Appendix I – Full Junction Modelling Outputs

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]
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Filename: A511-HartshorneRd-MoiraRd-SwadlincoteRd (The Clock) Roundabout_v01.arc8
Path: \\lefs02\Projects\067895.100 TPLE Woodville\Q3-Design\3A-Calculations\TP\Junction Modelling\Junction Models for 24.07.2019 Submission
Report generation date: 24/07/2019 11:13:53

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2019 Base No Reg Link							
1 - Burton Rd	49.06	257.00	1.15	F	48.18	252.78	1.15	F
2 - Hartshorne Rd	1.10	9.96	0.53	A	1.15	9.43	0.54	A
3 - Ashby Rd	2.57	12.14	0.72	B	6.29	26.26	0.88	D
4 - Moira Rd	0.46	5.35	0.31	A	0.53	6.24	0.35	A
5 - Swadlincote Rd	5.06	36.67	0.85	E	6.25	44.27	0.88	E
	A1 - 2021 Base Reg Link 25%							
1 - Burton Rd	50.69	254.62	1.15	F	58.88	306.92	1.18	F
2 - Hartshorne Rd	1.11	9.73	0.53	A	1.20	9.47	0.55	A
3 - Ashby Rd	2.16	10.80	0.69	B	4.05	18.07	0.81	C
4 - Moira Rd	0.46	5.26	0.32	A	0.53	5.98	0.35	A
5 - Swadlincote Rd	3.14	25.43	0.77	D	4.80	36.32	0.84	E
	A1 - 2021 Base Reg Link 25% with Dev							
1 - Burton Rd	57.25	291.85	1.17	F	67.25	366.60	1.21	F
2 - Hartshorne Rd	1.15	9.90	0.54	A	1.28	9.80	0.56	A
3 - Ashby Rd	2.20	11.03	0.69	B	4.28	19.15	0.82	C
4 - Moira Rd	0.49	5.39	0.33	A	0.55	6.12	0.36	A
5 - Swadlincote Rd	3.59	28.52	0.79	D	5.89	43.49	0.88	E
	A1 - 2021 Base Reg Link 50%							
1 - Burton Rd	34.41	174.03	1.08	F	47.05	233.62	1.13	F
2 - Hartshorne Rd	1.04	9.06	0.51	A	1.14	9.01	0.54	A
3 - Ashby Rd	1.52	8.64	0.61	A	1.02	7.07	0.51	A
4 - Moira Rd	0.43	4.90	0.30	A	0.41	4.56	0.29	A
5 - Swadlincote Rd	1.64	15.95	0.63	C	1.79	14.74	0.65	B
	A1 - 2021 Base Reg Link 50% with Dev							
1 - Burton Rd	40.24	199.44	1.10	F	54.85	269.90	1.16	F
2 - Hartshorne Rd	1.08	9.22	0.52	A	1.21	9.32	0.55	A
3 - Ashby Rd	1.55	8.80	0.61	A	2.35	12.00	0.71	B
4 - Moira Rd	0.46	5.01	0.31	A	0.50	5.48	0.33	A
5 - Swadlincote Rd	1.81	17.16	0.65	C	3.22	26.20	0.77	D
	A1 - 2024 Base Reg Link 25%							
1 - Burton Rd	71.38	388.92	1.22	F	79.16	452.91	1.25	F
2 - Hartshorne Rd	1.24	10.34	0.56	B	1.32	10.02	0.57	B
3 - Ashby Rd	2.55	12.30	0.72	B	5.40	23.35	0.85	C
4 - Moira Rd	0.52	5.60	0.34	A	0.60	6.46	0.38	A
5 - Swadlincote Rd	4.27	33.65	0.82	D	7.41	54.14	0.91	F
	A1 - 2024 Base Reg Link 25% with Dev							
1 - Burton Rd	78.71	441.67	1.25	F	88.96	524.94	1.28	F
2 - Hartshorne Rd	1.28	10.49	0.56	B	1.41	10.39	0.59	B
3 - Ashby Rd	2.61	12.58	0.73	B	5.81	25.20	0.86	D
4 - Moira Rd	0.54	5.74	0.35	A	0.62	6.61	0.38	A
5 - Swadlincote Rd	5.08	39.31	0.85	E	9.38	66.22	0.94	F
	A1 - 2024 Base Reg Link 50%							
1 - Burton Rd	52.53	252.26	1.14	F	65.98	345.18	1.20	F
2 - Hartshorne Rd	1.15	9.59	0.54	A	1.26	9.50	0.56	A
3 - Ashby Rd	1.74	9.48	0.64	A	2.71	13.28	0.74	B

4 - Moira Rd	0.48	5.18	0.32	A	0.53	5.72	0.35	A
5 - Swadlincote Rd	1.99	18.71	0.67	C	3.70	30.01	0.80	D
	A1 - 2024 Base Reg Link 50% with Dev							
1 - Burton Rd	59.44	293.80	1.17	F	75.68	411.36	1.23	F
2 - Hartshorne Rd	1.18	9.73	0.55	A	1.34	9.84	0.58	A
3 - Ashby Rd	1.77	9.65	0.64	A	2.83	13.90	0.74	B
4 - Moira Rd	0.50	5.30	0.34	A	0.55	5.83	0.36	A
5 - Swadlincote Rd	2.25	20.49	0.70	C	4.37	34.64	0.83	D

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

"D1 - 2021 Base Reg Link 25%, AM " model duration: 07:15 - 08:45
"D2 - 2021 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D3 - 2021 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D4 - 2021 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D5 - 2021 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D6 - 2021 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D7 - 2021 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D8 - 2021 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15
"D9 - 2024 Base Reg Link 25%, AM" model duration: 07:15 - 08:45
"D10 - 2024 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D11 - 2024 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D12 - 2024 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D13 - 2024 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D14 - 2024 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D15 - 2024 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D16 - 2024 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15
"D17 - 2019 Base No Reg Link, AM" model duration: 07:15 - 08:45
"D18 - 2019 Base No Reg Link, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 24/07/2019 11:13:33

File summary

Title	(untitled)
Location	
Site Number	
Date	12/06/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	RodriguezMartin_d
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) - 2021 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

					Model	Model	Model	Time	Results	Single				

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Segment Length (min)	For Central Hour Only	Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, AM	2021 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				75.62	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	612.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	379.00	100.000
3 - Ashby Rd	ONE HOUR	✓	664.00	100.000
4 - Moira Rd	ONE HOUR	✓	290.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	421.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	67.000	399.000	82.000	64.000
	2 - Hartshorne Rd	96.000	0.000	48.000	57.000	178.000
	3 - Ashby Rd	364.000	38.000	0.000	19.000	243.000
	4 - Moira Rd	149.000	76.000	23.000	0.000	42.000
	5 - Swadlincote Rd	34.000	136.000	234.000	17.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.11	0.65	0.13	0.10
	2 - Hartshorne Rd	0.25	0.00	0.13	0.15	0.47
	3 - Ashby Rd	0.55	0.06	0.00	0.03	0.37
	4 - Moira Rd	0.51	0.26	0.08	0.00	0.14
	5 - Swadlincote Rd	0.08	0.32	0.56	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.15	254.62	50.69	F	561.58	842.37	1775.34	126.45	19.73	1775.63	126.47
2 - Hartshorne Rd	0.53	9.73	1.11	A	347.78	521.67	68.75	7.91	0.76	68.76	7.91
3 - Ashby Rd	0.69	10.80	2.16	B	609.30	913.95	120.68	7.92	1.34	120.70	7.92
4 - Moira Rd	0.32	5.26	0.46	A	266.11	399.16	29.55	4.44	0.33	29.55	4.44
5 - Swadlincote Rd	0.77	25.43	3.14	D	386.32	579.48	148.40	15.37	1.65	148.43	15.37

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	460.75	115.19	452.38	481.24	391.19	0.00	668.77	565.07	0.689	0.00	2.09	16.078	C
2 - Hartshorne Rd	285.33	71.33	283.47	236.34	607.23	0.00	892.93	811.89	0.320	0.00	0.47	5.889	A
3 - Ashby Rd	499.89	124.97	496.85	522.54	368.16	0.00	1150.30	875.72	0.435	0.00	0.76	5.484	A
4 - Moira Rd	218.33	54.58	217.45	130.14	734.88	0.00	1205.60	749.02	0.181	0.00	0.22	3.639	A
5 - Swadlincote Rd	316.95	79.24	313.87	393.76	558.56	0.00	721.70	351.54	0.439	0.00	0.77	8.763	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	550.18	137.54	538.07	576.66	469.08	0.00	634.80	565.07	0.867	2.09	5.12	33.568	D
2 - Hartshorne Rd	340.71	85.18	339.85	282.85	724.30	0.00	835.42	811.89	0.408	0.47	0.68	7.253	A
3 - Ashby Rd	596.92	149.23	595.38	623.78	440.38	0.00	1109.82	875.72	0.538	0.76	1.15	6.976	A
4 - Moira Rd	260.70	65.18	260.38	155.45	880.32	0.00	1118.44	749.02	0.233	0.22	0.30	4.195	A
5 - Swadlincote Rd	378.47	94.62	376.53	471.48	669.21	0.00	671.62	351.54	0.564	0.77	1.25	12.118	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	673.82	168.46	579.54	704.54	570.18	0.00	590.71	565.07	1.141	5.12	28.69	122.994	F
2 - Hartshorne Rd	417.29	104.32	415.64	336.10	813.63	0.00	791.54	811.89	0.527	0.68	1.09	9.534	A
3 - Ashby Rd	731.08	182.77	727.22	709.57	519.70	0.00	1065.37	875.72	0.686	1.15	2.11	10.524	B
4 - Moira Rd	319.30	79.82	318.66	179.41	1067.50	0.00	1006.26	749.02	0.317	0.30	0.46	5.231	A
5 - Swadlincote Rd	463.53	115.88	456.66	568.10	818.06	0.00	604.25	351.54	0.767	1.25	2.97	23.366	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	673.82	168.46	585.82	707.77	576.31	0.00	588.03	565.07	1.146	28.69	50.69	254.615	F
2 - Hartshorne Rd	417.29	104.32	417.20	339.16	822.97	0.00	786.95	811.89	0.530	1.09	1.11	9.735	A
3 - Ashby Rd	731.08	182.77	730.90	717.36	522.80	0.00	1063.63	875.72	0.687	2.11	2.16	10.802	B
4 - Moira Rd	319.30	79.82	319.28	180.84	1072.86	0.00	1003.05	749.02	0.318	0.46	0.46	5.264	A
5 - Swadlincote Rd	463.53	115.88	462.87	570.93	821.22	0.00	602.82	351.54	0.769	2.97	3.14	25.428	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	550.18	137.54	618.66	581.37	478.10	0.00	630.86	565.07	0.872	50.69	33.57	246.493	F
2 - Hartshorne Rd	340.71	85.18	342.14	295.17	801.59	0.00	797.45	811.89	0.427	1.11	0.76	7.931	A
3 - Ashby Rd	596.92	149.23	600.69	681.76	461.97	0.00	1097.72	875.72	0.544	2.16	1.21	7.295	A
4 - Moira Rd	260.70	65.18	261.33	167.11	895.55	0.00	1109.31	749.02	0.235	0.46	0.31	4.249	A
5 - Swadlincote Rd	378.47	94.62	385.66	483.06	673.82	0.00	669.54	351.54	0.565	3.14	1.34	12.984	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	460.75	115.19	584.87	485.57	396.69	0.00	666.37	565.07	0.691	33.57	2.54	78.762	F
2 - Hartshorne Rd	285.33	71.33	286.25	253.12	728.44	0.00	833.39	811.89	0.342	0.76	0.53	6.592	A
3 - Ashby Rd	499.89	124.97	501.54	612.28	402.41	0.00	1131.10	875.72	0.442	1.21	0.80	5.734	A
4 - Moira Rd	218.33	54.58	218.66	148.65	755.30	0.00	1193.37	749.02	0.183	0.31	0.23	3.696	A
5 - Swadlincote Rd	316.95	79.24	319.11	410.82	563.15	0.00	719.63	351.54	0.440	1.34	0.80	9.037	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	28.01	1.87	16.078	C	B
2 - Hartshorne Rd	6.74	0.45	5.889	A	A
3 - Ashby Rd	10.99	0.73	5.484	A	A
4 - Moira Rd	3.23	0.22	3.639	A	A
5 - Swadlincote Rd	10.95	0.73	8.763	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	63.66	4.24	33.568	D	C
2 - Hartshorne Rd	9.88	0.66	7.253	A	A
3 - Ashby Rd	16.56	1.10	6.976	A	A
4 - Moira Rd	4.45	0.30	4.195	A	A
5 - Swadlincote Rd	17.80	1.19	12.118	B	B

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	261.37	17.42	122.994	F	F
2 - Hartshorne Rd	15.64	1.04	9.534	A	A
3 - Ashby Rd	29.63	1.98	10.524	B	B
4 - Moira Rd	6.75	0.45	5.231	A	A
5 - Swadlincote Rd	39.15	2.61	23.366	C	C

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	596.00	39.73	254.615	F	F
2 - Hartshorne Rd	16.58	1.11	9.735	A	A
3 - Ashby Rd	32.07	2.14	10.802	B	B
4 - Moira Rd	6.95	0.46	5.264	A	A
5 - Swadlincote Rd	46.07	3.07	25.428	D	C

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	631.94	42.13	246.493	F	F
2 - Hartshorne Rd	11.78	0.79	7.931	A	A
3 - Ashby Rd	19.03	1.27	7.295	A	A
4 - Moira Rd	4.73	0.32	4.249	A	A
5 - Swadlincote Rd	21.87	1.46	12.984	B	B

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	194.37	12.96	78.762	F	E
2 - Hartshorne Rd	8.13	0.54	6.592	A	A
3 - Ashby Rd	12.39	0.83	5.734	A	A
4 - Moira Rd	3.43	0.23	3.696	A	A
5 - Swadlincote Rd	12.56	0.84	9.037	A	A

(Default Analysis Set) - 2021 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, PM	2021 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				88.57	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	

3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	618.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	419.00	100.000
3 - Ashby Rd	ONE HOUR	✓	761.00	100.000
4 - Moira Rd	ONE HOUR	✓	292.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	460.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	104.000	359.000	100.000	55.000
	2 - Hartshorne Rd	79.000	0.000	58.000	65.000	217.000

	3 - Ashby Rd	396.000	35.000	0.000	7.000	323.000
	4 - Moira Rd	132.000	92.000	18.000	0.000	50.000
	5 - Swadlincote Rd	58.000	207.000	165.000	30.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.17	0.58	0.16	0.09
	2 - Hartshorne Rd	0.19	0.00	0.14	0.16	0.52
	3 - Ashby Rd	0.52	0.05	0.00	0.01	0.42
	4 - Moira Rd	0.45	0.32	0.06	0.00	0.17
	5 - Swadlincote Rd	0.13	0.45	0.36	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.18	306.92	58.88	F	567.09	850.63	2211.72	156.01	24.57	2212.21	156.04
2 - Hartshorne Rd	0.55	9.47	1.20	A	384.48	576.72	74.81	7.78	0.83	74.82	7.78
3 - Ashby Rd	0.81	18.07	4.05	C	698.31	1047.46	195.70	11.21	2.17	195.74	11.21
4 - Moira Rd	0.35	5.98	0.53	A	267.94	401.92	32.77	4.89	0.36	32.77	4.89
5 - Swadlincote Rd	0.84	36.32	4.80	E	422.10	633.16	202.59	19.20	2.25	202.63	19.20

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	465.26	116.32	456.36	497.26	408.09	0.00	661.40	545.96	0.703	0.00	2.23	16.904	C
2 - Hartshorne Rd	315.45	78.86	313.40	326.13	538.32	0.00	926.79	861.64	0.340	0.00	0.51	5.851	A
3 - Ashby Rd	572.92	143.23	568.86	444.90	406.83	0.00	1128.63	849.10	0.508	0.00	1.02	6.386	A
4 - Moira Rd	219.83	54.96	218.89	150.04	825.64	0.00	1151.21	747.91	0.191	0.00	0.23	3.857	A

5 - Swadlincote Rd	346.31	86.58	342.68	481.85	562.68	0.00	719.84	402.77	0.481	0.00	0.91	9.458	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	555.57	138.89	541.28	595.79	489.22	0.00	626.02	545.96	0.887	2.23	5.80	37.297	E
2 - Hartshorne Rd	376.67	94.17	375.74	389.94	640.55	0.00	876.56	861.64	0.430	0.51	0.74	7.175	A
3 - Ashby Rd	684.12	171.03	681.52	530.00	486.29	0.00	1084.09	849.10	0.631	1.02	1.67	8.884	A
4 - Moira Rd	262.50	65.63	262.12	178.94	988.86	0.00	1053.39	747.91	0.249	0.23	0.33	4.547	A
5 - Swadlincote Rd	413.53	103.38	410.94	576.92	674.07	0.00	669.42	402.77	0.618	0.91	1.56	13.787	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	680.43	170.11	572.63	725.52	591.80	0.00	581.28	545.96	1.171	5.80	32.75	139.073	F
2 - Hartshorne Rd	461.33	115.33	459.59	458.43	706.00	0.00	844.41	861.64	0.546	0.74	1.18	9.312	A
3 - Ashby Rd	837.88	209.47	829.10	593.69	571.89	0.00	1036.11	849.10	0.809	1.67	3.86	16.714	C
4 - Moira Rd	321.50	80.37	320.72	203.88	1197.11	0.00	928.58	747.91	0.346	0.33	0.52	5.915	A
5 - Swadlincote Rd	506.47	126.62	495.30	695.81	822.02	0.00	602.45	402.77	0.841	1.56	4.35	30.823	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	680.43	170.11	575.92	731.53	600.64	0.00	577.42	545.96	1.178	32.75	58.88	295.356	F
2 - Hartshorne Rd	461.33	115.33	461.25	463.80	712.75	0.00	841.09	861.64	0.548	1.18	1.20	9.473	A
3 - Ashby Rd	837.88	209.47	837.13	599.24	574.76	0.00	1034.51	849.10	0.810	3.86	4.05	18.066	C
4 - Moira Rd	321.50	80.37	321.47	205.36	1206.53	0.00	922.94	747.91	0.348	0.52	0.53	5.984	A
5 - Swadlincote Rd	506.47	126.62	504.66	700.49	827.51	0.00	599.97	402.77	0.844	4.35	4.80	36.316	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	555.57	138.89	609.54	604.68	503.26	0.00	619.89	545.96	0.896	58.88	45.38	306.924	F
2 - Hartshorne Rd	376.67	94.17	378.21	409.06	703.74	0.00	845.52	861.64	0.445	1.20	0.82	7.728	A
3 - Ashby Rd	684.12	171.03	693.08	575.44	506.51	0.00	1072.76	849.10	0.638	4.05	1.81	9.695	A
4 - Moira Rd	262.50	65.63	263.27	191.45	1008.14	0.00	1041.84	747.91	0.252	0.53	0.34	4.628	A
5 - Swadlincote Rd	413.53	103.38	425.91	589.37	682.03	0.00	665.82	402.77	0.621	4.80	1.71	15.711	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	465.26	116.32	633.70	502.85	414.72	0.00	658.50	545.96	0.707	45.38	3.27	139.192	F
2 - Hartshorne Rd	315.45	78.86	316.33	359.71	688.72	0.00	852.90	861.64	0.370	0.82	0.59	6.722	A
3 - Ashby Rd	572.92	143.23	575.76	550.79	454.26	0.00	1102.04	849.10	0.520	1.81	1.10	6.876	A
4 - Moira Rd	219.83	54.96	220.22	179.69	850.33	0.00	1136.41	747.91	0.193	0.34	0.24	3.930	A
5 - Swadlincote Rd	346.31	86.58	349.33	502.31	568.24	0.00	717.32	402.77	0.483	1.71	0.95	9.862	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	29.62	1.97	16.904	C	B
2 - Hartshorne Rd	7.40	0.49	5.851	A	A
3 - Ashby Rd	14.56	0.97	6.386	A	A
4 - Moira Rd	3.44	0.23	3.857	A	A
5 - Swadlincote Rd	12.85	0.86	9.458	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	70.55	4.70	37.297	E	D
2 - Hartshorne Rd	10.80	0.72	7.175	A	A
3 - Ashby Rd	23.76	1.58	8.884	A	A
4 - Moira Rd	4.85	0.32	4.547	A	A
5 - Swadlincote Rd	21.85	1.46	13.787	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	295.53	19.70	139.073	F	F
2 - Hartshorne Rd	16.89	1.13	9.312	A	A
3 - Ashby Rd	51.36	3.42	16.714	C	B
4 - Moira Rd	7.65	0.51	5.915	A	A
5 - Swadlincote Rd	54.46	3.63	30.823	D	C

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	687.66	45.84	295.356	F	F
2 - Hartshorne Rd	17.87	1.19	9.473	A	A
3 - Ashby Rd	59.61	3.97	18.066	C	B
4 - Moira Rd	7.93	0.53	5.984	A	A
5 - Swadlincote Rd	69.24	4.62	36.316	E	D

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	781.94	52.13	306.924	F	F
2 - Hartshorne Rd	12.69	0.85	7.728	A	A
3 - Ashby Rd	29.23	1.95	9.695	A	A
4 - Moira Rd	5.21	0.35	4.628	A	A
5 - Swadlincote Rd	29.15	1.94	15.711	C	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	346.42	23.09	139.192	F	F
2 - Hartshorne Rd	9.17	0.61	6.722	A	A
3 - Ashby Rd	17.18	1.15	6.876	A	A
4 - Moira Rd	3.68	0.25	3.930	A	A
5 - Swadlincote Rd	15.04	1.00	9.862	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, AM	2021 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				85.81	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	620.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	386.00	100.000
3 - Ashby Rd	ONE HOUR	✓	664.00	100.000
4 - Moira Rd	ONE HOUR	✓	299.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	432.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	67.000	399.000	82.000	72.000
	2 - Hartshorne Rd	96.000	0.000	48.000	61.000	181.000
	3 - Ashby Rd	364.000	38.000	0.000	19.000	243.000
	4 - Moira Rd	151.000	82.000	23.000	0.000	43.000
	5 - Swadlincote Rd	41.000	140.000	234.000	17.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.11	0.64	0.13	0.12
	2 - Hartshorne Rd	0.25	0.00	0.12	0.16	0.47
	3 - Ashby Rd	0.55	0.06	0.00	0.03	0.37
	4 - Moira Rd	0.51	0.27	0.08	0.00	0.14
	5 - Swadlincote Rd	0.09	0.32	0.54	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.17	291.85	57.25	F	568.92	853.38	2113.66	148.61	23.49	2114.06	148.64
2 - Hartshorne Rd	0.54	9.90	1.15	A	354.20	531.30	71.38	8.06	0.79	71.40	8.06
3 - Ashby Rd	0.69	11.03	2.20	B	609.30	913.95	122.74	8.06	1.36	122.76	8.06
4 - Moira Rd	0.33	5.39	0.49	A	274.37	411.55	31.04	4.53	0.34	31.04	4.53
5 - Swadlincote Rd	0.79	28.52	3.59	D	396.41	594.62	163.77	16.53	1.82	163.80	16.53

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	466.77	116.69	457.94	487.93	398.59	0.00	665.54	563.21	0.701	0.00	2.21	16.705	C
2 - Hartshorne Rd	290.60	72.65	288.68	243.75	612.78	0.00	890.21	815.15	0.326	0.00	0.48	5.965	A
3 - Ashby Rd	499.89	124.97	496.82	522.26	379.20	0.00	1144.11	870.38	0.437	0.00	0.77	5.537	A
4 - Moira Rd	225.10	56.28	224.18	133.07	742.95	0.00	1200.77	749.55	0.187	0.00	0.23	3.683	A
5 - Swadlincote Rd	325.23	81.31	321.99	402.61	564.53	0.00	719.00	353.78	0.452	0.00	0.81	8.997	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	557.37	139.34	543.54	584.67	477.92	0.00	630.95	563.21	0.883	2.21	5.66	36.384	E
2 - Hartshorne Rd	347.01	86.75	346.11	291.60	729.86	0.00	832.69	815.15	0.417	0.48	0.70	7.385	A
3 - Ashby Rd	596.92	149.23	595.35	622.69	453.28	0.00	1102.60	870.38	0.541	0.77	1.16	7.073	A
4 - Moira Rd	268.79	67.20	268.45	158.82	889.81	0.00	1112.75	749.55	0.242	0.23	0.32	4.261	A
5 - Swadlincote Rd	388.36	97.09	386.23	481.90	676.36	0.00	668.39	353.78	0.581	0.81	1.34	12.661	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	682.63	170.66	577.22	714.16	580.17	0.00	586.35	563.21	1.164	5.66	32.01	135.335	F
2 - Hartshorne Rd	424.99	106.25	423.29	345.61	811.78	0.00	792.44	815.15	0.536	0.70	1.13	9.706	A
3 - Ashby Rd	731.08	182.77	727.11	702.64	532.43	0.00	1058.23	870.38	0.691	1.16	2.15	10.743	B
4 - Moira Rd	329.21	82.30	328.53	182.44	1077.09	0.00	1000.51	749.55	0.329	0.32	0.49	5.351	A
5 - Swadlincote Rd	475.64	118.91	467.56	578.86	826.76	0.00	600.31	353.78	0.792	1.34	3.36	25.680	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	682.63	170.66	581.69	717.65	587.11	0.00	583.32	563.21	1.170	32.01	57.25	285.542	F
2 - Hartshorne Rd	424.99	106.25	424.91	348.82	819.98	0.00	788.41	815.15	0.539	1.13	1.15	9.897	A
3 - Ashby Rd	731.08	182.77	730.89	709.66	535.23	0.00	1056.66	870.38	0.692	2.15	2.20	11.034	B
4 - Moira Rd	329.21	82.30	329.19	183.68	1082.45	0.00	997.30	749.55	0.330	0.49	0.49	5.387	A
5 - Swadlincote Rd	475.64	118.91	474.74	581.62	830.02	0.00	598.83	353.78	0.794	3.36	3.59	28.516	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	557.37	139.34	615.68	589.78	488.27	0.00	626.43	563.21	0.890	57.25	42.67	291.846	F
2 - Hartshorne Rd	347.01	86.75	348.49	303.45	800.50	0.00	797.99	815.15	0.435	1.15	0.78	8.035	A
3 - Ashby Rd	596.92	149.23	600.81	675.29	473.70	0.00	1091.15	870.38	0.547	2.20	1.23	7.397	A
4 - Moira Rd	268.79	67.20	269.46	169.31	905.20	0.00	1103.53	749.55	0.244	0.49	0.32	4.320	A
5 - Swadlincote Rd	388.36	97.09	396.93	493.54	681.12	0.00	666.23	353.78	0.583	3.59	1.44	13.766	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	466.77	116.69	625.50	492.39	404.41	0.00	663.00	563.21	0.704	42.67	2.99	123.702	F
2 - Hartshorne Rd	290.60	72.65	291.48	264.30	765.60	0.00	815.13	815.15	0.357	0.78	0.56	6.885	A
3 - Ashby Rd	499.89	124.97	501.54	633.59	423.50	0.00	1119.29	870.38	0.447	1.23	0.82	5.842	A
4 - Moira Rd	225.10	56.28	225.46	156.03	769.00	0.00	1185.15	749.55	0.190	0.32	0.24	3.754	A
5 - Swadlincote Rd	325.23	81.31	327.63	425.29	569.17	0.00	716.90	353.78	0.454	1.44	0.85	9.303	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	29.40	1.96	16.705	C	B
2 - Hartshorne Rd	6.95	0.46	5.965	A	A
3 - Ashby Rd	11.09	0.74	5.537	A	A
4 - Moira Rd	3.37	0.22	3.683	A	A
5 - Swadlincote Rd	11.52	0.77	8.997	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	69.23	4.62	36.384	E	D
2 - Hartshorne Rd	10.24	0.68	7.385	A	A
3 - Ashby Rd	16.78	1.12	7.073	A	A
4 - Moira Rd	4.66	0.31	4.261	A	A
5 - Swadlincote Rd	19.00	1.27	12.661	B	B

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	289.29	19.29	135.335	F	F
2 - Hartshorne Rd	16.19	1.08	9.706	A	A
3 - Ashby Rd	30.19	2.01	10.743	B	B
4 - Moira Rd	7.11	0.47	5.351	A	A

5 - Swadlincote Rd	43.63	2.91	25.680	D	C

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	670.00	44.67	285.542	F	F
2 - Hartshorne Rd	17.18	1.15	9.897	A	A
3 - Ashby Rd	32.74	2.18	11.034	B	B
4 - Moira Rd	7.33	0.49	5.387	A	A
5 - Swadlincote Rd	52.47	3.50	28.516	D	C

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	749.43	49.96	291.846	F	F
2 - Hartshorne Rd	12.16	0.81	8.035	A	A
3 - Ashby Rd	19.31	1.29	7.397	A	A
4 - Moira Rd	4.96	0.33	4.320	A	A
5 - Swadlincote Rd	23.85	1.59	13.766	B	B

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	306.31	20.42	123.702	F	F
2 - Hartshorne Rd	8.66	0.58	6.885	A	A
3 - Ashby Rd	12.64	0.84	5.842	A	A
4 - Moira Rd	3.59	0.24	3.754	A	A
5 - Swadlincote Rd	13.29	0.89	9.303	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, PM	2021 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				104.85	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	629.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	431.00	100.000
3 - Ashby Rd	ONE HOUR	✓	761.00	100.000

4 - Moira Rd	ONE HOUR	✓	297.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	475.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	104.000	359.000	101.000	65.000
	2 - Hartshorne Rd	79.000	0.000	58.000	72.000	222.000
	3 - Ashby Rd	396.000	35.000	0.000	7.000	323.000
	4 - Moira Rd	132.000	97.000	18.000	0.000	50.000
	5 - Swadlincote Rd	68.000	211.000	165.000	31.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.17	0.57	0.16	0.10
	2 - Hartshorne Rd	0.18	0.00	0.13	0.17	0.52
	3 - Ashby Rd	0.52	0.05	0.00	0.01	0.42
	4 - Moira Rd	0.44	0.33	0.06	0.00	0.17
	5 - Swadlincote Rd	0.14	0.44	0.35	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.21	366.60	67.25	F	577.18	865.77	2698.69	187.03	29.99	2708.50	187.70
2 - Hartshorne Rd	0.56	9.80	1.28	A	395.49	593.24	79.24	8.01	0.88	79.25	8.02
3 - Ashby Rd	0.82	19.15	4.28	C	698.31	1047.46	203.69	11.67	2.26	203.73	11.67
4 - Moira Rd	0.36	6.12	0.55	A	272.53	408.80	33.93	4.98	0.38	33.93	4.98
5 - Swadlincote Rd	0.88	43.49	5.89	E	435.87	653.80	234.23	21.50	2.60	234.27	21.50

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	473.54	118.39	463.99	504.64	415.45	0.00	658.19	544.61	0.719	0.00	2.39	17.767	C
2 - Hartshorne Rd	324.48	81.12	322.33	332.71	546.72	0.00	922.66	863.61	0.352	0.00	0.54	5.975	A
3 - Ashby Rd	572.92	143.23	568.78	444.56	424.49	0.00	1118.73	842.40	0.512	0.00	1.03	6.499	A
4 - Moira Rd	223.60	55.90	222.63	156.67	836.61	0.00	1144.64	750.62	0.195	0.00	0.24	3.900	A
5 - Swadlincote Rd	357.60	89.40	353.72	492.87	566.37	0.00	718.17	404.38	0.498	0.00	0.97	9.779	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	565.46	141.36	548.46	604.62	497.94	0.00	622.21	544.61	0.909	2.39	6.64	41.422	E
2 - Hartshorne Rd	387.46	96.87	386.46	397.48	648.92	0.00	872.45	863.61	0.444	0.54	0.79	7.392	A
3 - Ashby Rd	684.12	171.03	681.40	528.51	506.87	0.00	1072.56	842.40	0.638	1.03	1.71	9.139	A
4 - Moira Rd	267.00	66.75	266.60	186.57	1001.70	0.00	1045.69	750.62	0.255	0.24	0.34	4.619	A
5 - Swadlincote Rd	427.02	106.75	424.09	589.83	678.47	0.00	667.43	404.38	0.640	0.97	1.70	14.616	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	692.54	173.14	570.71	735.59	600.57	0.00	577.45	544.62	1.199	6.64	37.10	155.587	F
2 - Hartshorne Rd	474.54	118.63	472.68	465.12	706.16	0.00	844.33	863.61	0.562	0.79	1.25	9.637	A
3 - Ashby Rd	837.88	209.47	828.47	585.93	592.91	0.00	1024.34	842.40	0.818	1.71	4.07	17.581	C
4 - Moira Rd	327.00	81.75	326.19	211.44	1209.93	0.00	920.90	750.62	0.355	0.34	0.55	6.044	A
5 - Swadlincote Rd	522.98	130.75	509.04	708.99	827.12	0.00	600.15	404.38	0.871	1.70	5.19	35.150	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	692.54	173.14	571.92	742.31	610.80	0.00	572.99	544.62	1.209	37.10	67.25	335.618	F
2 - Hartshorne Rd	474.54	118.63	474.45	470.91	711.81	0.00	841.56	863.61	0.564	1.25	1.28	9.800	A
3 - Ashby Rd	837.88	209.47	837.02	590.78	595.49	0.00	1022.89	842.40	0.819	4.07	4.28	19.149	C
4 - Moira Rd	327.00	81.75	326.97	212.74	1219.77	0.00	915.00	750.62	0.357	0.55	0.55	6.121	A
5 - Swadlincote Rd	522.98	130.75	520.16	713.80	832.95	0.00	597.51	404.38	0.875	5.19	5.89	43.494	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	565.46	141.36	605.67	614.80	515.21	0.00	614.68	544.61	0.920	67.25	57.20	366.604	F
2 - Hartshorne Rd	387.46	96.87	389.12	416.32	704.57	0.00	845.11	863.61	0.458	1.28	0.86	7.924	A
3 - Ashby Rd	684.12	171.03	693.80	568.18	525.51	0.00	1062.11	842.40	0.644	4.28	1.86	10.018	B
4 - Moira Rd	267.00	66.75	267.80	197.55	1021.76	0.00	1033.67	750.62	0.258	0.55	0.35	4.706	A
5 - Swadlincote Rd	427.02	106.75	443.03	602.58	686.98	0.00	663.58	404.38	0.644	5.89	1.89	17.388	C

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

Name	Total Demand	Junction Arrivals	Entry Flow	Exit Flow	Circulating Flow	Pedestrian Demand	Capacity	Saturation Capacity	RFC	Start Queue	End Queue	Delay	LOS

	(PCU/hr)	(PCU)	(PCU/hr)	(PCU/hr)	(PCU/hr)	(Ped/hr)	(PCU/hr)	(PCU/hr)		(PCU)	(PCU)	(s)	
1 - Burton Rd	473.54	118.39	643.81	510.56	422.61	0.00	655.06	544.61	0.723	57.20	14.63	207.080	F
2 - Hartshorne Rd	324.48	81.12	325.41	366.49	699.93	0.00	847.39	863.61	0.383	0.86	0.63	6.911	A
3 - Ashby Rd	572.92	143.23	575.87	550.25	475.09	0.00	1090.37	842.40	0.525	1.86	1.12	7.038	A
4 - Moira Rd	223.60	55.90	224.01	186.60	864.36	0.00	1128.01	750.62	0.198	0.35	0.25	3.983	A
5 - Swadlincote Rd	357.60	89.40	361.08	516.28	572.09	0.00	715.58	404.38	0.500	1.89	1.02	10.253	B

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	31.56	2.10	17.767	C	B
2 - Hartshorne Rd	7.77	0.52	5.975	A	A
3 - Ashby Rd	14.81	0.99	6.499	A	A
4 - Moira Rd	3.54	0.24	3.900	A	A
5 - Swadlincote Rd	13.69	0.91	9.779	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	78.83	5.26	41.422	E	D
2 - Hartshorne Rd	11.43	0.76	7.392	A	A
3 - Ashby Rd	24.39	1.63	9.139	A	A
4 - Moira Rd	5.01	0.33	4.619	A	A
5 - Swadlincote Rd	23.78	1.59	14.616	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	333.23	22.22	155.587	F	F
2 - Hartshorne Rd	17.93	1.20	9.637	A	A
3 - Ashby Rd	53.73	3.58	17.581	C	B
4 - Moira Rd	7.95	0.53	6.044	A	A
5 - Swadlincote Rd	63.11	4.21	35.150	E	D

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	782.97	52.20	335.618	F	F
2 - Hartshorne Rd	19.01	1.27	9.800	A	A
3 - Ashby Rd	62.93	4.20	19.149	C	B
4 - Moira Rd	8.25	0.55	6.121	A	A
5 - Swadlincote Rd	84.01	5.60	43.494	E	D

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	933.37	62.22	366.604	F	F
2 - Hartshorne Rd	13.40	0.89	7.924	A	A
3 - Ashby Rd	30.23	2.02	10.018	B	B
4 - Moira Rd	5.39	0.36	4.706	A	A
5 - Swadlincote Rd	33.47	2.23	17.388	C	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	538.72	35.91	207.080	F	F
2 - Hartshorne	9.71	0.65	6.911	A	A

Rd					
3 - Ashby Rd	17.59	1.17	7.038	A	A
4 - Moira Rd	3.80	0.25	3.983	A	A
5 - Swadlincote Rd	16.16	1.08	10.253	B	B

(Default Analysis Set) - 2021 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, AM	2021 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				55.20	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

	V - Approach road half-	E - Entry	I' - Effective flare	R - Entry	D - Inscribed circle	PHI - Conflict (entry)	Exit

Name	width (m)	width (m)	length (m)	radius (m)	diameter (m)	angle (deg)	Only
1 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	612.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	379.00	100.000
3 - Ashby Rd	ONE HOUR	✓	584.00	100.000
4 - Moira Rd	ONE HOUR	✓	290.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	343.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	67.000	399.000	82.000	64.000
	2 - Hartshorne Rd	96.000	0.000	48.000	57.000	178.000
	3 - Ashby Rd	364.000	38.000	0.000	19.000	163.000
	4 - Moira Rd	149.000	76.000	23.000	0.000	42.000
	5 - Swadlincote Rd	34.000	136.000	156.000	17.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.11	0.65	0.13	0.10
	2 - Hartshorne Rd	0.25	0.00	0.13	0.15	0.47
	3 - Ashby Rd	0.62	0.07	0.00	0.03	0.28
	4 - Moira Rd	0.51	0.26	0.08	0.00	0.14
	5 - Swadlincote Rd	0.10	0.40	0.45	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.08	174.03	34.41	F	561.58	842.37	1078.26	76.80	11.98	1078.45	76.81
2 - Hartshorne Rd	0.51	9.06	1.04	A	347.78	521.67	64.15	7.38	0.71	64.16	7.38
3 - Ashby Rd	0.61	8.64	1.52	A	535.89	803.83	90.26	6.74	1.00	90.27	6.74
4 - Moira Rd	0.30	4.90	0.43	A	266.11	399.16	27.94	4.20	0.31	27.94	4.20
5 - Swadlincote Rd	0.63	15.95	1.64	C	314.74	472.11	88.99	11.31	0.99	89.01	11.31

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	460.75	115.19	453.22	481.45	333.34	0.00	694.00	577.54	0.664	0.00	1.88	14.535	B
2 - Hartshorne Rd	285.33	71.33	283.55	236.58	549.98	0.00	921.06	830.07	0.310	0.00	0.44	5.631	A
3 - Ashby Rd	439.67	109.92	437.21	465.08	368.45	0.00	1150.14	864.22	0.382	0.00	0.61	5.032	A
4 - Moira Rd	218.33	54.58	217.48	130.28	675.38	0.00	1241.26	749.09	0.176	0.00	0.21	3.512	A
5 - Swadlincote Rd	258.23	64.56	256.03	334.09	558.76	0.00	721.61	320.14	0.358	0.00	0.55	7.697	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	550.18	137.54	541.29	576.90	399.75	0.00	665.03	577.55	0.827	1.88	4.10	27.256	D
2 - Hartshorne Rd	340.71	85.18	339.94	283.40	657.63	0.00	868.17	830.07	0.392	0.44	0.64	6.805	A
3 - Ashby Rd	525.00	131.25	523.91	556.33	441.24	0.00	1109.34	864.22	0.473	0.61	0.89	6.138	A
4 - Moira Rd	260.70	65.18	260.40	155.92	809.23	0.00	1161.05	749.09	0.225	0.21	0.29	3.996	A

5 - Swadlincote Rd	308.35	77.09	307.22	400.20	669.43	0.00	671.52	320.14	0.459	0.55	0.83	9.850	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	673.82	168.46	606.94	705.45	487.94	0.00	626.57	577.54	1.075	4.10	20.82	91.537	F
2 - Hartshorne Rd	417.29	104.32	415.78	340.18	754.71	0.00	820.48	830.07	0.509	0.64	1.02	8.862	A
3 - Ashby Rd	643.00	160.75	640.54	644.01	526.48	0.00	1061.57	864.22	0.606	0.89	1.50	8.501	A
4 - Moira Rd	319.30	79.82	318.73	183.26	983.76	0.00	1056.44	749.09	0.302	0.29	0.43	4.880	A
5 - Swadlincote Rd	377.65	94.41	374.59	483.69	818.80	0.00	603.91	320.14	0.625	0.83	1.60	15.490	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	673.82	168.46	619.48	707.85	490.90	0.00	625.28	577.54	1.078	20.82	34.41	174.027	F
2 - Hartshorne Rd	417.29	104.32	417.20	343.00	767.38	0.00	814.26	830.07	0.512	1.02	1.04	9.063	A
3 - Ashby Rd	643.00	160.75	642.90	653.73	530.85	0.00	1059.12	864.22	0.607	1.50	1.52	8.644	A
4 - Moira Rd	319.30	79.82	319.28	185.37	988.38	0.00	1053.68	749.09	0.303	0.43	0.43	4.901	A
5 - Swadlincote Rd	377.65	94.41	377.49	486.40	821.26	0.00	602.80	320.14	0.627	1.60	1.64	15.948	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	550.18	137.54	644.43	580.43	404.05	0.00	663.16	577.55	0.830	34.41	10.85	133.679	F
2 - Hartshorne Rd	340.71	85.18	341.99	296.81	751.67	0.00	821.97	830.07	0.415	1.04	0.72	7.519	A
3 - Ashby Rd	525.00	131.25	527.37	625.81	467.85	0.00	1094.43	864.22	0.480	1.52	0.93	6.374	A
4 - Moira Rd	260.70	65.18	261.26	170.37	824.85	0.00	1151.69	749.09	0.226	0.43	0.29	4.046	A
5 - Swadlincote Rd	308.35	77.09	311.42	413.04	673.06	0.00	669.88	320.14	0.460	1.64	0.87	10.126	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	460.75	115.19	495.73	485.38	337.05	0.00	692.38	577.54	0.665	10.85	2.10	21.234	C
2 - Hartshorne Rd	285.33	71.33	286.33	243.13	589.66	0.00	901.57	830.07	0.316	0.72	0.47	5.860	A
3 - Ashby Rd	439.67	109.92	440.88	494.80	381.19	0.00	1143.00	864.22	0.385	0.93	0.63	5.137	A
4 - Moira Rd	218.33	54.58	218.64	136.69	685.38	0.00	1235.27	749.09	0.177	0.29	0.22	3.541	A
5 - Swadlincote Rd	258.23	64.56	259.44	341.04	562.99	0.00	719.70	320.14	0.359	0.87	0.57	7.841	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	25.51	1.70	14.535	B	B
2 - Hartshorne Rd	6.45	0.43	5.631	A	A
3 - Ashby Rd	8.90	0.59	5.032	A	A
4 - Moira Rd	3.12	0.21	3.512	A	A
5 - Swadlincote Rd	7.89	0.53	7.697	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	53.00	3.53	27.256	D	C
2 - Hartshorne Rd	9.30	0.62	6.805	A	A
3 - Ashby Rd	12.91	0.86	6.138	A	A
4 - Moira Rd	4.25	0.28	3.996	A	A
5 - Swadlincote Rd	11.99	0.80	9.850	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	198.06	13.20	91.537	F	F
2 - Hartshorne Rd	14.60	0.97	8.862	A	A
3 - Ashby Rd	21.44	1.43	8.501	A	A
4 - Moira Rd	6.31	0.42	4.880	A	A
5 - Swadlincote Rd	22.22	1.48	15.490	C	B

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	415.60	27.71	174.027	F	F
2 - Hartshorne Rd	15.45	1.03	9.063	A	A
3 - Ashby Rd	22.74	1.52	8.644	A	A
4 - Moira Rd	6.48	0.43	4.901	A	A
5 - Swadlincote Rd	24.33	1.62	15.948	C	B

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	339.42	22.63	133.679	F	F
2 - Hartshorne Rd	11.14	0.74	7.519	A	A
3 - Ashby Rd	14.54	0.97	6.374	A	A
4 - Moira Rd	4.50	0.30	4.046	A	A
5 - Swadlincote Rd	13.75	0.92	10.126	B	B

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	46.68	3.11	21.234	C	C
2 - Hartshorne Rd	7.21	0.48	5.860	A	A
3 - Ashby Rd	9.72	0.65	5.137	A	A
4 - Moira Rd	3.29	0.22	3.541	A	A
5 - Swadlincote Rd	8.81	0.59	7.841	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

		Time		Traffic	Model	Model	Model Time	Time	Results For	Single				

Name	Scenario Name	Period Name	Description	Profile Type	Start Time (HH:mm)	Finish Time (HH:mm)	Period Length (min)	Segment Length (min)	Central Hour Only	Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, PM	2021 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				71.92	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	618.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	419.00	100.000
3 - Ashby Rd	ONE HOUR	✓	474.00	100.000
4 - Moira Rd	ONE HOUR	✓	292.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	405.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	104.000	359.000	100.000	55.000
	2 - Hartshorne Rd	79.000	0.000	58.000	65.000	217.000
	3 - Ashby Rd	216.000	35.000	0.000	7.000	216.000
	4 - Moira Rd	132.000	92.000	18.000	0.000	50.000
	5 - Swadlincote Rd	58.000	207.000	110.000	30.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.17	0.58	0.16	0.09
	2 - Hartshorne Rd	0.19	0.00	0.14	0.16	0.52
	3 - Ashby Rd	0.46	0.07	0.00	0.01	0.46
	4 - Moira Rd	0.45	0.32	0.06	0.00	0.17
	5 - Swadlincote Rd	0.14	0.51	0.27	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.13	233.62	47.05	F	567.09	850.63	1598.81	112.77	17.76	1599.06	112.79
2 - Hartshorne Rd	0.54	9.01	1.14	A	384.48	576.72	71.26	7.41	0.79	71.27	7.42
3 - Ashby Rd	0.51	7.07	1.02	A	434.95	652.43	63.45	5.84	0.71	63.46	5.84
4 - Moira Rd	0.29	4.56	0.41	A	267.94	401.92	26.63	3.98	0.30	26.63	3.98
5 - Swadlincote Rd	0.65	14.74	1.79	B	371.64	557.45	99.34	10.69	1.10	99.35	10.69

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	465.26	116.32	457.03	363.19	367.79	0.00	678.97	533.36	0.685	0.00	2.06	15.695	C
2 - Hartshorne Rd	315.45	78.86	313.46	326.67	498.14	0.00	946.53	879.79	0.333	0.00	0.50	5.670	A
3 - Ashby Rd	356.85	89.21	355.02	404.51	407.10	0.00	1128.48	839.51	0.316	0.00	0.46	4.640	A
4 - Moira Rd	219.83	54.96	219.01	150.22	611.89	0.00	1279.31	749.39	0.172	0.00	0.21	3.395	A
5 - Swadlincote Rd	304.91	76.23	302.38	402.30	428.60	0.00	780.52	417.12	0.391	0.00	0.63	7.491	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	555.57	138.89	544.23	435.20	441.07	0.00	647.01	533.36	0.859	2.06	4.89	31.903	D
2 - Hartshorne Rd	376.67	94.17	375.81	391.06	594.23	0.00	899.32	879.79	0.419	0.50	0.71	6.865	A
3 - Ashby Rd	426.12	106.53	425.38	482.88	487.16	0.00	1083.61	839.51	0.393	0.46	0.64	5.464	A
4 - Moira Rd	262.50	65.63	262.22	179.52	733.02	0.00	1206.72	749.39	0.218	0.21	0.28	3.811	A
5 - Swadlincote Rd	364.09	91.02	362.84	481.81	513.43	0.00	742.13	417.12	0.491	0.63	0.94	9.459	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	680.43	170.11	591.80	532.33	538.64	0.00	604.46	533.36	1.126	4.89	27.05	115.006	F
2 - Hartshorne Rd	461.33	115.33	459.69	465.42	665.02	0.00	864.54	879.79	0.534	0.71	1.12	8.856	A
3 - Ashby Rd	521.88	130.47	520.43	547.44	577.28	0.00	1033.10	839.51	0.505	0.64	1.01	7.002	A
4 - Moira Rd	321.50	80.37	320.99	207.55	890.16	0.00	1112.54	749.39	0.289	0.28	0.40	4.545	A
5 - Swadlincote Rd	445.91	111.48	442.69	582.86	628.28	0.00	690.14	417.12	0.646	0.94	1.75	14.359	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	680.43	170.11	600.44	533.93	541.56	0.00	603.19	533.36	1.128	27.05	47.05	233.622	F
2 - Hartshorne Rd	461.33	115.33	461.25	468.70	673.30	0.00	860.47	879.79	0.536	1.12	1.14	9.013	A
3 - Ashby Rd	521.88	130.47	521.84	553.54	581.01	0.00	1031.00	839.51	0.506	1.01	1.02	7.070	A
4 - Moira Rd	321.50	80.37	321.49	209.44	893.42	0.00	1110.59	749.39	0.289	0.40	0.41	4.561	A
5 - Swadlincote Rd	445.91	111.48	445.75	585.17	629.74	0.00	689.49	417.12	0.647	1.75	1.79	14.744	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	555.57	138.89	631.72	437.59	445.34	0.00	645.15	533.36	0.861	47.05	28.01	216.421	F
2 - Hartshorne Rd	376.67	94.17	378.09	408.47	668.60	0.00	862.79	879.79	0.437	1.14	0.79	7.448	A
3 - Ashby Rd	426.12	106.53	427.51	535.28	511.41	0.00	1070.02	839.51	0.398	1.02	0.67	5.616	A
4 - Moira Rd	262.50	65.63	263.00	194.40	744.52	0.00	1199.83	749.39	0.219	0.41	0.28	3.844	A
5 - Swadlincote Rd	364.09	91.02	367.30	491.88	515.63	0.00	741.13	417.12	0.491	1.79	0.99	9.712	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	465.26	116.32	567.64	365.99	371.71	0.00	677.26	533.36	0.687	28.01	2.42	56.037	F
2 - Hartshorne Rd	315.45	78.86	316.41	347.81	591.55	0.00	900.64	879.79	0.350	0.79	0.54	6.171	A
3 - Ashby Rd	356.85	89.21	357.62	470.29	437.67	0.00	1111.35	839.51	0.321	0.67	0.48	4.782	A
4 - Moira Rd	219.83	54.96	220.12	168.90	626.38	0.00	1270.63	749.39	0.173	0.28	0.21	3.427	A
5 - Swadlincote Rd	304.91	76.23	306.24	415.04	431.46	0.00	779.23	417.12	0.391	0.99	0.65	7.631	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	27.66	1.84	15.695	C	B
2 - Hartshorne Rd	7.18	0.48	5.670	A	A
3 - Ashby Rd	6.69	0.45	4.640	A	A
4 - Moira Rd	3.04	0.20	3.395	A	A
5 - Swadlincote Rd	9.07	0.60	7.491	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	61.44	4.10	31.903	D	C
2 - Hartshorne Rd	10.36	0.69	6.865	A	A
3 - Ashby Rd	9.39	0.63	5.464	A	A
4 - Moira Rd	4.08	0.27	3.811	A	A
5 - Swadlincote Rd	13.59	0.91	9.459	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	248.17	16.54	115.006	F	F
2 - Hartshorne Rd	16.10	1.07	8.856	A	A
3 - Ashby Rd	14.55	0.97	7.002	A	A
4 - Moira Rd	5.93	0.40	4.545	A	A
5 - Swadlincote Rd	24.38	1.63	14.359	B	B

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	556.56	37.10	233.622	F	F
2 - Hartshorne Rd	17.01	1.13	9.013	A	A
3 - Ashby Rd	15.18	1.01	7.070	A	A
4 - Moira Rd	6.07	0.40	4.561	A	A
5 - Swadlincote Rd	26.61	1.77	14.744	B	B

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	562.96	37.53	216.421	F	F
2 - Hartshorne Rd	12.21	0.81	7.448	A	A
3 - Ashby Rd	10.33	0.69	5.616	A	A
4 - Moira Rd	4.30	0.29	3.844	A	A
5 - Swadlincote Rd	15.56	1.04	9.712	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	142.02	9.47	56.037	F	E
2 - Hartshorne Rd	8.41	0.56	6.171	A	A
3 - Ashby Rd	7.31	0.49	4.782	A	A
4 - Moira Rd	3.20	0.21	3.427	A	A
5 - Swadlincote Rd	10.13	0.68	7.631	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, AM	2021 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				62.38	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	

2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	620.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	386.00	100.000
3 - Ashby Rd	ONE HOUR	✓	584.00	100.000
4 - Moira Rd	ONE HOUR	✓	299.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	354.00	100.000

Turning Proportions

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

	To					
		1 - Burton Rd	**2 - Hartshorne Rd**	**3 - Ashby Rd**	**4 - Moira Rd**	**5 - Swadlincote Rd**
	1 - Burton Rd	0.000	67.000	399.000	82.000	72.000

From	2 - Hartshorne Rd	96.000	0.000	48.000	61.000	181.000
	3 - Ashby Rd	364.000	38.000	0.000	19.000	163.000
	4 - Moira Rd	151.000	82.000	23.000	0.000	43.000
	5 - Swadlincote Rd	41.000	140.000	156.000	17.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.11	0.64	0.13	0.12
	2 - Hartshorne Rd	0.25	0.00	0.12	0.16	0.47
	3 - Ashby Rd	0.62	0.07	0.00	0.03	0.28
	4 - Moira Rd	0.51	0.27	0.08	0.00	0.14
	5 - Swadlincote Rd	0.12	0.40	0.44	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.10	199.44	40.24	F	568.92	853.38	1308.03	91.97	14.53	1308.25	91.98
2 - Hartshorne Rd	0.52	9.22	1.08	A	354.20	531.30	66.55	7.52	0.74	66.56	7.52
3 - Ashby Rd	0.61	8.80	1.55	A	535.89	803.83	91.59	6.84	1.02	91.60	6.84
4 - Moira Rd	0.31	5.01	0.46	A	274.37	411.55	29.32	4.27	0.33	29.32	4.27
5 - Swadlincote Rd	0.65	17.16	1.81	C	324.84	487.25	96.53	11.89	1.07	96.54	11.89

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	466.77	116.69	458.85	488.14	340.77	0.00	690.76	575.79	0.676	0.00	1.98	15.056	C
2 - Hartshorne Rd	290.60	72.65	288.77	244.00	555.62	0.00	918.29	833.16	0.316	0.00	0.46	5.703	A
3 - Ashby Rd	439.67	109.92	437.19	464.87	379.52	0.00	1143.94	858.91	0.384	0.00	0.62	5.077	A

4 - Moira Rd	225.10	56.28	224.22	133.23	683.48	0.00	1236.41	749.62	0.182	0.00	0.22	3.553	A
5 - Swadlincote Rd	266.51	66.63	264.19	342.96	564.73	0.00	718.91	322.63	0.371	0.00	0.58	7.878	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	557.37	139.34	547.35	584.93	408.65	0.00	661.15	575.79	0.843	1.98	4.48	29.275	D
2 - Hartshorne Rd	347.01	86.75	346.20	292.23	663.77	0.00	865.16	833.16	0.401	0.46	0.66	6.925	A
3 - Ashby Rd	525.00	131.25	523.89	555.64	454.32	0.00	1102.01	858.90	0.476	0.62	0.90	6.214	A
4 - Moira Rd	268.79	67.20	268.48	159.37	818.84	0.00	1155.29	749.62	0.233	0.22	0.30	4.059	A
5 - Swadlincote Rd	318.24	79.56	317.00	410.73	676.58	0.00	668.28	322.63	0.476	0.58	0.89	10.211	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	682.63	170.66	605.82	715.20	498.60	0.00	621.92	575.79	1.098	4.48	23.69	101.387	F
2 - Hartshorne Rd	424.99	106.25	423.43	350.02	754.40	0.00	820.64	833.16	0.518	0.66	1.05	9.027	A
3 - Ashby Rd	643.00	160.75	640.48	638.02	539.80	0.00	1054.10	858.90	0.610	0.90	1.53	8.650	A
4 - Moira Rd	329.21	82.30	328.60	186.43	993.85	0.00	1050.40	749.62	0.313	0.30	0.45	4.983	A
5 - Swadlincote Rd	389.76	97.44	386.27	494.92	827.53	0.00	599.96	322.63	0.650	0.89	1.76	16.577	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	682.63	170.66	616.40	717.75	501.88	0.00	620.49	575.79	1.100	23.69	40.24	199.442	F
2 - Hartshorne Rd	424.99	106.25	424.91	352.79	765.49	0.00	815.18	833.16	0.521	1.05	1.08	9.220	A
3 - Ashby Rd	643.00	160.75	642.90	646.52	543.88	0.00	1051.81	858.90	0.611	1.53	1.55	8.798	A
4 - Moira Rd	329.21	82.30	329.19	188.30	998.48	0.00	1047.62	749.62	0.314	0.45	0.46	5.010	A
5 - Swadlincote Rd	389.76	97.44	389.56	497.61	830.07	0.00	598.81	322.63	0.651	1.76	1.81	17.161	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	557.37	139.34	643.09	588.68	413.42	0.00	659.07	575.79	0.846	40.24	18.81	169.936	F
2 - Hartshorne Rd	347.01	86.75	348.34	304.94	751.57	0.00	822.03	833.16	0.422	1.08	0.74	7.620	A
3 - Ashby Rd	525.00	131.25	527.43	619.70	480.21	0.00	1087.50	858.90	0.483	1.55	0.95	6.457	A
4 - Moira Rd	268.79	67.20	269.39	172.71	834.93	0.00	1145.64	749.62	0.235	0.46	0.31	4.112	A
5 - Swadlincote Rd	318.24	79.56	321.76	423.98	680.34	0.00	666.58	322.63	0.477	1.81	0.93	10.544	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	466.77	116.69	533.01	492.19	344.67	0.00	689.05	575.79	0.677	18.81	2.25	31.943	D
2 - Hartshorne Rd	290.60	72.65	291.59	254.04	623.65	0.00	884.87	833.16	0.328	0.74	0.49	6.077	A
3 - Ashby Rd	439.67	109.92	440.89	514.65	400.59	0.00	1132.13	858.91	0.388	0.95	0.64	5.218	A
4 - Moira Rd	225.10	56.28	225.43	143.78	697.69	0.00	1227.89	749.62	0.183	0.31	0.23	3.594	A
5 - Swadlincote Rd	266.51	66.63	267.84	354.10	569.02	0.00	716.97	322.63	0.372	0.93	0.60	8.038	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	26.70	1.78	15.056	C	B
2 - Hartshorne Rd	6.65	0.44	5.703	A	A
3 - Ashby Rd	8.97	0.60	5.077	A	A
4 - Moira Rd	3.25	0.22	3.553	A	A
5 - Swadlincote Rd	8.33	0.56	7.878	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	57.14	3.81	29.275	D	C
2 - Hartshorne Rd	9.63	0.64	6.925	A	A
3 - Ashby Rd	13.07	0.87	6.214	A	A
4 - Moira Rd	4.45	0.30	4.059	A	A
5 - Swadlincote Rd	12.79	0.85	10.211	B	B

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	221.22	14.75	101.387	F	F
2 - Hartshorne Rd	15.12	1.01	9.027	A	A
3 - Ashby Rd	21.80	1.45	8.650	A	A
4 - Moira Rd	6.64	0.44	4.983	A	A
5 - Swadlincote Rd	24.36	1.62	16.577	C	B

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	480.53	32.04	199.442	F	F
2 - Hartshorne Rd	16.01	1.07	9.220	A	A
3 - Ashby Rd	23.14	1.54	8.798	A	A
4 - Moira Rd	6.82	0.45	5.010	A	A
5 - Swadlincote Rd	26.92	1.79	17.161	C	B

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	442.92	29.53	169.936	F	F
2 - Hartshorne Rd	11.51	0.77	7.620	A	A
3 - Ashby Rd	14.73	0.98	6.457	A	A
4 - Moira Rd	4.72	0.31	4.112	A	A
5 - Swadlincote Rd	14.79	0.99	10.544	B	B

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	79.52	5.30	31.943	D	C
2 - Hartshorne Rd	7.62	0.51	6.077	A	A
3 - Ashby Rd	9.88	0.66	5.218	A	A
4 - Moira Rd	3.44	0.23	3.594	A	A
5 - Swadlincote Rd	9.34	0.62	8.038	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, PM	2021 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				79.91	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	629.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	431.00	100.000
3 - Ashby Rd	ONE HOUR	✓	654.00	100.000
4 - Moira Rd	ONE HOUR	✓	297.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	420.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	104.000	359.000	101.000	65.000
	2 - Hartshorne Rd	79.000	0.000	58.000	72.000	222.000
	3 - Ashby Rd	396.000	35.000	0.000	7.000	216.000
	4 - Moira Rd	132.000	97.000	18.000	0.000	50.000
	5 - Swadlincote Rd	68.000	211.000	110.000	31.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.17	0.57	0.16	0.10
	2 - Hartshorne Rd	0.18	0.00	0.13	0.17	0.52
	3 - Ashby Rd	0.61	0.05	0.00	0.01	0.33
	4 - Moira Rd	0.44	0.33	0.06	0.00	0.17
	5 - Swadlincote Rd	0.16	0.50	0.26	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.16	269.90	54.85	F	577.18	865.77	1985.76	137.62	22.06	1986.11	137.64
2 - Hartshorne Rd	0.55	9.32	1.21	A	395.49	593.24	75.69	7.66	0.84	75.70	7.66
3 - Ashby Rd	0.71	12.00	2.35	B	600.12	900.18	128.22	8.55	1.42	128.24	8.55
4 - Moira Rd	0.33	5.48	0.50	A	272.53	408.80	31.21	4.58	0.35	31.21	4.58
5 - Swadlincote Rd	0.77	26.20	3.22	D	385.40	578.10	150.91	15.66	1.68	150.94	15.67

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	473.54	118.39	464.74	505.00	374.82	0.00	675.91	557.70	0.701	0.00	2.20	16.438	C
2 - Hartshorne Rd	324.48	81.12	322.40	333.05	506.51	0.00	942.42	879.05	0.344	0.00	0.52	5.788	A
3 - Ashby Rd	492.37	123.09	489.26	404.13	424.77	0.00	1118.57	832.42	0.440	0.00	0.78	5.694	A
4 - Moira Rd	223.60	55.90	222.68	156.83	757.20	0.00	1192.23	750.02	0.188	0.00	0.23	3.709	A
5 - Swadlincote Rd	316.20	79.05	313.10	413.16	566.71	0.00	718.01	370.97	0.440	0.00	0.77	8.826	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	565.46	141.36	552.15	605.16	449.41	0.00	643.38	557.70	0.879	2.20	5.53	35.116	E
2 - Hartshorne Rd	387.46	96.87	386.53	398.45	603.11	0.00	894.96	879.05	0.433	0.52	0.75	7.067	A
3 - Ashby Rd	587.93	146.98	586.27	481.69	507.95	0.00	1071.95	832.42	0.548	0.78	1.19	7.387	A
4 - Moira Rd	267.00	66.75	266.65	187.23	906.99	0.00	1102.45	750.02	0.242	0.23	0.32	4.305	A
5 - Swadlincote Rd	377.57	94.39	375.60	494.67	678.97	0.00	667.20	370.97	0.566	0.77	1.27	12.261	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	692.54	173.14	591.11	738.74	546.26	0.00	601.14	557.70	1.152	5.53	30.89	128.571	F
2 - Hartshorne Rd	474.54	118.63	472.78	471.36	666.01	0.00	864.06	879.05	0.549	0.75	1.19	9.158	A
3 - Ashby Rd	720.07	180.02	715.66	540.03	598.77	0.00	1021.05	832.42	0.705	1.19	2.29	11.621	B
4 - Moira Rd	327.00	81.75	326.31	215.16	1099.27	0.00	987.22	750.02	0.331	0.32	0.49	5.441	A
5 - Swadlincote Rd	462.43	115.61	455.33	595.91	829.67	0.00	598.99	370.97	0.772	1.27	3.04	23.948	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	692.54	173.14	596.70	742.91	552.09	0.00	598.60	557.70	1.157	30.89	54.85	268.692	F
2 - Hartshorne Rd	474.54	118.63	474.46	475.93	672.86	0.00	860.69	879.05	0.551	1.19	1.21	9.316	A
3 - Ashby Rd	720.07	180.02	719.84	545.16	602.16	0.00	1019.15	832.42	0.707	2.29	2.35	12.003	B
4 - Moira Rd	327.00	81.75	326.99	216.86	1105.15	0.00	983.70	750.02	0.332	0.49	0.50	5.481	A
5 - Swadlincote Rd	462.43	115.61	461.71	598.84	833.29	0.00	597.35	370.97	0.774	3.04	3.22	26.203	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	565.46	141.36	628.16	611.22	458.03	0.00	639.62	557.70	0.884	54.85	39.17	269.904	F
2 - Hartshorne Rd	387.46	96.87	389.00	416.41	669.78	0.00	862.20	879.05	0.449	1.21	0.83	7.631	A
3 - Ashby Rd	587.93	146.98	592.26	527.93	530.85	0.00	1059.12	832.42	0.555	2.35	1.27	7.781	A
4 - Moira Rd	267.00	66.75	267.68	200.61	922.50	0.00	1093.16	750.02	0.244	0.50	0.33	4.364	A
5 - Swadlincote Rd	377.57	94.39	385.03	505.95	684.22	0.00	664.82	370.97	0.568	3.22	1.36	13.189	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	473.54	118.39	618.95	509.94	380.01	0.00	673.64	557.70	0.703	39.17	2.82	104.100	F
2 - Hartshorne Rd	324.48	81.12	325.42	361.89	637.08	0.00	878.27	879.05	0.369	0.83	0.59	6.522	A
3 - Ashby Rd	492.37	123.09	494.14	494.02	468.48	0.00	1094.08	832.42	0.450	1.27	0.83	6.019	A
4 - Moira Rd	223.60	55.90	223.96	182.54	780.08	0.00	1178.52	750.02	0.190	0.33	0.24	3.771	A
5 - Swadlincote Rd	316.20	79.05	318.40	432.49	571.55	0.00	715.82	370.97	0.442	1.36	0.81	9.107	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	29.37	1.96	16.438	C	B
2 - Hartshorne Rd	7.53	0.50	5.788	A	A
3 - Ashby Rd	11.22	0.75	5.694	A	A
4 - Moira Rd	3.37	0.22	3.709	A	A
5 - Swadlincote Rd	11.00	0.73	8.826	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	68.03	4.54	35.116	E	D
2 - Hartshorne Rd	10.95	0.73	7.067	A	A
3 - Ashby Rd	17.22	1.15	7.387	A	A
4 - Moira Rd	4.68	0.31	4.305	A	A
5 - Swadlincote Rd	17.95	1.20	12.261	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	280.31	18.69	128.571	F	F
2 - Hartshorne Rd	17.09	1.14	9.158	A	A
3 - Ashby Rd	31.97	2.13	11.621	B	B
4 - Moira Rd	7.18	0.48	5.441	A	A

5 - Swadlincote Rd	39.92	2.66	23.948	C	C

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	643.56	42.90	268.692	F	F
2 - Hartshorne Rd	18.08	1.21	9.316	A	A
3 - Ashby Rd	34.95	2.33	12.003	B	B
4 - Moira Rd	7.41	0.49	5.481	A	A
5 - Swadlincote Rd	47.23	3.15	26.203	D	C

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	705.10	47.01	269.904	F	F
2 - Hartshorne Rd	12.89	0.86	7.631	A	A
3 - Ashby Rd	20.02	1.33	7.781	A	A
4 - Moira Rd	4.98	0.33	4.364	A	A
5 - Swadlincote Rd	22.18	1.48	13.189	B	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	259.38	17.29	104.100	F	F
2 - Hartshorne Rd	9.15	0.61	6.522	A	A
3 - Ashby Rd	12.83	0.86	6.019	A	A
4 - Moira Rd	3.59	0.24	3.771	A	A
5 - Swadlincote Rd	12.63	0.84	9.107	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, AM	2024 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				112.46	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	640.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	397.00	100.000
3 - Ashby Rd	ONE HOUR	✓	693.00	100.000

4 - Moira Rd	ONE HOUR	✓	303.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	439.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	70.000	417.000	86.000	67.000
	2 - Hartshorne Rd	101.000	0.000	50.000	60.000	186.000
	3 - Ashby Rd	380.000	40.000	0.000	19.000	254.000
	4 - Moira Rd	156.000	79.000	24.000	0.000	44.000
	5 - Swadlincote Rd	36.000	142.000	244.000	17.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.11	0.65	0.13	0.10
	2 - Hartshorne Rd	0.25	0.00	0.13	0.15	0.47
	3 - Ashby Rd	0.55	0.06	0.00	0.03	0.37
	4 - Moira Rd	0.51	0.26	0.08	0.00	0.15
	5 - Swadlincote Rd	0.08	0.32	0.56	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.22	388.92	71.38	F	587.28	880.91	2922.52	199.06	32.47	2941.65	200.36
2 - Hartshorne Rd	0.56	10.34	1.24	B	364.29	546.44	76.35	8.38	0.85	76.36	8.38
3 - Ashby Rd	0.72	12.30	2.55	B	635.91	953.86	138.20	8.69	1.54	138.22	8.69
4 - Moira Rd	0.34	5.60	0.52	A	278.04	417.06	32.41	4.66	0.36	32.41	4.66
5 - Swadlincote Rd	0.82	33.65	4.27	D	402.83	604.25	184.68	18.34	2.05	184.72	18.34

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	481.83	120.46	471.88	503.56	407.41	0.00	661.69	565.73	0.728	0.00	2.49	18.133	C
2 - Hartshorne Rd	298.88	74.72	296.85	246.56	632.73	0.00	880.41	811.99	0.339	0.00	0.51	6.148	A
3 - Ashby Rd	521.73	130.43	518.40	544.64	384.94	0.00	1140.90	875.44	0.457	0.00	0.83	5.754	A
4 - Moira Rd	228.11	57.03	227.17	135.15	768.18	0.00	1185.65	748.45	0.192	0.00	0.24	3.752	A
5 - Swadlincote Rd	330.50	82.63	327.09	411.47	583.88	0.00	710.24	351.30	0.465	0.00	0.85	9.316	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	575.35	143.84	556.90	603.39	488.43	0.00	626.36	565.73	0.919	2.49	7.10	43.225	E
2 - Hartshorne Rd	356.89	89.22	355.91	294.58	750.76	0.00	822.42	811.99	0.434	0.51	0.76	7.701	A
3 - Ashby Rd	622.99	155.75	621.19	647.26	459.41	0.00	1099.16	875.44	0.567	0.83	1.28	7.503	A
4 - Moira Rd	272.39	68.10	272.02	160.85	919.75	0.00	1094.81	748.45	0.249	0.24	0.33	4.373	A
5 - Swadlincote Rd	394.65	98.66	392.28	492.23	699.54	0.00	657.89	351.30	0.600	0.85	1.45	13.431	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	704.65	176.16	575.37	736.69	591.54	0.00	581.39	565.73	1.212	7.10	39.42	162.859	F
2 - Hartshorne Rd	437.11	109.28	435.27	346.62	820.28	0.00	788.27	811.98	0.555	0.76	1.21	10.144	B
3 - Ashby Rd	763.01	190.75	758.19	719.21	536.33	0.00	1056.05	875.44	0.723	1.28	2.49	11.893	B
4 - Moira Rd	333.61	83.40	332.88	182.22	1112.30	0.00	979.41	748.45	0.341	0.33	0.51	5.563	A
5 - Swadlincote Rd	483.35	120.84	473.44	590.39	854.78	0.00	587.63	351.30	0.823	1.45	3.92	29.283	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	704.65	176.16	576.82	740.71	599.88	0.00	577.75	565.73	1.220	39.42	71.38	351.918	F
2 - Hartshorne Rd	437.11	109.28	437.01	350.00	826.71	0.00	785.11	811.98	0.557	1.21	1.24	10.336	B
3 - Ashby Rd	763.01	190.75	762.76	725.19	538.53	0.00	1054.81	875.44	0.723	2.49	2.55	12.297	B
4 - Moira Rd	333.61	83.40	333.59	183.13	1118.16	0.00	975.90	748.45	0.342	0.51	0.52	5.604	A
5 - Swadlincote Rd	483.35	120.84	481.98	593.14	858.61	0.00	585.90	351.30	0.825	3.92	4.27	33.655	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	575.35	143.84	612.19	609.30	501.26	0.00	620.77	565.73	0.927	71.38	62.17	388.916	F
2 - Hartshorne Rd	356.89	89.22	358.53	305.54	807.90	0.00	794.35	811.99	0.449	1.24	0.83	8.291	A
3 - Ashby Rd	622.99	155.75	627.76	691.01	475.43	0.00	1090.18	875.44	0.571	2.55	1.36	7.864	A
4 - Moira Rd	272.39	68.10	273.11	169.36	933.83	0.00	1086.37	748.45	0.251	0.52	0.34	4.431	A
5 - Swadlincote Rd	394.65	98.66	405.43	501.81	705.12	0.00	655.37	351.30	0.602	4.27	1.57	14.977	B

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

Name	Total Demand	Junction Arrivals	Entry Flow	Exit Flow	Circulating Flow	Pedestrian Demand	Capacity	Saturation Capacity	RFC	Start Queue	End Queue	Delay	LOS

	(PCU/hr)	(PCU)	(PCU/hr)	(PCU/hr)	(PCU/hr)	(Ped/hr)	(PCU/hr)	(PCU/hr)		(PCU)	(PCU)	(s)	
1 - Burton Rd	481.83	120.46	648.48	508.35	413.78	0.00	658.91	565.73	0.731	62.17	20.50	234.651	F
2 - Hartshorne Rd	298.88	74.72	299.79	268.51	793.76	0.00	801.30	811.99	0.373	0.83	0.60	7.193	A
3 - Ashby Rd	521.73	130.43	523.61	663.59	429.96	0.00	1115.66	875.44	0.468	1.36	0.89	6.099	A
4 - Moira Rd	228.11	57.03	228.49	159.71	793.86	0.00	1170.25	748.45	0.195	0.34	0.24	3.823	A
5 - Swadlincote Rd	330.50	82.63	333.22	433.44	588.91	0.00	707.96	351.30	0.467	1.57	0.89	9.675	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	32.72	2.18	18.133	C	B
2 - Hartshorne Rd	7.36	0.49	6.148	A	A
3 - Ashby Rd	12.00	0.80	5.754	A	A
4 - Moira Rd	3.48	0.23	3.752	A	A
5 - Swadlincote Rd	12.10	0.81	9.316	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	83.32	5.55	43.225	E	D
2 - Hartshorne Rd	10.96	0.73	7.701	A	A
3 - Ashby Rd	18.50	1.23	7.503	A	A
4 - Moira Rd	4.85	0.32	4.373	A	A
5 - Swadlincote Rd	20.38	1.36	13.431	B	B

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	353.59	23.57	162.859	F	F
2 - Hartshorne Rd	17.35	1.16	10.144	B	B
3 - Ashby Rd	34.55	2.30	11.893	B	B
4 - Moira Rd	7.48	0.50	5.563	A	A
5 - Swadlincote Rd	49.75	3.32	29.283	D	C

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	831.28	55.42	351.918	F	F
2 - Hartshorne Rd	18.44	1.23	10.336	B	B
3 - Ashby Rd	37.90	2.53	12.297	B	B
4 - Moira Rd	7.72	0.51	5.604	A	A
5 - Swadlincote Rd	61.91	4.13	33.655	D	C

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	1001.58	66.77	388.916	F	F
2 - Hartshorne Rd	12.93	0.86	8.291	A	A
3 - Ashby Rd	21.45	1.43	7.864	A	A
4 - Moira Rd	5.16	0.34	4.431	A	A
5 - Swadlincote Rd	26.48	1.77	14.977	B	B

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	620.02	41.33	234.651	F	F
2 - Hartshorne	9.31	0.62	7.193	A	A

Rd					
3 - Ashby Rd	13.80	0.92	6.099	A	A
4 - Moira Rd	3.71	0.25	3.823	A	A
5 - Swadlincote Rd	14.07	0.94	9.675	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, PM	2024 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				128.63	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

	V - Approach road half-	E - Entry	I' - Effective flare	R - Entry	D - Inscribed circle	PHI - Conflict (entry)	Exit

Name	width (m)	width (m)	length (m)	radius (m)	diameter (m)	angle (deg)	Only
1 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	644.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	438.00	100.000
3 - Ashby Rd	ONE HOUR	✓	796.00	100.000
4 - Moira Rd	ONE HOUR	✓	305.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	481.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	108.000	375.000	104.000	57.000
	2 - Hartshorne Rd	82.000	0.000	61.000	68.000	227.000
	3 - Ashby Rd	414.000	36.000	0.000	8.000	338.000
	4 - Moira Rd	138.000	97.000	18.000	0.000	52.000
	5 - Swadlincote Rd	61.000	217.000	172.000	31.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.17	0.58	0.16	0.09
	2 - Hartshorne Rd	0.19	0.00	0.14	0.16	0.52
	3 - Ashby Rd	0.52	0.05	0.00	0.01	0.42
	4 - Moira Rd	0.45	0.32	0.06	0.00	0.17
	5 - Swadlincote Rd	0.13	0.45	0.36	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.25	452.91	79.16	F	590.95	886.42	3403.03	230.34	37.81	3459.09	234.14
2 - Hartshorne Rd	0.57	10.02	1.32	B	401.92	602.87	82.15	8.18	0.91	82.17	8.18
3 - Ashby Rd	0.85	23.35	5.40	C	730.42	1095.64	241.67	13.23	2.69	241.71	13.24
4 - Moira Rd	0.38	6.46	0.60	A	279.87	419.81	36.24	5.18	0.40	36.24	5.18
5 - Swadlincote Rd	0.91	54.14	7.41	F	441.37	662.06	273.03	24.74	3.03	273.08	24.75

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	484.84	121.21	474.26	519.48	425.73	0.00	653.71	546.06	0.742	0.00	2.64	19.088	C
2 - Hartshorne Rd	329.75	82.44	327.52	340.66	559.33	0.00	916.47	862.70	0.360	0.00	0.56	6.089	A
3 - Ashby Rd	599.27	149.82	594.74	463.30	423.55	0.00	1119.26	849.39	0.535	0.00	1.13	6.806	A
4 - Moira Rd	229.62	57.41	228.61	156.49	861.80	0.00	1129.54	748.37	0.203	0.00	0.25	3.992	A
5 - Swadlincote Rd	362.12	90.53	358.04	503.24	587.17	0.00	708.75	403.10	0.511	0.00	1.02	10.151	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	578.94	144.74	557.17	622.31	510.14	0.00	616.89	546.06	0.938	2.64	8.09	48.133	E
2 - Hartshorne Rd	393.75	98.44	392.70	406.32	660.99	0.00	866.52	862.70	0.454	0.56	0.82	7.580	A
3 - Ashby Rd	715.59	178.90	712.38	548.73	504.95	0.00	1073.63	849.39	0.667	1.13	1.94	9.875	A
4 - Moira Rd	274.19	68.55	273.76	185.76	1031.57	0.00	1027.79	748.37	0.267	0.25	0.36	4.772	A

5 - Swadlincote Rd	432.41	108.10	429.12	602.00	703.33	0.00	656.18	403.10	0.659	1.02	1.84	15.625	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	709.06	177.26	567.52	755.75	612.45	0.00	572.27	546.06	1.239	8.09	43.47	180.755	F
2 - Hartshorne Rd	482.25	120.56	480.32	471.76	708.21	0.00	843.33	862.70	0.572	0.82	1.30	9.864	A
3 - Ashby Rd	876.41	219.10	863.99	600.22	588.30	0.00	1026.92	849.39	0.853	1.94	5.04	20.669	C
4 - Moira Rd	335.81	83.95	334.90	207.90	1244.39	0.00	900.25	748.37	0.373	0.36	0.59	6.357	A
5 - Swadlincote Rd	529.59	132.40	512.03	723.13	856.16	0.00	587.00	403.10	0.902	1.84	6.23	40.898	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	709.06	177.26	566.32	763.83	624.49	0.00	567.02	546.06	1.251	43.47	79.16	394.438	F
2 - Hartshorne Rd	482.25	120.56	482.16	478.13	712.69	0.00	841.13	862.70	0.573	1.30	1.32	10.022	B
3 - Ashby Rd	876.41	219.10	874.97	604.43	590.42	0.00	1025.73	849.39	0.854	5.04	5.40	23.348	C
4 - Moira Rd	335.81	83.95	335.77	208.93	1256.46	0.00	893.01	748.37	0.376	0.59	0.60	6.460	A
5 - Swadlincote Rd	529.59	132.40	524.88	728.79	863.44	0.00	583.71	403.10	0.907	6.23	7.41	54.143	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	578.94	144.74	599.41	635.07	532.85	0.00	606.99	546.06	0.954	79.16	74.04	452.911	F
2 - Hartshorne Rd	393.75	98.44	395.50	425.66	706.61	0.00	844.11	862.70	0.466	1.32	0.89	8.057	A
3 - Ashby Rd	715.59	178.90	728.74	582.59	519.51	0.00	1065.47	849.39	0.672	5.40	2.11	11.082	B
4 - Moira Rd	274.19	68.55	275.09	194.77	1053.49	0.00	1014.66	748.37	0.270	0.60	0.37	4.875	A
5 - Swadlincote Rd	432.41	108.10	453.71	614.37	714.21	0.00	651.25	403.10	0.664	7.41	2.08	19.950	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	484.84	121.21	641.55	525.96	433.72	0.00	650.22	546.06	0.746	74.04	34.86	309.056	F
2 - Hartshorne Rd	329.75	82.44	330.72	373.21	702.07	0.00	846.34	862.70	0.390	0.89	0.65	6.997	A
3 - Ashby Rd	599.27	149.82	602.80	564.14	468.65	0.00	1093.98	849.39	0.548	2.11	1.23	7.380	A
4 - Moira Rd	229.62	57.41	230.07	184.61	886.84	0.00	1114.53	748.37	0.206	0.37	0.26	4.072	A
5 - Swadlincote Rd	362.12	90.53	366.15	523.37	593.54	0.00	705.87	403.10	0.513	2.08	1.08	10.719	B

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	34.52	2.30	19.088	C	B
2 - Hartshorne Rd	8.04	0.54	6.089	A	A
3 - Ashby Rd	16.18	1.08	6.806	A	A
4 - Moira Rd	3.72	0.25	3.992	A	A
5 - Swadlincote Rd	14.37	0.96	10.151	B	B

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	92.45	6.16	48.133	E	D
2 - Hartshorne Rd	11.89	0.79	7.580	A	A
3 - Ashby Rd	27.39	1.83	9.875	A	A
4 - Moira Rd	5.31	0.35	4.772	A	A
5 - Swadlincote Rd	25.58	1.71	15.625	C	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	390.47	26.03	180.755	F	F
2 - Hartshorne Rd	18.62	1.24	9.864	A	A
3 - Ashby Rd	64.79	4.32	20.669	C	C
4 - Moira Rd	8.57	0.57	6.357	A	A
5 - Swadlincote Rd	73.16	4.88	40.898	E	D

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	919.94	61.33	394.438	F	F
2 - Hartshorne Rd	19.75	1.32	10.022	B	B
3 - Ashby Rd	78.86	5.26	23.348	C	C
4 - Moira Rd	8.92	0.59	6.460	A	A
5 - Swadlincote Rd	103.59	6.91	54.143	F	D

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	1148.94	76.60	452.911	F	F
2 - Hartshorne Rd	13.86	0.92	8.057	A	A
3 - Ashby Rd	35.10	2.34	11.082	B	B
4 - Moira Rd	5.73	0.38	4.875	A	A
5 - Swadlincote Rd	39.22	2.61	19.950	C	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	816.71	54.45	309.056	F	F
2 - Hartshorne Rd	9.99	0.67	6.997	A	A
3 - Ashby Rd	19.34	1.29	7.380	A	A
4 - Moira Rd	3.99	0.27	4.072	A	A
5 - Swadlincote Rd	17.12	1.14	10.719	B	B

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

		Time		Traffic	Model	Model	Model Time	Time	Results For	Single				

Name	Scenario Name	Period Name	Description	Profile Type	Start Time (HH:mm)	Finish Time (HH:mm)	Period Length (min)	Segment Length (min)	Central Hour Only	Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, AM	2024 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				127.11	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	648.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	403.00	100.000
3 - Ashby Rd	ONE HOUR	✓	693.00	100.000
4 - Moira Rd	ONE HOUR	✓	312.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	451.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	70.000	417.000	86.000	75.000
	2 - Hartshorne Rd	101.000	0.000	50.000	63.000	189.000
	3 - Ashby Rd	380.000	40.000	0.000	19.000	254.000
	4 - Moira Rd	158.000	85.000	24.000	0.000	45.000
	5 - Swadlincote Rd	43.000	146.000	244.000	18.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.11	0.64	0.13	0.12
	2 - Hartshorne Rd	0.25	0.00	0.12	0.16	0.47
	3 - Ashby Rd	0.55	0.06	0.00	0.03	0.37
	4 - Moira Rd	0.51	0.27	0.08	0.00	0.14
	5 - Swadlincote Rd	0.10	0.32	0.54	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.25	441.67	78.71	F	594.62	891.92	3353.37	225.58	37.26	3402.67	228.90
2 - Hartshorne Rd	0.56	10.49	1.28	B	369.80	554.70	78.57	8.50	0.87	78.58	8.50
3 - Ashby Rd	0.73	12.58	2.61	B	635.91	953.86	140.57	8.84	1.56	140.60	8.84
4 - Moira Rd	0.35	5.74	0.54	A	286.30	429.44	34.01	4.75	0.38	34.01	4.75
5 - Swadlincote Rd	0.85	39.31	5.08	E	413.85	620.77	209.07	20.21	2.32	209.11	20.21

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	487.85	121.96	477.29	510.23	415.53	0.00	658.15	563.97	0.741	0.00	2.64	18.945	C
2 - Hartshorne Rd	303.40	75.85	301.31	253.95	638.87	0.00	877.39	814.93	0.346	0.00	0.52	6.227	A
3 - Ashby Rd	521.73	130.43	518.36	544.26	395.92	0.00	1134.74	870.12	0.460	0.00	0.84	5.810	A
4 - Moira Rd	234.89	58.72	233.90	138.07	776.21	0.00	1180.83	748.27	0.199	0.00	0.25	3.798	A
5 - Swadlincote Rd	339.54	84.88	335.92	420.28	589.84	0.00	707.55	353.55	0.480	0.00	0.90	9.598	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	582.54	145.63	561.13	611.38	498.10	0.00	622.14	563.97	0.936	2.64	7.99	47.374	E
2 - Hartshorne Rd	362.29	90.57	361.26	303.17	756.06	0.00	819.82	814.93	0.442	0.52	0.78	7.832	A
3 - Ashby Rd	622.99	155.75	621.14	645.38	471.93	0.00	1092.14	870.12	0.570	0.84	1.30	7.612	A
4 - Moira Rd	280.48	70.12	280.09	164.05	929.02	0.00	1089.25	748.27	0.258	0.25	0.34	4.447	A
5 - Swadlincote Rd	405.44	101.36	402.80	502.43	706.68	0.00	654.66	353.55	0.619	0.90	1.56	14.142	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	713.46	178.37	572.05	746.16	601.81	0.00	576.91	563.97	1.237	7.99	43.34	178.626	F
2 - Hartshorne Rd	443.71	110.93	441.82	355.77	818.09	0.00	789.35	814.93	0.562	0.78	1.25	10.301	B
3 - Ashby Rd	763.01	190.75	758.05	711.44	548.47	0.00	1049.24	870.12	0.727	1.30	2.54	12.156	B
4 - Moira Rd	343.52	85.88	342.74	185.11	1121.41	0.00	973.95	748.27	0.353	0.34	0.54	5.696	A
5 - Swadlincote Rd	496.56	124.14	484.51	600.69	863.46	0.00	583.70	353.55	0.851	1.56	4.58	32.928	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	713.46	178.37	572.00	750.53	611.42	0.00	572.72	563.97	1.246	43.34	78.71	388.516	F
2 - Hartshorne Rd	443.71	110.93	443.62	359.49	823.93	0.00	786.48	814.93	0.564	1.25	1.28	10.494	B
3 - Ashby Rd	763.01	190.75	762.75	717.11	550.43	0.00	1048.14	870.12	0.728	2.54	2.61	12.582	B
4 - Moira Rd	343.52	85.88	343.50	185.91	1127.27	0.00	970.44	748.27	0.354	0.54	0.54	5.741	A
5 - Swadlincote Rd	496.56	124.14	494.55	603.36	867.41	0.00	581.91	353.55	0.853	4.58	5.08	39.312	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	582.54	145.63	607.72	617.90	513.47	0.00	615.44	563.97	0.947	78.71	72.41	441.672	F
2 - Hartshorne Rd	362.29	90.57	363.98	314.13	807.06	0.00	794.76	814.93	0.456	1.28	0.85	8.389	A
3 - Ashby Rd	622.99	155.75	627.91	684.51	486.54	0.00	1083.95	870.12	0.575	2.61	1.38	7.976	A
4 - Moira Rd	280.48	70.12	281.25	171.49	942.96	0.00	1080.90	748.27	0.259	0.54	0.35	4.505	A
5 - Swadlincote Rd	405.44	101.36	418.91	511.75	712.46	0.00	652.04	353.55	0.622	5.08	1.71	16.251	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	487.85	121.96	646.25	515.22	422.36	0.00	655.17	563.97	0.745	72.41	32.81	296.798	F
2 - Hartshorne Rd	303.40	75.85	304.34	275.04	793.57	0.00	801.39	814.93	0.379	0.85	0.62	7.255	A
3 - Ashby Rd	521.73	130.43	523.65	657.09	440.82	0.00	1109.58	870.12	0.470	1.38	0.90	6.165	A
4 - Moira Rd	234.89	58.72	235.29	161.37	803.09	0.00	1164.73	748.27	0.202	0.35	0.25	3.874	A
5 - Swadlincote Rd	339.54	84.88	342.60	443.39	594.98	0.00	705.22	353.55	0.481	1.71	0.95	10.010	B

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	34.49	2.30	18.945	C	B
2 - Hartshorne Rd	7.56	0.50	6.227	A	A
3 - Ashby Rd	12.12	0.81	5.810	A	A
4 - Moira Rd	3.62	0.24	3.798	A	A
5 - Swadlincote Rd	12.78	0.85	9.598	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	91.67	6.11	47.374	E	D
2 - Hartshorne Rd	11.30	0.75	7.832	A	A
3 - Ashby Rd	18.76	1.25	7.612	A	A
4 - Moira Rd	5.07	0.34	4.447	A	A
5 - Swadlincote Rd	21.94	1.46	14.142	B	B

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	388.90	25.93	178.626	F	F
2 - Hartshorne Rd	17.87	1.19	10.301	B	B
3 - Ashby Rd	35.24	2.35	12.156	B	B
4 - Moira Rd	7.88	0.53	5.696	A	A
5 - Swadlincote Rd	56.64	3.78	32.928	D	C

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	915.65	61.04	388.516	F	F
2 - Hartshorne Rd	19.00	1.27	10.494	B	B
3 - Ashby Rd	38.75	2.58	12.582	B	B
4 - Moira Rd	8.14	0.54	5.741	A	A
5 - Swadlincote Rd	73.10	4.87	39.312	E	D

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	1133.43	75.56	441.672	F	F
2 - Hartshorne Rd	13.29	0.89	8.389	A	A
3 - Ashby Rd	21.76	1.45	7.976	A	A
4 - Moira Rd	5.41	0.36	4.505	A	A
5 - Swadlincote Rd	29.64	1.98	16.251	C	B

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	789.22	52.61	296.798	F	F
2 - Hartshorne Rd	9.54	0.64	7.255	A	A
3 - Ashby Rd	13.95	0.93	6.165	A	A
4 - Moira Rd	3.88	0.26	3.874	A	A
5 - Swadlincote Rd	14.97	1.00	10.010	B	B

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, PM	2024 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				149.41	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	

2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	657.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	450.00	100.000
3 - Ashby Rd	ONE HOUR	✓	796.00	100.000
4 - Moira Rd	ONE HOUR	✓	309.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	495.00	100.000

Turning Proportions

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

	To					
		1 - Burton Rd	**2 - Hartshorne Rd**	**3 - Ashby Rd**	**4 - Moira Rd**	**5 - Swadlincote Rd**
	1 - Burton Rd	0.000	108.000	375.000	106.000	68.000

From	2 - Hartshorne Rd	82.000	0.000	61.000	75.000	232.000
	3 - Ashby Rd	414.000	36.000	0.000	8.000	338.000
	4 - Moira Rd	138.000	101.000	18.000	0.000	52.000
	5 - Swadlincote Rd	70.000	221.000	172.000	32.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.16	0.57	0.16	0.10
	2 - Hartshorne Rd	0.18	0.00	0.14	0.17	0.52
	3 - Ashby Rd	0.52	0.05	0.00	0.01	0.42
	4 - Moira Rd	0.45	0.33	0.06	0.00	0.17
	5 - Swadlincote Rd	0.14	0.45	0.35	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.28	524.94	88.96	F	602.87	904.31	3990.93	264.79	44.34	4114.39	272.98
2 - Hartshorne Rd	0.59	10.39	1.41	B	412.93	619.39	86.97	8.42	0.97	86.98	8.43
3 - Ashby Rd	0.86	25.20	5.81	D	730.42	1095.64	254.21	13.92	2.82	254.26	13.92
4 - Moira Rd	0.38	6.61	0.62	A	283.54	425.32	37.37	5.27	0.42	37.37	5.27
5 - Swadlincote Rd	0.94	66.22	9.38	F	454.22	681.33	322.14	28.37	3.58	322.20	28.37

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	494.62	123.66	483.10	526.10	432.31	0.00	650.83	544.98	0.760	0.00	2.88	20.277	C
2 - Hartshorne Rd	338.78	84.70	336.44	346.45	568.97	0.00	911.73	864.04	0.372	0.00	0.58	6.233	A
3 - Ashby Rd	599.27	149.82	594.64	462.82	442.59	0.00	1108.58	842.45	0.541	0.00	1.16	6.945	A

4 - Moira Rd	232.63	58.16	231.59	163.80	873.43	0.00	1122.57	751.07	0.207	0.00	0.26	4.037	A
5 - Swadlincote Rd	372.66	93.17	368.32	514.93	590.09	0.00	707.43	404.95	0.527	0.00	1.09	10.488	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	590.63	147.66	563.92	630.19	517.90	0.00	613.51	544.98	0.963	2.88	9.56	54.468	F
2 - Hartshorne Rd	404.54	101.14	403.40	412.58	669.24	0.00	862.47	864.04	0.469	0.58	0.87	7.822	A
3 - Ashby Rd	715.59	178.90	712.21	546.05	526.59	0.00	1061.50	842.45	0.674	1.16	2.00	10.207	B
4 - Moira Rd	277.78	69.45	277.34	193.90	1044.90	0.00	1019.80	751.07	0.272	0.26	0.37	4.845	A
5 - Swadlincote Rd	444.99	111.25	441.29	615.43	706.81	0.00	654.60	404.95	0.680	1.09	2.01	16.587	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	723.37	180.84	565.94	764.17	618.76	0.00	569.52	544.98	1.270	9.56	48.92	202.825	F
2 - Hartshorne Rd	495.46	123.86	493.39	476.47	708.23	0.00	843.32	864.04	0.588	0.87	1.39	10.225	B
3 - Ashby Rd	876.41	219.10	862.88	591.41	610.20	0.00	1014.64	842.45	0.864	2.00	5.38	21.981	C
4 - Moira Rd	340.22	85.05	339.27	216.02	1257.06	0.00	892.65	751.07	0.381	0.37	0.61	6.495	A
5 - Swadlincote Rd	545.01	136.25	523.04	736.44	859.89	0.00	585.31	404.95	0.931	2.01	7.50	46.744	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	723.37	180.84	563.21	773.13	632.05	0.00	563.73	544.98	1.283	48.92	88.96	443.560	F
2 - Hartshorne Rd	495.46	123.86	495.37	483.30	711.96	0.00	841.48	864.04	0.589	1.39	1.41	10.395	B
3 - Ashby Rd	876.41	219.10	874.70	595.20	612.12	0.00	1013.57	842.45	0.865	5.38	5.81	25.201	D
4 - Moira Rd	340.22	85.05	340.17	216.97	1269.86	0.00	884.98	751.07	0.384	0.61	0.62	6.607	A
5 - Swadlincote Rd	545.01	136.25	537.49	742.35	867.69	0.00	581.79	404.95	0.937	7.50	9.38	66.218	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	590.63	147.66	594.91	645.18	546.68	0.00	600.96	544.98	0.983	88.96	87.89	524.943	F
2 - Hartshorne Rd	404.54	101.14	406.43	433.20	708.38	0.00	843.24	864.04	0.480	1.41	0.94	8.276	A
3 - Ashby Rd	715.59	178.90	730.08	575.33	539.49	0.00	1054.28	842.45	0.679	5.81	2.19	11.564	B
4 - Moira Rd	277.78	69.45	278.73	201.65	1067.92	0.00	1006.01	751.07	0.276	0.62	0.38	4.957	A
5 - Swadlincote Rd	444.99	111.25	473.24	628.03	718.62	0.00	649.26	404.95	0.685	9.38	2.32	23.262	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	494.62	123.66	639.76	533.00	441.02	0.00	647.04	544.98	0.764	87.89	51.60	394.891	F
2 - Hartshorne Rd	338.78	84.70	339.83	377.09	703.68	0.00	845.55	864.04	0.401	0.94	0.68	7.135	A
3 - Ashby Rd	599.27	149.82	602.98	555.92	487.59	0.00	1083.37	842.45	0.553	2.19	1.26	7.549	A
4 - Moira Rd	232.63	58.16	233.10	190.31	900.26	0.00	1106.49	751.07	0.210	0.38	0.27	4.123	A
5 - Swadlincote Rd	372.66	93.17	377.34	536.68	596.68	0.00	704.45	404.95	0.529	2.32	1.15	11.155	B

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	37.23	2.48	20.277	C	C
2 - Hartshorne Rd	8.44	0.56	6.233	A	A
3 - Ashby Rd	16.50	1.10	6.945	A	A
4 - Moira Rd	3.81	0.25	4.037	A	A
5 - Swadlincote Rd	15.24	1.02	10.488	B	B

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	105.69	7.05	54.468	F	D
2 - Hartshorne Rd	12.59	0.84	7.822	A	A
3 - Ashby Rd	28.23	1.88	10.207	B	B
4 - Moira Rd	5.46	0.36	4.845	A	A
5 - Swadlincote Rd	27.76	1.85	16.587	C	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	441.43	29.43	202.825	F	F
2 - Hartshorne Rd	19.78	1.32	10.225	B	B
3 - Ashby Rd	68.44	4.56	21.981	C	C
4 - Moira Rd	8.86	0.59	6.495	A	A
5 - Swadlincote Rd	84.93	5.66	46.744	E	D

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	1034.22	68.95	443.560	F	F
2 - Hartshorne Rd	21.03	1.40	10.395	B	B
3 - Ashby Rd	84.56	5.64	25.201	D	C
4 - Moira Rd	9.24	0.62	6.607	A	A
5 - Swadlincote Rd	128.31	8.55	66.218	F	E

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	1326.19	88.41	524.943	F	F
2 - Hartshorne Rd	14.65	0.98	8.276	A	A
3 - Ashby Rd	36.68	2.45	11.564	B	B
4 - Moira Rd	5.91	0.39	4.957	A	A
5 - Swadlincote Rd	47.53	3.17	23.262	C	C

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	1046.18	69.75	394.891	F	F
2 - Hartshorne Rd	10.48	0.70	7.135	A	A
3 - Ashby Rd	19.80	1.32	7.549	A	A
4 - Moira Rd	4.09	0.27	4.123	A	A
5 - Swadlincote Rd	18.37	1.22	11.155	B	B

(Default Analysis Set) - 2024 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, AM	2024 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				77.72	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	640.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	397.00	100.000
3 - Ashby Rd	ONE HOUR	✓	609.00	100.000
4 - Moira Rd	ONE HOUR	✓	303.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	358.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	70.000	417.000	86.000	67.000
	2 - Hartshorne Rd	101.000	0.000	50.000	60.000	186.000
	3 - Ashby Rd	380.000	40.000	0.000	19.000	170.000
	4 - Moira Rd	156.000	79.000	24.000	0.000	44.000
	5 - Swadlincote Rd	36.000	142.000	163.000	17.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.11	0.65	0.13	0.10
	2 - Hartshorne Rd	0.25	0.00	0.13	0.15	0.47
	3 - Ashby Rd	0.62	0.07	0.00	0.03	0.28
	4 - Moira Rd	0.51	0.26	0.08	0.00	0.15
	5 - Swadlincote Rd	0.10	0.40	0.46	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.14	252.26	52.53	F	587.28	880.91	1865.31	127.05	20.73	1865.63	127.07
2 - Hartshorne Rd	0.54	9.59	1.15	A	364.29	546.44	71.30	7.83	0.79	71.31	7.83
3 - Ashby Rd	0.64	9.48	1.74	A	558.83	838.24	101.02	7.23	1.12	101.03	7.23
4 - Moira Rd	0.32	5.18	0.48	A	278.04	417.06	30.48	4.39	0.34	30.49	4.39
5 - Swadlincote Rd	0.67	18.71	1.99	C	328.51	492.76	103.40	12.59	1.15	103.42	12.59

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	481.83	120.46	473.02	503.80	347.42	0.00	687.86	578.27	0.700	0.00	2.20	15.944	C
2 - Hartshorne Rd	298.88	74.72	296.94	246.86	573.58	0.00	909.47	830.14	0.329	0.00	0.48	5.841	A
3 - Ashby Rd	458.49	114.62	455.82	485.21	385.31	0.00	1140.69	863.98	0.402	0.00	0.67	5.237	A
4 - Moira Rd	228.11	57.03	227.20	135.35	705.79	0.00	1223.04	748.44	0.187	0.00	0.23	3.611	A
5 - Swadlincote Rd	269.52	67.38	267.11	348.88	584.12	0.00	710.14	319.67	0.380	0.00	0.60	8.083	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	575.35	143.84	562.50	603.69	416.63	0.00	657.67	578.28	0.875	2.20	5.41	33.886	D
2 - Hartshorne Rd	356.89	89.22	356.01	295.46	683.67	0.00	855.38	830.15	0.417	0.48	0.71	7.195	A
3 - Ashby Rd	547.48	136.87	546.22	578.81	460.86	0.00	1098.34	863.98	0.498	0.67	0.98	6.506	A
4 - Moira Rd	272.39	68.10	272.05	161.65	845.43	0.00	1139.35	748.44	0.239	0.23	0.31	4.148	A
5 - Swadlincote Rd	321.83	80.46	320.50	417.66	699.82	0.00	657.76	319.67	0.489	0.60	0.94	10.630	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	704.65	176.16	606.84	738.00	507.99	0.00	617.83	578.27	1.141	5.41	29.87	122.137	F
2 - Hartshorne Rd	437.11	109.28	435.42	351.80	763.02	0.00	816.40	830.15	0.535	0.71	1.13	9.407	A
3 - Ashby Rd	670.52	167.63	667.59	654.26	544.18	0.00	1051.65	863.98	0.638	0.98	1.71	9.300	A
4 - Moira Rd	333.61	83.40	332.96	186.71	1025.07	0.00	1031.69	748.44	0.323	0.31	0.47	5.148	A
5 - Swadlincote Rd	394.17	98.54	390.20	502.24	855.80	0.00	587.17	319.67	0.671	0.94	1.93	17.922	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	704.65	176.16	614.00	740.86	511.74	0.00	616.19	578.27	1.144	29.87	52.53	252.262	F
2 - Hartshorne Rd	437.11	109.28	437.02	354.41	771.32	0.00	812.32	830.15	0.538	1.13	1.15	9.588	A
3 - Ashby Rd	670.52	167.63	670.40	660.87	547.47	0.00	1049.80	863.98	0.639	1.71	1.74	9.481	A
4 - Moira Rd	333.61	83.40	333.60	188.18	1029.70	0.00	1028.91	748.44	0.324	0.47	0.48	5.177	A
5 - Swadlincote Rd	394.17	98.54	393.91	504.61	858.68	0.00	585.86	319.67	0.673	1.93	1.99	18.706	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	575.35	143.84	643.07	607.89	422.05	0.00	655.31	578.28	0.878	52.53	35.60	247.991	F
2 - Hartshorne Rd	356.89	89.22	358.36	306.92	758.20	0.00	818.77	830.15	0.436	1.15	0.78	7.845	A
3 - Ashby Rd	547.48	136.87	550.32	634.12	482.43	0.00	1086.26	863.98	0.504	1.74	1.03	6.754	A
4 - Moira Rd	272.39	68.10	273.02	173.21	859.53	0.00	1130.90	748.44	0.241	0.48	0.32	4.200	A
5 - Swadlincote Rd	321.83	80.46	325.86	428.48	704.08	0.00	655.84	319.67	0.491	1.99	0.99	11.037	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	481.83	120.46	613.38	508.06	351.58	0.00	686.04	578.27	0.702	35.60	2.71	85.677	F
2 - Hartshorne Rd	298.88	74.72	299.81	264.33	700.63	0.00	847.05	830.14	0.353	0.78	0.55	6.589	A
3 - Ashby Rd	458.49	114.62	459.81	578.89	421.56	0.00	1120.37	863.98	0.409	1.03	0.70	5.462	A
4 - Moira Rd	228.11	57.03	228.46	154.95	726.42	0.00	1210.67	748.44	0.188	0.32	0.23	3.665	A
5 - Swadlincote Rd	269.52	67.38	270.97	366.21	588.67	0.00	708.07	319.67	0.381	0.99	0.62	8.264	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	29.42	1.96	15.944	C	B
2 - Hartshorne Rd	7.02	0.47	5.841	A	A
3 - Ashby Rd	9.64	0.64	5.237	A	A
4 - Moira Rd	3.35	0.22	3.611	A	A
5 - Swadlincote Rd	8.63	0.58	8.083	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	67.03	4.47	33.886	D	C
2 - Hartshorne Rd	10.27	0.68	7.195	A	A
3 - Ashby Rd	14.23	0.95	6.506	A	A
4 - Moira Rd	4.60	0.31	4.148	A	A
5 - Swadlincote Rd	13.43	0.90	10.630	B	B

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	272.33	18.16	122.137	F	F
2 - Hartshorne Rd	16.17	1.08	9.407	A	A
3 - Ashby Rd	24.30	1.62	9.300	A	A
4 - Moira Rd	6.94	0.46	5.148	A	A

5 - Swadlincote Rd	26.42	1.76	17.922	C	B

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	618.66	41.24	252.262	F	F
2 - Hartshorne Rd	17.12	1.14	9.588	A	A
3 - Ashby Rd	25.95	1.73	9.481	A	A
4 - Moira Rd	7.14	0.48	5.177	A	A
5 - Swadlincote Rd	29.51	1.97	18.706	C	B

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	661.01	44.07	247.991	F	F
2 - Hartshorne Rd	12.20	0.81	7.845	A	A
3 - Ashby Rd	16.10	1.07	6.754	A	A
4 - Moira Rd	4.89	0.33	4.200	A	A
5 - Swadlincote Rd	15.69	1.05	11.037	B	B

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	216.85	14.46	85.677	F	F
2 - Hartshorne Rd	8.52	0.57	6.589	A	A
3 - Ashby Rd	10.80	0.72	5.462	A	A
4 - Moira Rd	3.56	0.24	3.665	A	A
5 - Swadlincote Rd	9.72	0.65	8.264	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, PM	2024 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				100.24	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	644.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	438.00	100.000
3 - Ashby Rd	ONE HOUR	✓	683.00	100.000

4 - Moira Rd	ONE HOUR	✓	305.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	424.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	**2 - Hartshorne Rd**	**3 - Ashby Rd**	**4 - Moira Rd**	**5 - Swadlincote Rd**
From	**1 - Burton Rd**	0.000	108.000	375.000	104.000	57.000
	2 - Hartshorne Rd	82.000	0.000	61.000	68.000	227.000
	3 - Ashby Rd	414.000	36.000	0.000	8.000	225.000
	4 - Moira Rd	138.000	97.000	18.000	0.000	52.000
	5 - Swadlincote Rd	61.000	217.000	115.000	31.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	**2 - Hartshorne Rd**	**3 - Ashby Rd**	**4 - Moira Rd**	**5 - Swadlincote Rd**
From	**1 - Burton Rd**	0.00	0.17	0.58	0.16	0.09
	2 - Hartshorne Rd	0.19	0.00	0.14	0.16	0.52
	3 - Ashby Rd	0.61	0.05	0.00	0.01	0.33
	4 - Moira Rd	0.45	0.32	0.06	0.00	0.17
	5 - Swadlincote Rd	0.14	0.51	0.27	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	**2 - Hartshorne Rd**	**3 - Ashby Rd**	**4 - Moira Rd**	**5 - Swadlincote Rd**
From	**1 - Burton Rd**	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	**2 - Hartshorne Rd**	**3 - Ashby Rd**	**4 - Moira Rd**	**5 - Swadlincote Rd**
From	**1 - Burton Rd**	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.20	345.18	65.98	F	590.95	886.42	2608.18	176.54	28.98	2613.95	176.93
2 - Hartshorne Rd	0.56	9.50	1.26	A	401.92	602.87	78.63	7.83	0.87	78.64	7.83
3 - Ashby Rd	0.74	13.28	2.71	B	626.73	940.10	143.56	9.16	1.60	143.58	9.16
4 - Moira Rd	0.35	5.72	0.53	A	279.87	419.81	33.08	4.73	0.37	33.08	4.73
5 - Swadlincote Rd	0.80	30.01	3.70	D	389.07	583.60	166.04	17.07	1.84	166.07	17.07

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	484.84	121.21	475.18	519.90	383.67	0.00	672.05	559.33	0.721	0.00	2.41	17.527	C
2 - Hartshorne Rd	329.75	82.44	327.60	341.06	517.80	0.00	936.87	878.44	0.352	0.00	0.54	5.889	A
3 - Ashby Rd	514.20	128.55	510.84	421.52	423.87	0.00	1119.08	839.37	0.459	0.00	0.84	5.888	A
4 - Moira Rd	229.62	57.41	228.66	156.68	778.03	0.00	1179.75	747.79	0.195	0.00	0.24	3.782	A
5 - Swadlincote Rd	319.21	79.80	315.99	419.11	587.58	0.00	708.57	369.01	0.451	0.00	0.80	9.099	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	578.94	144.74	562.28	622.98	459.99	0.00	638.76	559.33	0.906	2.41	6.58	40.194	E
2 - Hartshorne Rd	393.75	98.44	392.77	407.62	614.65	0.00	889.29	878.44	0.443	0.54	0.78	7.235	A
3 - Ashby Rd	614.00	153.50	612.11	501.07	506.35	0.00	1072.85	839.37	0.572	0.84	1.31	7.781	A
4 - Moira Rd	274.19	68.55	273.81	186.66	931.80	0.00	1087.59	747.79	0.252	0.24	0.33	4.422	A
5 - Swadlincote Rd	381.17	95.29	379.01	501.66	703.96	0.00	655.89	369.01	0.581	0.80	1.34	12.879	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	709.06	177.26	588.74	760.12	558.17	0.00	595.95	559.33	1.190	6.58	36.66	149.521	F
2 - Hartshorne Rd	482.25	120.56	480.43	479.27	667.64	0.00	863.26	878.44	0.559	0.78	1.24	9.357	A
3 - Ashby Rd	752.00	188.00	746.72	553.84	594.22	0.00	1023.60	839.37	0.735	1.31	2.63	12.759	B
4 - Moira Rd	335.81	83.95	335.05	211.93	1129.02	0.00	969.39	747.79	0.346	0.33	0.53	5.668	A
5 - Swadlincote Rd	466.83	116.71	458.43	604.21	859.85	0.00	585.33	369.01	0.798	1.34	3.44	26.756	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	709.06	177.26	591.76	764.86	565.03	0.00	592.95	559.33	1.196	36.66	65.98	319.986	F
2 - Hartshorne Rd	482.25	120.56	482.17	484.06	672.74	0.00	860.75	878.44	0.560	1.24	1.26	9.505	A
3 - Ashby Rd	752.00	188.00	751.70	557.89	597.01	0.00	1022.03	839.37	0.736	2.63	2.71	13.278	B
4 - Moira Rd	335.81	83.95	335.79	213.28	1135.43	0.00	965.55	747.79	0.348	0.53	0.53	5.716	A
5 - Swadlincote Rd	466.83	116.71	465.82	607.15	864.07	0.00	583.42	369.01	0.800	3.44	3.70	30.011	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	578.94	144.74	624.79	629.90	470.33	0.00	634.25	559.33	0.913	65.98	54.52	345.180	F
2 - Hartshorne Rd	393.75	98.44	395.37	424.53	670.58	0.00	861.81	878.44	0.457	1.26	0.85	7.745	A
3 - Ashby Rd	614.00	153.50	619.24	540.92	525.03	0.00	1062.38	839.37	0.578	2.71	1.40	8.216	A
4 - Moira Rd	274.19	68.55	274.94	198.06	946.21	0.00	1078.95	747.79	0.254	0.53	0.34	4.483	A
5 - Swadlincote Rd	381.17	95.29	390.15	511.08	710.07	0.00	653.12	369.01	0.584	3.70	1.45	14.123	B

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

Name	Total Demand	Junction Arrivals	Entry Flow	Exit Flow	Circulating Flow	Pedestrian Demand	Capacity	Saturation Capacity	RFC	Start Queue	End Queue	Delay	LOS

	(PCU/hr)	(PCU)	(PCU/hr)	(PCU/hr)	(PCU/hr)	(Ped/hr)	(PCU/hr)	(PCU/hr)		(PCU)	(PCU)	(s)	
1 - Burton Rd	484.84	121.21	657.53	525.13	389.30	0.00	669.59	559.33	0.724	54.52	11.35	187.259	F
2 - Hartshorne Rd	329.75	82.44	330.65	375.24	671.59	0.00	861.32	878.44	0.383	0.85	0.63	6.797	A
3 - Ashby Rd	514.20	128.55	516.18	529.74	472.50	0.00	1091.82	839.37	0.471	1.40	0.90	6.274	A
4 - Moira Rd	229.62	57.41	230.01	187.08	801.60	0.00	1165.62	747.79	0.197	0.34	0.25	3.849	A
5 - Swadlincote Rd	319.21	79.80	321.65	438.82	592.79	0.00	706.21	369.01	0.452	1.45	0.84	9.419	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	31.91	2.13	17.527	C	B
2 - Hartshorne Rd	7.78	0.52	5.889	A	A
3 - Ashby Rd	12.10	0.81	5.888	A	A
4 - Moira Rd	3.53	0.24	3.782	A	A
5 - Swadlincote Rd	11.43	0.76	9.099	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	78.52	5.23	40.194	E	D
2 - Hartshorne Rd	11.38	0.76	7.235	A	A
3 - Ashby Rd	18.88	1.26	7.781	A	A
4 - Moira Rd	4.93	0.33	4.422	A	A
5 - Swadlincote Rd	18.98	1.27	12.879	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	329.79	21.99	149.521	F	F
2 - Hartshorne Rd	17.72	1.18	9.357	A	A
3 - Ashby Rd	36.31	2.42	12.759	B	B
4 - Moira Rd	7.67	0.51	5.668	A	A
5 - Swadlincote Rd	44.43	2.96	26.756	D	C

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	770.18	51.35	319.986	F	F
2 - Hartshorne Rd	18.75	1.25	9.505	A	A
3 - Ashby Rd	40.18	2.68	13.278	B	B
4 - Moira Rd	7.92	0.53	5.716	A	A
5 - Swadlincote Rd	53.93	3.60	30.011	D	C

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	903.77	60.25	345.180	F	F
2 - Hartshorne Rd	13.30	0.89	7.745	A	A
3 - Ashby Rd	22.10	1.47	8.216	A	A
4 - Moira Rd	5.26	0.35	4.483	A	A
5 - Swadlincote Rd	24.06	1.60	14.123	B	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	494.01	32.93	187.259	F	F
2 - Hartshorne	9.69	0.65	6.797	A	A

Rd					
3 - Ashby Rd	14.00	0.93	6.274	A	A
4 - Moira Rd	3.76	0.25	3.849	A	A
5 - Swadlincote Rd	13.21	0.88	9.419	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, AM	2024 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				89.42	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	648.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	403.00	100.000
3 - Ashby Rd	ONE HOUR	✓	609.00	100.000
4 - Moira Rd	ONE HOUR	✓	312.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	370.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	70.000	417.000	86.000	75.000
	2 - Hartshorne Rd	101.000	0.000	50.000	63.000	189.000
	3 - Ashby Rd	380.000	40.000	0.000	19.000	170.000
	4 - Moira Rd	158.000	85.000	24.000	0.000	45.000
	5 - Swadlincote Rd	43.000	146.000	163.000	18.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.11	0.64	0.13	0.12
	2 - Hartshorne Rd	0.25	0.00	0.12	0.16	0.47
	3 - Ashby Rd	0.62	0.07	0.00	0.03	0.28
	4 - Moira Rd	0.51	0.27	0.08	0.00	0.14
	5 - Swadlincote Rd	0.12	0.39	0.44	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.17	293.80	59.44	F	594.62	891.92	2228.04	149.88	24.76	2228.54	149.91
2 - Hartshorne Rd	0.55	9.73	1.18	A	369.80	554.70	73.68	7.97	0.82	73.69	7.97
3 - Ashby Rd	0.64	9.65	1.77	A	558.83	838.24	102.58	7.34	1.14	102.59	7.34
4 - Moira Rd	0.34	5.30	0.50	A	286.30	429.44	31.97	4.47	0.36	31.97	4.47
5 - Swadlincote Rd	0.70	20.49	2.25	C	339.52	509.28	113.59	13.38	1.26	113.61	13.38

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	487.85	121.96	478.54	510.49	355.59	0.00	684.29	576.59	0.713	0.00	2.33	16.820	C
2 - Hartshorne Rd	303.40	75.85	301.41	254.27	579.86	0.00	906.38	832.88	0.335	0.00	0.50	5.932	A
3 - Ashby Rd	458.49	114.62	455.80	484.93	396.34	0.00	1134.51	858.68	0.404	0.00	0.67	5.288	A
4 - Moira Rd	234.89	58.72	233.94	138.28	713.86	0.00	1218.20	748.27	0.193	0.00	0.24	3.654	A
5 - Swadlincote Rd	278.56	69.64	276.00	357.72	590.08	0.00	707.44	322.17	0.394	0.00	0.64	8.296	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	582.54	145.63	567.81	611.72	426.40	0.00	653.41	576.59	0.892	2.33	6.01	36.830	E
2 - Hartshorne Rd	362.29	90.57	361.36	304.20	690.02	0.00	852.26	832.88	0.425	0.50	0.73	7.320	A
3 - Ashby Rd	547.48	136.87	546.19	577.66	473.72	0.00	1091.14	858.68	0.502	0.67	0.99	6.589	A
4 - Moira Rd	280.48	70.12	280.13	165.00	854.91	0.00	1133.67	748.27	0.247	0.24	0.33	4.215	A

5 - Swadlincote Rd	332.62	83.16	331.15	428.06	706.97	0.00	654.53	322.17	0.508	0.64	1.01	11.080	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	713.46	178.37	603.87	747.70	519.56	0.00	612.78	576.59	1.164	6.01	33.41	134.786	F
2 - Hartshorne Rd	443.71	110.93	441.98	361.40	762.03	0.00	816.89	832.88	0.543	0.73	1.16	9.557	A
3 - Ashby Rd	670.52	167.63	667.52	647.24	556.77	0.00	1044.59	858.68	0.642	0.99	1.74	9.471	A
4 - Moira Rd	343.52	85.88	342.83	189.66	1034.64	0.00	1025.95	748.27	0.335	0.33	0.50	5.264	A
5 - Swadlincote Rd	407.38	101.84	402.75	512.95	864.51	0.00	583.22	322.17	0.698	1.01	2.17	19.460	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	713.46	178.37	609.33	750.75	523.78	0.00	610.94	576.59	1.168	33.41	59.44	283.632	F
2 - Hartshorne Rd	443.71	110.93	443.63	364.06	769.06	0.00	813.43	832.88	0.545	1.16	1.18	9.730	A
3 - Ashby Rd	670.52	167.63	670.40	652.90	559.78	0.00	1042.90	858.68	0.643	1.74	1.77	9.654	A
4 - Moira Rd	343.52	85.88	343.50	190.94	1039.25	0.00	1023.19	748.27	0.336	0.50	0.50	5.296	A
5 - Swadlincote Rd	407.38	101.84	407.05	515.26	867.49	0.00	581.88	322.17	0.700	2.17	2.25	20.493	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	582.54	145.63	639.98	616.19	432.52	0.00	650.74	576.59	0.895	59.44	45.08	293.804	F
2 - Hartshorne Rd	362.29	90.57	363.80	315.00	757.50	0.00	819.11	832.88	0.442	1.18	0.81	7.934	A
3 - Ashby Rd	547.48	136.87	550.39	627.22	494.09	0.00	1079.72	858.68	0.507	1.77	1.04	6.837	A
4 - Moira Rd	280.48	70.12	281.16	175.39	869.09	0.00	1125.17	748.27	0.249	0.50	0.33	4.268	A
5 - Swadlincote Rd	332.62	83.16	337.35	438.88	711.36	0.00	652.54	322.17	0.510	2.25	1.07	11.584	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	487.85	121.96	654.76	514.86	359.99	0.00	682.37	576.59	0.715	45.08	3.35	132.709	F
2 - Hartshorne Rd	303.40	75.85	304.28	275.57	739.18	0.00	828.11	832.88	0.366	0.81	0.58	6.886	A
3 - Ashby Rd	458.49	114.62	459.81	600.63	442.84	0.00	1108.45	858.68	0.414	1.04	0.71	5.560	A
4 - Moira Rd	234.89	58.72	235.25	162.44	740.21	0.00	1202.41	748.27	0.195	0.33	0.24	3.722	A
5 - Swadlincote Rd	278.56	69.64	280.17	380.77	594.69	0.00	705.35	322.17	0.395	1.07	0.66	8.498	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	30.90	2.06	16.820	C	B
2 - Hartshorne Rd	7.21	0.48	5.932	A	A
3 - Ashby Rd	9.73	0.65	5.288	A	A
4 - Moira Rd	3.49	0.23	3.654	A	A
5 - Swadlincote Rd	9.14	0.61	8.296	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	73.06	4.87	36.830	E	D
2 - Hartshorne Rd	10.59	0.71	7.320	A	A
3 - Ashby Rd	14.41	0.96	6.589	A	A
4 - Moira Rd	4.81	0.32	4.215	A	A
5 - Swadlincote Rd	14.42	0.96	11.080	B	B

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	302.17	20.14	134.786	F	F
2 - Hartshorne Rd	16.65	1.11	9.557	A	A
3 - Ashby Rd	24.71	1.65	9.471	A	A
4 - Moira Rd	7.31	0.49	5.264	A	A
5 - Swadlincote Rd	29.37	1.96	19.460	C	B

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	696.84	46.46	283.632	F	F
2 - Hartshorne Rd	17.64	1.18	9.730	A	A
3 - Ashby Rd	26.42	1.76	9.654	A	A
4 - Moira Rd	7.52	0.50	5.296	A	A
5 - Swadlincote Rd	33.24	2.22	20.493	C	C

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	783.88	52.26	293.804	F	F
2 - Hartshorne Rd	12.54	0.84	7.934	A	A
3 - Ashby Rd	16.31	1.09	6.837	A	A
4 - Moira Rd	5.12	0.34	4.268	A	A
5 - Swadlincote Rd	17.06	1.14	11.584	B	B

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	341.20	22.75	132.709	F	F
2 - Hartshorne Rd	9.04	0.60	6.886	A	A
3 - Ashby Rd	11.00	0.73	5.560	A	A
4 - Moira Rd	3.72	0.25	3.722	A	A
5 - Swadlincote Rd	10.34	0.69	8.498	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

		Time		Traffic	Model	Model	Model Time	Time	Results For	Single				

Name	Scenario Name	Period Name	Description	Profile Type	Start Time (HH:mm)	Finish Time (HH:mm)	Period Length (min)	Segment Length (min)	Central Hour Only	Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, PM	2024 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				118.71	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	657.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	450.00	100.000
3 - Ashby Rd	ONE HOUR	✓	683.00	100.000
4 - Moira Rd	ONE HOUR	✓	309.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	438.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	108.000	375.000	106.000	68.000
	2 - Hartshorne Rd	82.000	0.000	61.000	75.000	232.000
	3 - Ashby Rd	414.000	36.000	0.000	8.000	225.000
	4 - Moira Rd	138.000	101.000	18.000	0.000	52.000
	5 - Swadlincote Rd	70.000	221.000	115.000	32.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.16	0.57	0.16	0.10
	2 - Hartshorne Rd	0.18	0.00	0.14	0.17	0.52
	3 - Ashby Rd	0.61	0.05	0.00	0.01	0.33
	4 - Moira Rd	0.45	0.33	0.06	0.00	0.17
	5 - Swadlincote Rd	0.16	0.50	0.26	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.23	411.36	75.68	F	602.87	904.31	3171.76	210.44	35.24	3205.41	212.68
2 - Hartshorne Rd	0.58	9.84	1.34	A	412.93	619.39	83.17	8.06	0.92	83.18	8.06
3 - Ashby Rd	0.74	13.90	2.83	B	626.73	940.10	148.43	9.47	1.65	148.45	9.47
4 - Moira Rd	0.36	5.83	0.55	A	283.54	425.32	34.06	4.81	0.38	34.07	4.81
5 - Swadlincote Rd	0.83	34.64	4.37	D	401.92	602.87	187.61	18.67	2.08	187.64	18.67

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	494.62	123.66	484.16	526.54	390.30	0.00	669.15	558.17	0.739	0.00	2.62	18.547	C
2 - Hartshorne Rd	338.78	84.70	336.52	346.88	527.58	0.00	932.06	879.43	0.363	0.00	0.57	6.022	A
3 - Ashby Rd	514.20	128.55	510.78	421.13	442.97	0.00	1108.37	832.51	0.464	0.00	0.85	5.991	A
4 - Moira Rd	232.63	58.16	231.65	164.02	789.73	0.00	1172.73	750.54	0.198	0.00	0.25	3.822	A
5 - Swadlincote Rd	329.75	82.44	326.32	430.86	590.52	0.00	707.24	371.18	0.466	0.00	0.86	9.370	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	590.63	147.66	570.36	630.93	467.89	0.00	635.32	558.17	0.930	2.62	7.68	45.225	E
2 - Hartshorne Rd	404.54	101.14	403.48	414.15	624.10	0.00	884.65	879.43	0.457	0.57	0.83	7.465	A
3 - Ashby Rd	614.00	153.50	612.03	499.15	528.43	0.00	1060.47	832.51	0.579	0.85	1.35	7.992	A
4 - Moira Rd	277.78	69.45	277.39	195.03	945.43	0.00	1079.42	750.54	0.257	0.25	0.34	4.486	A
5 - Swadlincote Rd	393.75	98.44	391.35	515.35	707.48	0.00	654.30	371.18	0.602	0.86	1.46	13.565	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	723.37	180.84	586.79	769.39	566.67	0.00	592.24	558.17	1.221	7.68	41.83	168.842	F
2 - Hartshorne Rd	495.46	123.86	493.51	484.93	668.54	0.00	862.82	879.43	0.574	0.83	1.32	9.695	A
3 - Ashby Rd	752.00	188.00	746.40	545.54	616.51	0.00	1011.11	832.51	0.744	1.35	2.75	13.320	B
4 - Moira Rd	340.22	85.05	339.42	220.16	1142.75	0.00	961.16	750.54	0.354	0.34	0.54	5.783	A
5 - Swadlincote Rd	482.25	120.56	472.06	618.17	864.00	0.00	583.45	371.18	0.827	1.46	4.01	29.918	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	723.37	180.84	587.96	774.66	574.57	0.00	588.79	558.17	1.229	41.83	75.68	365.456	F
2 - Hartshorne Rd	495.46	123.86	495.38	490.05	672.48	0.00	860.88	879.43	0.576	1.32	1.34	9.843	A
3 - Ashby Rd	752.00	188.00	751.66	548.79	619.07	0.00	1009.67	832.51	0.745	2.75	2.83	13.904	B
4 - Moira Rd	340.22	85.05	340.19	221.35	1149.38	0.00	957.19	750.54	0.355	0.54	0.55	5.834	A
5 - Swadlincote Rd	482.25	120.56	480.77	621.12	868.45	0.00	581.44	371.18	0.829	4.01	4.37	34.644	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	590.63	147.66	621.76	638.72	480.13	0.00	629.98	558.17	0.938	75.68	67.90	411.357	F
2 - Hartshorne Rd	404.54	101.14	406.29	430.22	671.68	0.00	861.27	879.43	0.470	1.34	0.90	7.944	A
3 - Ashby Rd	614.00	153.50	619.59	532.50	545.47	0.00	1050.93	832.51	0.584	2.83	1.44	8.451	A
4 - Moira Rd	277.78	69.45	278.57	204.87	960.18	0.00	1070.58	750.54	0.259	0.55	0.35	4.549	A
5 - Swadlincote Rd	393.75	98.44	404.90	524.81	713.94	0.00	651.37	371.18	0.605	4.37	1.59	15.211	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	494.62	123.66	656.85	532.06	396.33	0.00	666.53	558.17	0.742	67.90	27.34	265.231	F
2 - Hartshorne Rd	338.78	84.70	339.75	379.13	674.05	0.00	860.11	879.43	0.394	0.90	0.66	6.933	A
3 - Ashby Rd	514.20	128.55	516.26	521.85	491.95	0.00	1080.92	832.51	0.476	1.44	0.92	6.400	A
4 - Moira Rd	232.63	58.16	233.03	192.94	815.27	0.00	1157.42	750.54	0.201	0.35	0.25	3.895	A
5 - Swadlincote Rd	329.75	82.44	332.51	452.43	595.87	0.00	704.82	371.18	0.468	1.59	0.90	9.739	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	34.28	2.29	18.547	C	B
2 - Hartshorne Rd	8.17	0.54	6.022	A	A
3 - Ashby Rd	12.30	0.82	5.991	A	A
4 - Moira Rd	3.61	0.24	3.822	A	A
5 - Swadlincote Rd	12.14	0.81	9.370	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	89.07	5.94	45.225	E	D
2 - Hartshorne Rd	12.04	0.80	7.465	A	A
3 - Ashby Rd	19.36	1.29	7.992	A	A
4 - Moira Rd	5.07	0.34	4.486	A	A
5 - Swadlincote Rd	20.52	1.37	13.565	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	375.65	25.04	168.842	F	F
2 - Hartshorne Rd	18.81	1.25	9.695	A	A
3 - Ashby Rd	37.75	2.52	13.320	B	B
4 - Moira Rd	7.92	0.53	5.783	A	A
5 - Swadlincote Rd	50.59	3.37	29.918	D	C

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	881.62	58.77	365.456	F	F
2 - Hartshorne Rd	19.94	1.33	9.843	A	A
3 - Ashby Rd	41.99	2.80	13.904	B	B
4 - Moira Rd	8.19	0.55	5.834	A	A
5 - Swadlincote Rd	63.37	4.22	34.644	D	C

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	1076.85	71.79	411.357	F	F
2 - Hartshorne Rd	14.03	0.94	7.944	A	A
3 - Ashby Rd	22.74	1.52	8.451	A	A
4 - Moira Rd	5.41	0.36	4.549	A	A
5 - Swadlincote Rd	26.86	1.79	15.211	C	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	714.29	47.62	265.231	F	F
2 - Hartshorne Rd	10.17	0.68	6.933	A	A
3 - Ashby Rd	14.29	0.95	6.400	A	A
4 - Moira Rd	3.86	0.26	3.895	A	A
5 - Swadlincote Rd	14.13	0.94	9.739	A	A

(Default Analysis Set) - 2019 Base No Reg Link, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2019 Base No Reg Link, AM	2019 Base No Reg Link	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				75.28	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	587.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	366.00	100.000
3 - Ashby Rd	ONE HOUR	✓	707.00	100.000
4 - Moira Rd	ONE HOUR	✓	280.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	480.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	65.000	381.000	79.000	62.000
	2 - Hartshorne Rd	93.000	0.000	46.000	55.000	172.000
	3 - Ashby Rd	342.000	36.000	0.000	18.000	311.000
	4 - Moira Rd	144.000	73.000	22.000	0.000	41.000
	5 - Swadlincote Rd	33.000	131.000	300.000	16.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.11	0.65	0.13	0.11
	2 - Hartshorne Rd	0.25	0.00	0.13	0.15	0.47
	3 - Ashby Rd	0.48	0.05	0.00	0.03	0.44
	4 - Moira Rd	0.51	0.26	0.08	0.00	0.15
	5 - Swadlincote Rd	0.07	0.27	0.63	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.15	257.00	49.06	F	538.64	807.96	1703.79	126.53	18.93	1704.06	126.55
2 - Hartshorne Rd	0.53	9.96	1.10	A	335.85	503.77	67.49	8.04	0.75	67.50	8.04
3 - Ashby Rd	0.72	12.14	2.57	B	648.76	973.13	139.21	8.58	1.55	139.23	8.58
4 - Moira Rd	0.31	5.35	0.46	A	256.93	385.40	28.88	4.50	0.32	28.88	4.50
5 - Swadlincote Rd	0.85	36.67	5.06	E	440.46	660.68	212.69	19.32	2.36	212.73	19.32

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	441.92	110.48	433.94	457.96	431.15	0.00	651.34	554.78	0.678	0.00	2.00	16.028	C
2 - Hartshorne Rd	275.54	68.89	273.73	227.30	637.78	0.00	877.92	797.19	0.314	0.00	0.45	5.940	A
3 - Ashby Rd	532.27	133.07	528.90	556.03	355.48	0.00	1157.41	884.21	0.460	0.00	0.84	5.699	A
4 - Moira Rd	210.80	52.70	209.94	124.92	759.46	0.00	1190.87	748.55	0.177	0.00	0.21	3.666	A
5 - Swadlincote Rd	361.37	90.34	357.57	437.87	531.53	0.00	733.94	379.66	0.492	0.00	0.95	9.473	A

Main results: (07:30-07:45)

	Total	Junction	Entry	Exit Flow	Circulating	Pedestrian	Capacity	Saturation		Start	End	Delay	

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	(PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	(PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	(s)	LOS
1 - Burton Rd	527.70	131.93	516.19	548.73	516.88	0.00	613.95	554.78	0.860	2.00	4.87	33.386	D
2 - Hartshorne Rd	329.03	82.26	328.18	272.00	761.07	0.00	817.36	797.19	0.403	0.45	0.66	7.348	A
3 - Ashby Rd	635.58	158.89	633.77	664.03	425.22	0.00	1118.32	884.21	0.568	0.84	1.29	7.401	A
4 - Moira Rd	251.71	62.93	251.39	149.22	909.77	0.00	1100.79	748.55	0.229	0.21	0.29	4.238	A
5 - Swadlincote Rd	431.51	107.88	428.79	524.35	636.82	0.00	686.28	379.66	0.629	0.95	1.63	13.831	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	646.30	161.57	555.50	669.92	624.91	0.00	566.84	554.78	1.140	4.87	27.57	123.655	F
2 - Hartshorne Rd	402.97	100.74	401.33	322.12	858.29	0.00	769.60	797.19	0.524	0.66	1.08	9.733	A
3 - Ashby Rd	778.42	194.61	773.57	758.07	501.55	0.00	1075.54	884.21	0.724	1.29	2.51	11.734	B
4 - Moira Rd	308.29	77.07	307.66	171.99	1103.13	0.00	984.90	748.55	0.313	0.29	0.45	5.311	A
5 - Swadlincote Rd	528.49	132.12	516.65	632.61	778.18	0.00	622.30	379.66	0.849	1.63	4.59	31.095	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	646.30	161.57	560.37	673.54	634.63	0.00	562.60	554.78	1.149	27.57	49.06	256.998	F
2 - Hartshorne Rd	402.97	100.74	402.88	325.77	869.23	0.00	764.22	797.19	0.527	1.08	1.10	9.957	A
3 - Ashby Rd	778.42	194.61	778.16	767.71	504.40	0.00	1073.94	884.21	0.725	2.51	2.57	12.143	B
4 - Moira Rd	308.29	77.07	308.27	173.32	1109.24	0.00	981.24	748.55	0.314	0.45	0.46	5.348	A
5 - Swadlincote Rd	528.49	132.12	526.62	635.96	781.55	0.00	620.77	379.66	0.851	4.59	5.06	36.672	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	527.70	131.93	595.11	554.06	532.26	0.00	607.24	554.78	0.869	49.06	32.20	247.027	F
2 - Hartshorne Rd	329.03	82.26	330.45	285.63	841.74	0.00	777.73	797.19	0.423	1.10	0.74	8.075	A
3 - Ashby Rd	635.58	158.89	640.35	725.50	446.69	0.00	1106.29	884.21	0.575	2.57	1.38	7.803	A
4 - Moira Rd	251.71	62.93	252.33	160.87	926.16	0.00	1090.96	748.55	0.231	0.46	0.30	4.295	A
5 - Swadlincote Rd	431.51	107.88	444.61	536.78	641.71	0.00	684.07	379.66	0.631	5.06	1.78	15.783	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	441.92	110.48	561.12	462.31	438.28	0.00	648.23	554.78	0.682	32.20	2.40	74.657	F
2 - Hartshorne Rd	275.54	68.89	276.48	243.86	755.55	0.00	820.07	797.19	0.336	0.74	0.51	6.633	A
3 - Ashby Rd	532.27	133.07	534.22	643.36	388.66	0.00	1138.81	884.21	0.467	1.38	0.89	5.975	A
4 - Moira Rd	210.80	52.70	211.13	142.82	780.07	0.00	1178.52	748.55	0.179	0.30	0.22	3.721	A
5 - Swadlincote Rd	361.37	90.34	364.51	455.11	536.09	0.00	731.87	379.66	0.494	1.78	1.00	9.880	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	26.81	1.79	16.028	C	B

2 - Hartshorne Rd	6.56	0.44	5.940	A	A
3 - Ashby Rd	12.13	0.81	5.699	A	A
4 - Moira Rd	3.14	0.21	3.666	A	A
5 - Swadlincote Rd	13.43	0.90	9.473	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	60.85	4.06	33.386	D	C
2 - Hartshorne Rd	9.66	0.64	7.348	A	A
3 - Ashby Rd	18.63	1.24	7.401	A	A
4 - Moira Rd	4.34	0.29	4.238	A	A
5 - Swadlincote Rd	22.85	1.52	13.831	B	B

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	251.28	16.75	123.655	F	F
2 - Hartshorne Rd	15.40	1.03	9.733	A	A
3 - Ashby Rd	34.79	2.32	11.734	B	B
4 - Moira Rd	6.62	0.44	5.311	A	A
5 - Swadlincote Rd	57.18	3.81	31.095	D	C

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	575.41	38.36	256.998	F	F
2 - Hartshorne Rd	16.37	1.09	9.957	A	A
3 - Ashby Rd	38.17	2.54	12.143	B	B
4 - Moira Rd	6.81	0.45	5.348	A	A
5 - Swadlincote Rd	72.95	4.86	36.672	E	D

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	609.45	40.63	247.027	F	F
2 - Hartshorne Rd	11.59	0.77	8.075	A	A
3 - Ashby Rd	21.71	1.45	7.803	A	A
4 - Moira Rd	4.62	0.31	4.295	A	A
5 - Swadlincote Rd	30.55	2.04	15.783	C	B

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	180.00	12.00	74.657	F	E
2 - Hartshorne Rd	7.90	0.53	6.633	A	A
3 - Ashby Rd	13.78	0.92	5.975	A	A
4 - Moira Rd	3.34	0.22	3.721	A	A
5 - Swadlincote Rd	15.73	1.05	9.880	A	A

(Default Analysis Set) - 2019 Base No Reg Link, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors

(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2019 Base No Reg Link, PM	2019 Base No Reg Link	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5				76.07	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Burton Rd	1	1 - Burton Rd	
2 - Hartshorne Rd	2	2 - Hartshorne Rd	
3 - Ashby Rd	3	3 - Ashby Rd	
4 - Moira Rd	4	4 - Moira Rd	
5 - Swadlincote Rd	5	5 - Swadlincote Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Burton Rd	0.00	99999.00		0.00
2 - Hartshorne Rd	0.00	99999.00		0.00
3 - Ashby Rd	0.00	99999.00		0.00
4 - Moira Rd	0.00	99999.00		0.00
5 - Swadlincote Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Burton Rd	3.00	5.00	1.00	9.60	27.00	58.80	
2 - Hartshorne Rd	4.70	6.40	1.00	4.50	27.00	41.40	
3 - Ashby Rd	4.00	6.40	5.00	9.00	27.00	40.10	
4 - Moira Rd	6.30	6.70	1.00	25.60	27.00	79.50	
5 - Swadlincote Rd	3.70	5.50	1.00	11.70	27.00	74.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Burton Rd		(calculated)	(calculated)	0.436	839.374
2 - Hartshorne Rd		(calculated)	(calculated)	0.491	1191.248
3 - Ashby Rd		(calculated)	(calculated)	0.560	1356.649
4 - Moira Rd		(calculated)	(calculated)	0.599	1646.033
5 - Swadlincote Rd		(calculated)	(calculated)	0.453	974.518

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Burton Rd	ONE HOUR	✓	586.00	100.000
2 - Hartshorne Rd	ONE HOUR	✓	403.00	100.000
3 - Ashby Rd	ONE HOUR	✓	830.00	100.000
4 - Moira Rd	ONE HOUR	✓	281.00	100.000
5 - Swadlincote Rd	ONE HOUR	✓	495.00	100.000

Turning Proportions

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

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.000	100.000	337.000	96.000	53.000
	2 - Hartshorne Rd	76.000	0.000	55.000	63.000	209.000
	3 - Ashby Rd	376.000	33.000	0.000	7.000	414.000
	4 - Moira Rd	127.000	89.000	17.000	0.000	48.000
	5 - Swadlincote Rd	56.000	200.000	210.000	29.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.00	0.17	0.58	0.16	0.09
	2 - Hartshorne Rd	0.19	0.00	0.14	0.16	0.52
	3 - Ashby Rd	0.45	0.04	0.00	0.01	0.50
	4 - Moira Rd	0.45	0.32	0.06	0.00	0.17
	5 - Swadlincote Rd	0.11	0.40	0.42	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	1.000	1.000	1.000	1.000	1.000
	2 - Hartshorne Rd	1.000	1.000	1.000	1.000	1.000
	3 - Ashby Rd	1.000	1.000	1.000	1.000	1.000
	4 - Moira Rd	1.000	1.000	1.000	1.000	1.000
	5 - Swadlincote Rd	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To				
		1 - Burton Rd	2 - Hartshorne Rd	3 - Ashby Rd	4 - Moira Rd	5 - Swadlincote Rd
From	1 - Burton Rd	0.0	0.0	0.0	0.0	0.0
	2 - Hartshorne Rd	0.0	0.0	0.0	0.0	0.0
	3 - Ashby Rd	0.0	0.0	0.0	0.0	0.0
	4 - Moira Rd	0.0	0.0	0.0	0.0	0.0
	5 - Swadlincote Rd	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Burton Rd	1.15	252.78	48.18	F	537.72	806.59	1670.63	124.27	18.56	1670.89	124.29
2 - Hartshorne Rd	0.54	9.43	1.15	A	369.80	554.70	71.10	7.69	0.79	71.11	7.69
3 - Ashby Rd	0.88	26.26	6.29	D	761.62	1142.43	269.77	14.17	3.00	269.82	14.17
4 - Moira Rd	0.35	6.24	0.53	A	257.85	386.78	32.53	5.05	0.36	32.53	5.05
5 - Swadlincote Rd	0.88	44.27	6.25	E	454.22	681.33	246.58	21.71	2.74	246.63	21.72

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	441.17	110.29	433.23	474.64	431.01	0.00	651.40	534.94	0.677	0.00	1.99	15.974	C
2 - Hartshorne Rd	303.40	75.85	301.45	314.22	550.01	0.00	921.04	848.99	0.329	0.00	0.49	5.793	A
3 - Ashby Rd	624.87	156.22	620.07	459.40	392.06	0.00	1136.91	855.39	0.550	0.00	1.20	6.903	A
4 - Moira Rd	211.55	52.89	210.63	144.92	867.21	0.00	1126.30	748.88	0.188	0.00	0.23	3.927	A
5 - Swadlincote Rd	372.66	93.17	368.60	540.79	537.05	0.00	731.44	430.21	0.509	0.00	1.02	9.816	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	526.80	131.70	515.43	568.58	516.59	0.00	614.08	534.94	0.858	1.99	4.83	33.143	D
2 - Hartshorne Rd	362.29	90.57	361.41	375.92	656.10	0.00	868.92	848.99	0.417	0.49	0.71	7.082	A
3 - Ashby Rd	746.15	186.54	742.65	548.48	469.03	0.00	1093.76	855.39	0.682	1.20	2.08	10.149	B
4 - Moira Rd	252.61	63.15	252.23	173.09	1038.59	0.00	1023.58	748.88	0.247	0.23	0.33	4.665	A
5 - Swadlincote Rd	444.99	111.25	441.91	647.57	643.26	0.00	683.37	430.21	0.651	1.02	1.79	14.718	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	645.20	161.30	556.19	690.11	622.51	0.00	567.88	534.94	1.136	4.83	27.08	121.799	F
2 - Hartshorne Rd	443.71	110.93	442.03	442.69	736.02	0.00	829.66	848.99	0.535	0.71	1.13	9.247	A
3 - Ashby Rd	913.85	228.46	899.05	623.86	554.20	0.00	1046.03	855.39	0.874	2.08	5.77	22.512	C
4 - Moira Rd	309.39	77.35	308.59	198.87	1254.37	0.00	894.26	748.88	0.346	0.33	0.52	6.140	A
5 - Swadlincote Rd	545.01	136.25	530.36	780.70	782.27	0.00	620.45	430.21	0.878	1.79	5.45	35.338	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	645.20	161.30	560.79	697.81	633.46	0.00	563.11	534.94	1.146	27.08	48.18	252.777	F
2 - Hartshorne	443.71	110.93	443.62	448.84	745.40	0.00	825.05	848.99	0.538	1.13	1.15	9.434	A

Rd													
3 - Ashby Rd	913.85	228.46	911.77	631.62	557.41	0.00	1044.23	855.39	0.875	5.77	6.29	26.256	D
4 - Moira Rd	309.39	77.35	309.35	200.65	1268.53	0.00	885.78	748.88	0.349	0.52	0.53	6.245	A
5 - Swadlincote Rd	545.01	136.25	541.81	788.41	789.46	0.00	617.19	430.21	0.883	5.45	6.25	44.268	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	526.80	131.70	593.47	580.62	535.60	0.00	605.79	534.94	0.870	48.18	31.52	243.038	F
2 - Hartshorne Rd	362.29	90.57	363.75	398.49	730.58	0.00	832.33	848.99	0.435	1.15	0.78	7.706	A
3 - Ashby Rd	746.15	186.54	762.08	602.26	492.07	0.00	1080.85	855.39	0.690	6.29	2.31	11.813	B
4 - Moira Rd	252.61	63.15	253.40	187.58	1066.57	0.00	1006.82	748.88	0.251	0.53	0.34	4.782	A
5 - Swadlincote Rd	444.99	111.25	461.98	665.73	654.24	0.00	678.40	430.21	0.656	6.25	2.00	17.798	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Burton Rd	441.17	110.29	557.70	480.70	438.77	0.00	648.02	534.94	0.681	31.52	2.38	71.810	F
2 - Hartshorne Rd	303.40	75.85	304.36	339.38	657.08	0.00	868.44	848.99	0.349	0.78	0.54	6.392	A
3 - Ashby Rd	624.87	156.22	628.96	534.76	426.67	0.00	1117.51	855.39	0.559	2.31	1.29	7.431	A
4 - Moira Rd	211.55	52.89	211.96	166.30	889.33	0.00	1113.04	748.88	0.190	0.34	0.24	3.996	A
5 - Swadlincote Rd	372.66	93.17	376.38	558.21	543.08	0.00	728.71	430.21	0.511	2.00	1.07	10.323	B

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	26.68	1.78	15.974	C	B
2 - Hartshorne Rd	7.05	0.47	5.793	A	A
3 - Ashby Rd	17.10	1.14	6.903	A	A
4 - Moira Rd	3.37	0.22	3.927	A	A
5 - Swadlincote Rd	14.32	0.95	9.816	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	60.36	4.02	33.143	D	C
2 - Hartshorne Rd	10.26	0.68	7.082	A	A
3 - Ashby Rd	29.26	1.95	10.149	B	B
4 - Moira Rd	4.79	0.32	4.665	A	A
5 - Swadlincote Rd	24.91	1.66	14.718	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	247.36	16.49	121.799	F	F
2 - Hartshorne Rd	16.14	1.08	9.247	A	A
3 - Ashby Rd	72.79	4.85	22.512	C	C
4 - Moira Rd	7.64	0.51	6.140	A	A
5 - Swadlincote Rd	66.00	4.40	35.338	E	D

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	565.16	37.68	252.777	F	F

2 - Hartshorne Rd	17.10	1.14	9.434	A	A
3 - Ashby Rd	91.24	6.08	26.256	D	C
4 - Moira Rd	7.95	0.53	6.245	A	A
5 - Swadlincote Rd	88.70	5.91	44.268	E	D

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	597.74	39.85	243.038	F	F
2 - Hartshorne Rd	12.16	0.81	7.706	A	A
3 - Ashby Rd	39.09	2.61	11.813	B	B
4 - Moira Rd	5.18	0.35	4.782	A	A
5 - Swadlincote Rd	35.68	2.38	17.798	C	B

Queueing Delay results: (18:00-18:15)

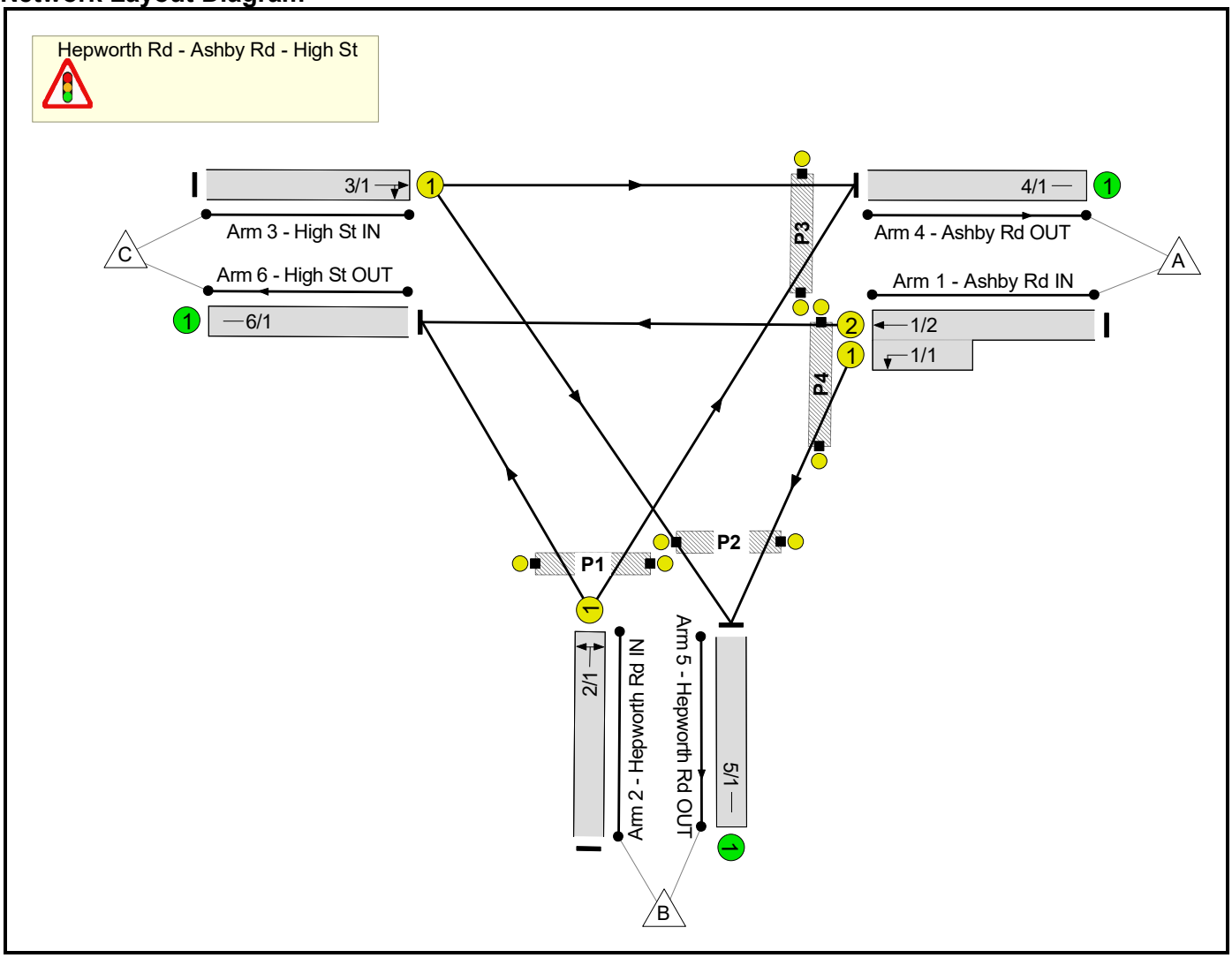
Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Burton Rd	173.32	11.55	71.810	F	E
2 - Hartshorne Rd	8.38	0.56	6.392	A	A
3 - Ashby Rd	20.30	1.35	7.431	A	A
4 - Moira Rd	3.60	0.24	3.996	A	A
5 - Swadlincote Rd	16.96	1.13	10.323	B	B

Full Input Data And Results

User and Project Details

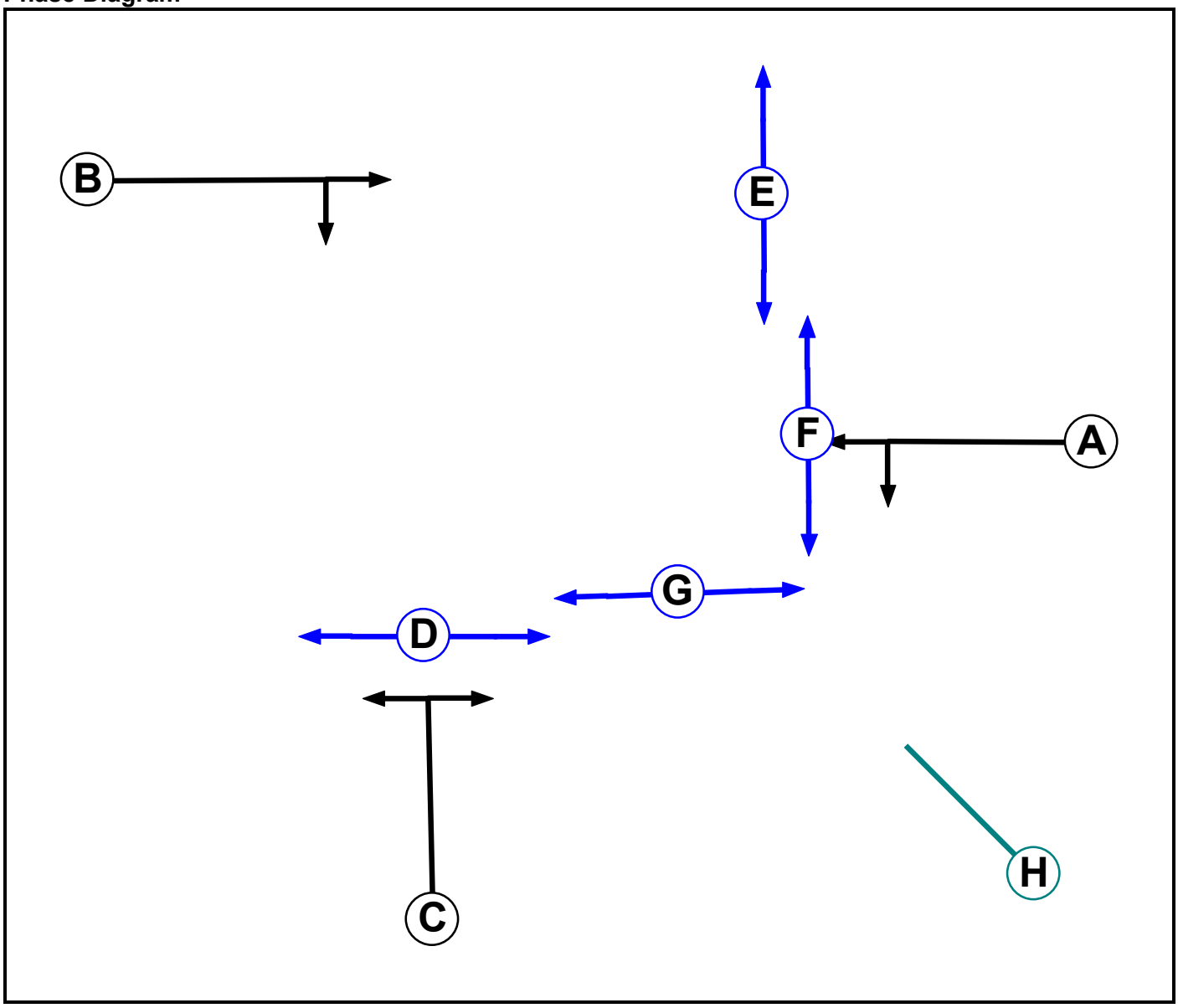
Project:	**067895.100**
Title:	**Site at Woodville, Swadlincote**
Location:	Swadlincote, South Derbyshire
File name:	HepworthRd-AshbyRd-HighSt Signalised Junction_v01.lsg3x
Author:	DRM
Company:	Curtins
Address:	Leeds Office
Notes:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Pedestrian		6	6
E	Pedestrian		6	6
F	Pedestrian		7	7
G	Pedestrian		6	6
H	Dummy		7	7

Full Input Data And Results

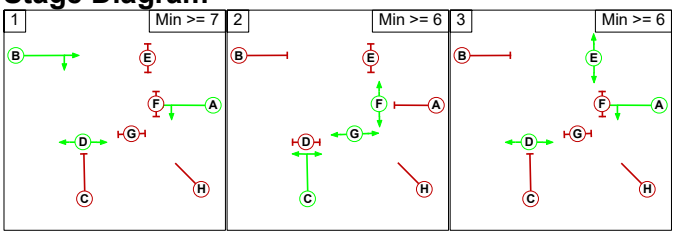
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H
A		-	6	-	-	5	7	3
B	-		5	-	7	-	8	3
C	5	6		5	9	-	-	3
D	-	-	6		-	-	-	3
E	-	6	6	-		-	-	3
F	7	-	-	-	-		-	3
G	7	7	-	-	-	-		3
H	2	2	2	2	2	2	2	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage \ To Stage	1	2	3
1		8	7
2	7		9
3	6	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Hepworth Rd - Ashby Rd - High St
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Hepworth Rd - Ashby Rd - High St												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (Ashby Rd IN)	U	A	2	3	5.0	Geom	-	3.00	0.00	Y	Arm 5 Left	13.90
1/2 (Ashby Rd IN)	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
2/1 (Hepworth Rd IN)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Right	15.60
											Arm 6 Left	14.80
3/1 (High St IN)	U	B	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Right	14.80
4/1 (Ashby Rd OUT)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Hepworth Rd OUT)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (High St OUT)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2021 Base Reg Link 25% AM'	07:30	08:30	01:00	
2: '2021 Base Reg Link 25% PM'	17:00	18:00	01:00	
3: '2021 Base Reg Link 25% with Dev AM'	07:30	08:30	01:00	
4: '2021 Base Reg Link 25% with Dev PM'	17:00	18:00	01:00	
5: '2021 Base Reg Link 50% AM'	07:30	08:30	01:00	
6: '2021 Base Reg Link 50% PM'	17:00	18:00	01:00	
7: '2021 Base Reg Link 50% with Dev AM'	07:30	08:30	01:00	
8: '2021 Base Reg Link 50% with Dev PM'	17:00	18:00	01:00	
9: '2024 Base Reg Link 25% AM'	07:30	08:30	01:00	
10: '2024 Base Reg Link 25% PM'	17:00	18:00	01:00	
11: '2024 Base Reg Link 25% with Dev AM'	07:30	08:30	01:00	
12: '2024 Base Reg Link 25% with Dev PM'	17:00	18:00	01:00	
13: '2024 Base Reg Link 50% AM'	07:30	08:30	01:00	
14: '2024 Base Reg Link 50% PM'	17:00	18:00	01:00	
15: '2024 Base Reg Link 50% with Dev AM'	07:30	08:30	01:00	
16: '2024 Base Reg Link 50% with Dev PM'	17:00	18:00	01:00	

Scenario 1: '2021 Base Reg Link 25% AM' (FG1: '2021 Base Reg Link 25% AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	240	505	745
	B	478	0	80	558
	C	592	57	0	649
	Tot.	1070	297	585	1952

Traffic Lane Flows

Lane	Scenario 1: 2021 Base Reg Link 25% AM
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	240
1/2 (with short)	745(In) 505(Out)
2/1	558
3/1	649
4/1	1070
5/1	297
6/1	585

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	85.7 %	1746	1746
				Arm 6 Left	14.80	14.3 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	91.2 %	2096	2096
				Arm 5 Right	14.80	8.8 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2021 Base Reg Link 25% PM' (FG2: '2021 Base Reg Link 25% PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	400	641	1041
	B	297	0	87	384
	C	413	64	0	477
	Tot.	710	464	728	1902

Traffic Lane Flows

Lane	Scenario 2: 2021 Base Reg Link 25% PM
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	400
1/2 (with short)	1041(In) 641(Out)
2/1	384
3/1	477
4/1	710
5/1	464
6/1	728

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	77.3 %	1745	1745
				Arm 6 Left	14.80	22.7 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	86.6 %	2087	2087
				Arm 5 Right	14.80	13.4 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2021 Base Reg Link 25% with Dev AM' (FG3: '2021 Base Reg Link 25% with Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	260	505	765
	B	511	0	80	591
	C	592	57	0	649
	Tot.	1103	317	585	2005

Traffic Lane Flows

Lane	**Scenario 3: 2021 Base Reg Link 25% with Dev AM**
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	260
1/2 (with short)	765(In) 505(Out)
2/1	591
3/1	649
4/1	1103
5/1	317
6/1	585

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	86.5 %	1746	1746
				Arm 6 Left	14.80	13.5 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	91.2 %	2096	2096
				Arm 5 Right	14.80	8.8 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2021 Base Reg Link 25% with Dev PM' (FG4: '2021 Base Reg Link 25% with Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	437	641	1078
	B	321	0	87	408
	C	413	64	0	477
	Tot.	734	501	728	1963

Traffic Lane Flows

Lane	**Scenario 4: 2021 Base Reg Link 25% with Dev PM**
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	437
1/2 (with short)	1078(In) 641(Out)
2/1	408
3/1	477
4/1	734
5/1	501
6/1	728

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	78.7 %	1745	1745
				Arm 6 Left	14.80	21.3 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	86.6 %	2087	2087
				Arm 5 Right	14.80	13.4 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2021 Base Reg Link 50% AM' (FG5: '2021 Base Reg Link 50% AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	320	424	744
	B	556	0	80	636
	C	515	57	0	572
	Tot.	1071	377	504	1952

Traffic Lane Flows

Lane	**Scenario 5: 2021 Base Reg Link 50% AM**
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	320
1/2 (with short)	744(In) 424(Out)
2/1	636
3/1	572
4/1	1071
5/1	377
6/1	504

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	87.4 %	1746	1746
				Arm 6 Left	14.80	12.6 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	90.0 %	2094	2094
				Arm 5 Right	14.80	10.0 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2021 Base Reg Link 50% PM' (FG6: '2021 Base Reg Link 50% PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	508	534	1042
	B	351	0	87	438
	C	359	64	0	423
	Tot.	710	572	621	1903

Traffic Lane Flows

Lane	Scenario 6: 2021 Base Reg Link 50% PM
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	508
1/2 (with short)	1042(In) 534(Out)
2/1	438
3/1	423
4/1	710
5/1	572
6/1	621

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	80.1 %	1745	1745
				Arm 6 Left	14.80	19.9 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	84.9 %	2083	2083
				Arm 5 Right	14.80	15.1 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 7: '2021 Base Reg Link 50% with Dev AM' (FG7: '2021 Base Reg Link 50% with Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	341	424	765
	B	588	0	80	668
	C	515	57	0	572
	Tot.	1103	398	504	2005

Traffic Lane Flows

Lane	**Scenario 7: 2021 Base Reg Link 50% with Dev AM**
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	341
1/2 (with short)	765(In) 424(Out)
2/1	668
3/1	572
4/1	1103
5/1	398
6/1	504

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	88.0 %	1746	1746
				Arm 6 Left	14.80	12.0 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	90.0 %	2094	2094
				Arm 5 Right	14.80	10.0 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2021 Base Reg Link 50% with Dev PM' (FG8: '2021 Base Reg Link 50% with Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	544	534	1078
	B	375	0	87	462
	C	359	64	0	423
	Tot.	734	608	621	1963

Traffic Lane Flows

Lane	**Scenario 8: 2021 Base Reg Link 50% with Dev PM**
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	544
1/2 (with short)	1078(In) 534(Out)
2/1	462
3/1	423
4/1	734
5/1	608
6/1	621

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	81.2 %	1745	1745
				Arm 6 Left	14.80	18.8 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	84.9 %	2083	2083
				Arm 5 Right	14.80	15.1 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 9: '2024 Base Reg Link 25% AM' (FG9: '2024 Base Reg Link 25% AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	250	528	778
	B	499	0	83	582
	C	619	59	0	678
	Tot.	1118	309	611	2038

Traffic Lane Flows

Lane	Scenario 9: 2024 Base Reg Link 25% AM
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	250
1/2 (with short)	778(In) 528(Out)
2/1	582
3/1	678
4/1	1118
5/1	309
6/1	611

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	85.7 %	1746	1746
				Arm 6 Left	14.80	14.3 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	91.3 %	2097	2097
				Arm 5 Right	14.80	8.7 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2024 Base Reg Link 25% PM' (FG10: '2024 Base Reg Link 25% PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	418	671	1089
	B	310	0	91	401
	C	432	66	0	498
	Tot.	742	484	762	1988

Traffic Lane Flows

Lane	Scenario 10: 2024 Base Reg Link 25% PM
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	418
1/2 (with short)	1089(In) 671(Out)
2/1	401
3/1	498
4/1	742
5/1	484
6/1	762

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	77.3 %	1745	1745
				Arm 6 Left	14.80	22.7 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	86.7 %	2087	2087
				Arm 5 Right	14.80	13.3 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 11: '2024 Base Reg Link 25% with Dev AM' (FG11: '2024 Base Reg Link 25% with Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	271	528	799
	B	531	0	83	614
	C	619	59	0	678
	Tot.	1150	330	611	2091

Traffic Lane Flows

Lane	**Scenario 11: 2024 Base Reg Link 25% with Dev AM**
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	271
1/2 (with short)	799(In) 528(Out)
2/1	614
3/1	678
4/1	1150
5/1	330
6/1	611

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	86.5 %	1746	1746
				Arm 6 Left	14.80	13.5 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	91.3 %	2097	2097
				Arm 5 Right	14.80	8.7 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 12: '2024 Base Reg Link 25% with Dev PM' (FG12: '2024 Base Reg Link 25% with Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	454	671	1125
	B	334	0	91	425
	C	432	66	0	498
	Tot.	766	520	762	2048

Traffic Lane Flows

Lane	Scenario 12: 2024 Base Reg Link 25% with Dev PM
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	454
1/2 (with short)	1125(In) 671(Out)
2/1	425
3/1	498
4/1	766
5/1	520
6/1	762

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	78.6 %	1745	1745
				Arm 6 Left	14.80	21.4 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	86.7 %	2087	2087
				Arm 5 Right	14.80	13.3 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 13: '2024 Base Reg Link 50% AM' (FG13: '2024 Base Reg Link 50% AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	334	443	777
	B	580	0	83	663
	C	538	59	0	597
	Tot.	1118	393	526	2037

Traffic Lane Flows

Lane	**Scenario 13: 2024 Base Reg Link 50% AM**
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	334
1/2 (with short)	777(In) 443(Out)
2/1	663
3/1	597
4/1	1118
5/1	393
6/1	526

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	87.5 %	1746	1746
				Arm 6 Left	14.80	12.5 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	90.1 %	2094	2094
				Arm 5 Right	14.80	9.9 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 14: '2024 Base Reg Link 50% PM' (FG14: '2024 Base Reg Link 50% PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	530	559	1089
	B	367	0	91	458
	C	375	66	0	441
	Tot.	742	596	650	1988

Traffic Lane Flows

Lane	Scenario 14: 2024 Base Reg Link 50% PM
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	530
1/2 (with short)	1089(In) 559(Out)
2/1	458
3/1	441
4/1	742
5/1	596
6/1	650

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	80.1 %	1745	1745
				Arm 6 Left	14.80	19.9 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	85.0 %	2083	2083
				Arm 5 Right	14.80	15.0 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 15: '2024 Base Reg Link 50% with Dev AM' (FG15: '2024 Base Reg Link 50% with Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	355	443	798
	B	613	0	83	696
	C	538	59	0	597
	Tot.	1151	414	526	2091

Traffic Lane Flows

Lane	**Scenario 15: 2024 Base Reg Link 50% with Dev AM**
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	355
1/2 (with short)	798(In) 443(Out)
2/1	696
3/1	597
4/1	1151
5/1	414
6/1	526

Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	88.1 %	1746	1746
				Arm 6 Left	14.80	11.9 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	90.1 %	2094	2094
				Arm 5 Right	14.80	9.9 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 16: '2024 Base Reg Link 50% with Dev PM' (FG16: '2024 Base Reg Link 50% with Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	567	559	1126
	B	391	0	91	482
	C	375	66	0	441
	Tot.	766	633	650	2049

Traffic Lane Flows

Lane	Scenario 16: 2024 Base Reg Link 50% with Dev PM
Junction: Hepworth Rd - Ashby Rd - High St	
1/1 (short)	567
1/2 (with short)	1126(In) 559(Out)
2/1	482
3/1	441
4/1	766
5/1	633
6/1	650

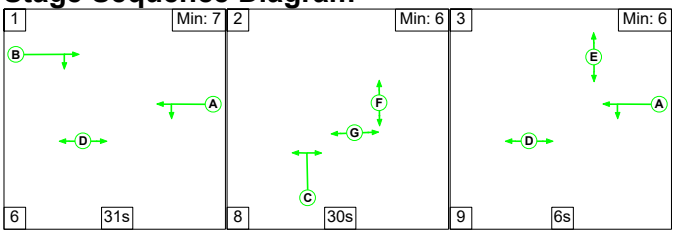
Full Input Data And Results

Lane Saturation Flows

Junction: Hepworth Rd - Ashby Rd - High St								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Ashby Rd IN)	3.00	0.00	Y	Arm 5 Left	13.90	100.0 %	1728	1728
1/2 (Ashby Rd IN)	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Hepworth Rd IN)	3.00	0.00	Y	Arm 4 Right	15.60	81.1 %	1745	1745
				Arm 6 Left	14.80	18.9 %		
3/1 (High St IN)	5.00	0.00	Y	Arm 4 Ahead	Inf	85.0 %	2083	2083
				Arm 5 Right	14.80	15.0 %		
4/1 (Ashby Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Hepworth Rd OUT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High St OUT Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2021 Base Reg Link 25% AM' (FG1: '2021 Base Reg Link 25% AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

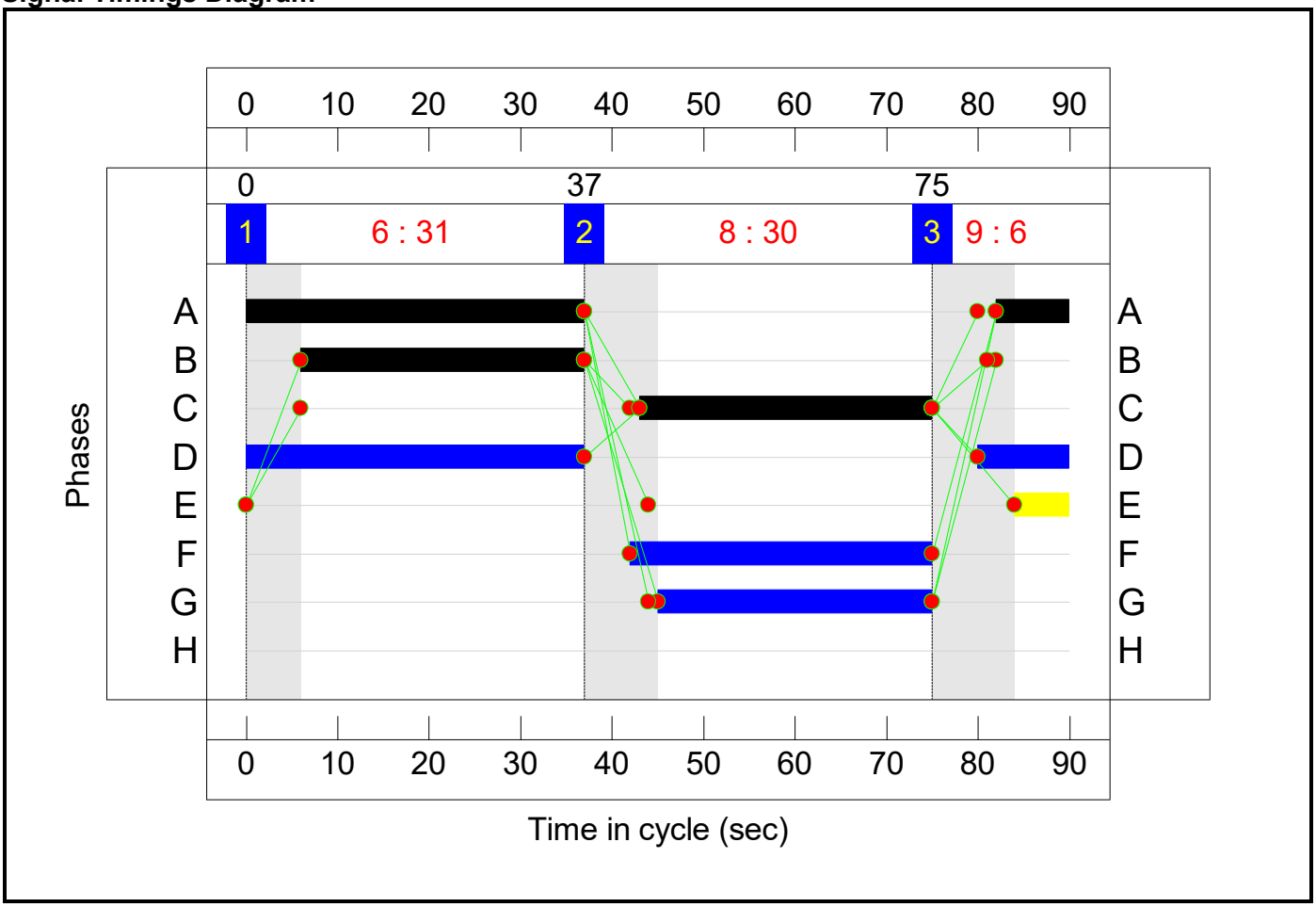


Stage Timings

Stage	1	2	3
Duration	31	30	6
Change Point	0	37	75

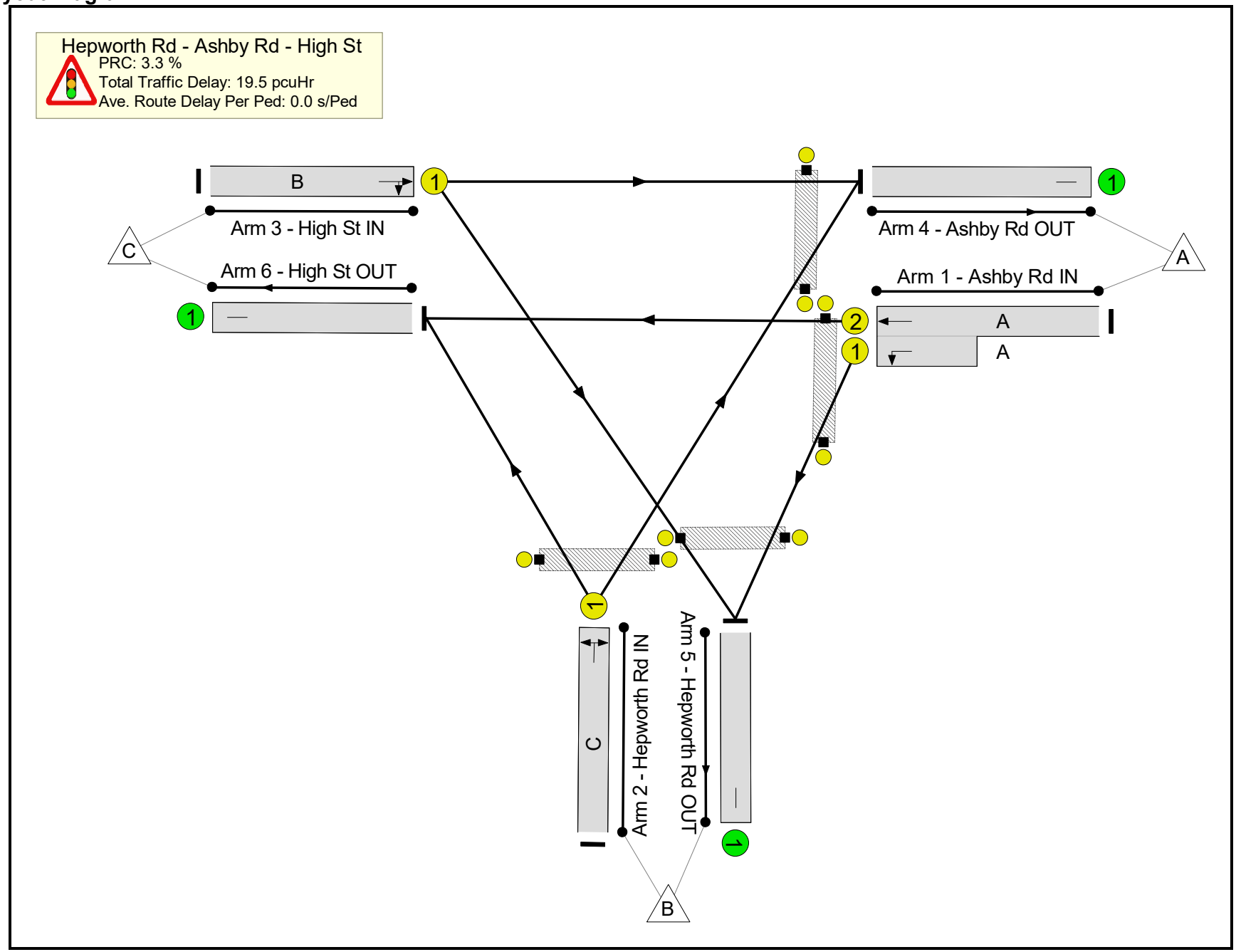
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.2%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.2%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	45	-	745	1965:1728	724+344	69.7 : 69.7%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	32	-	558	1746	640	87.2%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	31	-	649	2096	745	87.1%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	1070	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	297	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	585	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	47	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	30	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	33	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.0**	**7.5**	**0.0**	**19.5**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**12.0**	**7.5**	**0.0**	**19.5**	**-**	**-**	**-**	**-**
1/2+1/1	745	745	-	-	-	3.0	1.1	-	4.2	20.3	10.9	1.1	12.0
2/1	558	558	-	-	-	4.1	3.2	-	7.3	46.9	12.9	3.2	16.0
3/1	649	649	-	-	-	4.9	3.2	-	8.0	44.6	15.1	3.2	18.3
4/1	1070	1070	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	297	297	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	585	585	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

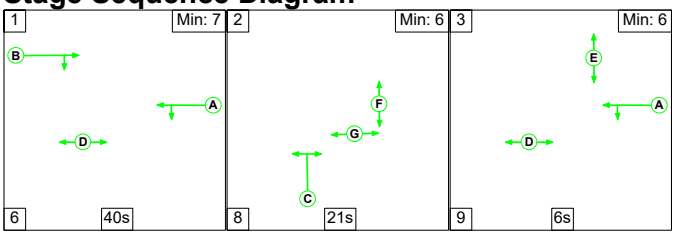
C1 PRC for Signalled Lanes (%): 3.3 Total Delay for Signalled Lanes (pcuHr): 19.50 Cycle Time (s): 90

PRC Over All Lanes (%): 3.3 Total Delay Over All Lanes(pcuHr): 19.50

Full Input Data And Results

Scenario 2: '2021 Base Reg Link 25% PM' (FG2: '2021 Base Reg Link 25% PM', Plan 1: 'Network Control Plan 1')

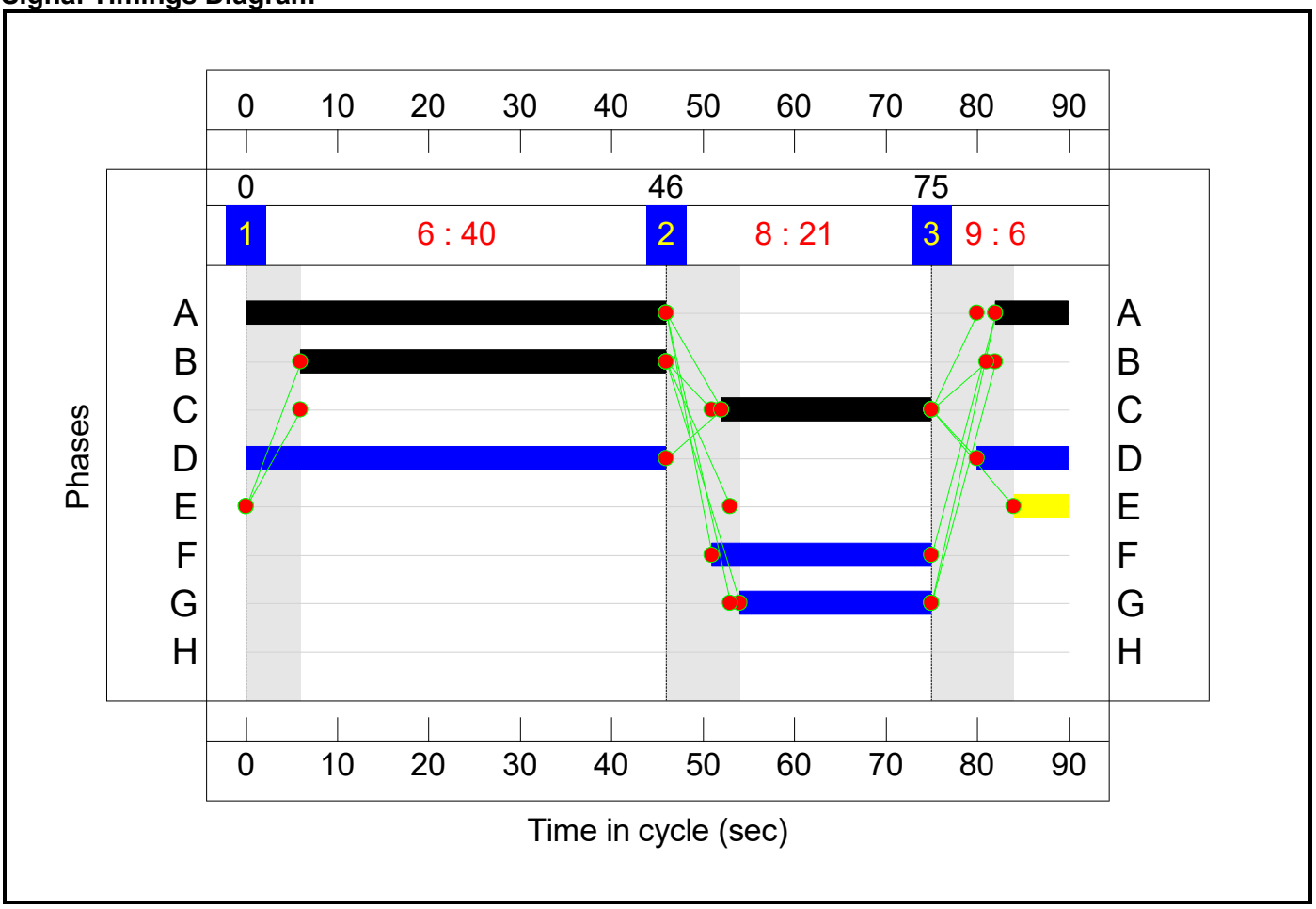
Stage Sequence Diagram



Stage Timings

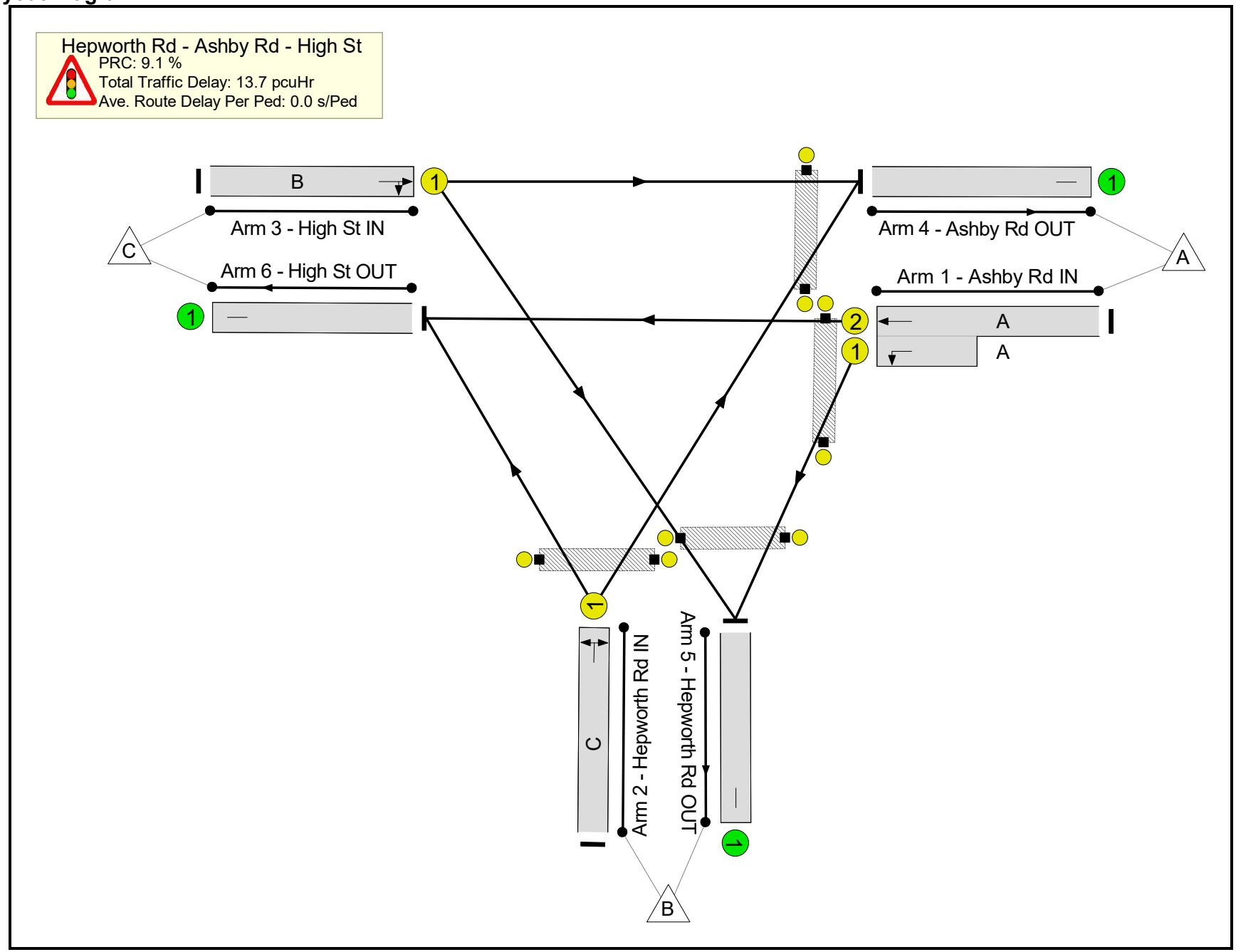
Stage	1	2	3
Duration	40	21	6
Change Point	0	46	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**82.5%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**82.5%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	54	-	1041	1965:1728	787+491	81.4 : 81.4%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	23	-	384	1745	465	82.5%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	40	-	477	2087	951	50.2%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	710	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	464	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	728	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	56	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	21	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	24	-	0	-	0	0.0%

Full Input Data And Results

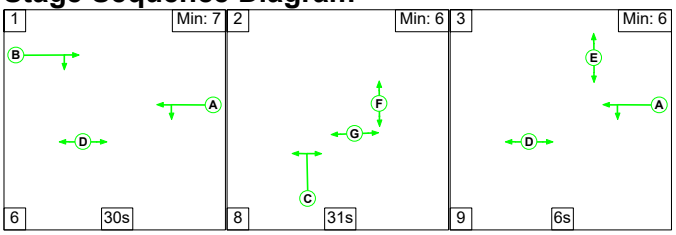
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**8.8**	**4.9**	**0.0**	**13.7**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**8.8**	**4.9**	**0.0**	**13.7**	**-**	**-**	**-**	**-**
1/2+1/1	1041	1041	-	-	-	3.2	2.1	-	5.3	18.5	15.4	2.1	17.5
2/1	384	384	-	-	-	3.3	2.2	-	5.5	52.0	9.0	2.2	11.2
3/1	477	477	-	-	-	2.3	0.5	-	2.8	21.1	8.3	0.5	8.8
4/1	710	710	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	728	728	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 9.1 Total Delay for Signalled Lanes (pcuHr): 13.69 Cycle Time (s): 90
PRC Over All Lanes (%): 9.1 Total Delay Over All Lanes(pcuHr): 13.69

Full Input Data And Results

Scenario 3: '2021 Base Reg Link 25% with Dev AM' (FG3: '2021 Base Reg Link 25% with Dev AM', Plan 1: 'Network Control Plan 1')

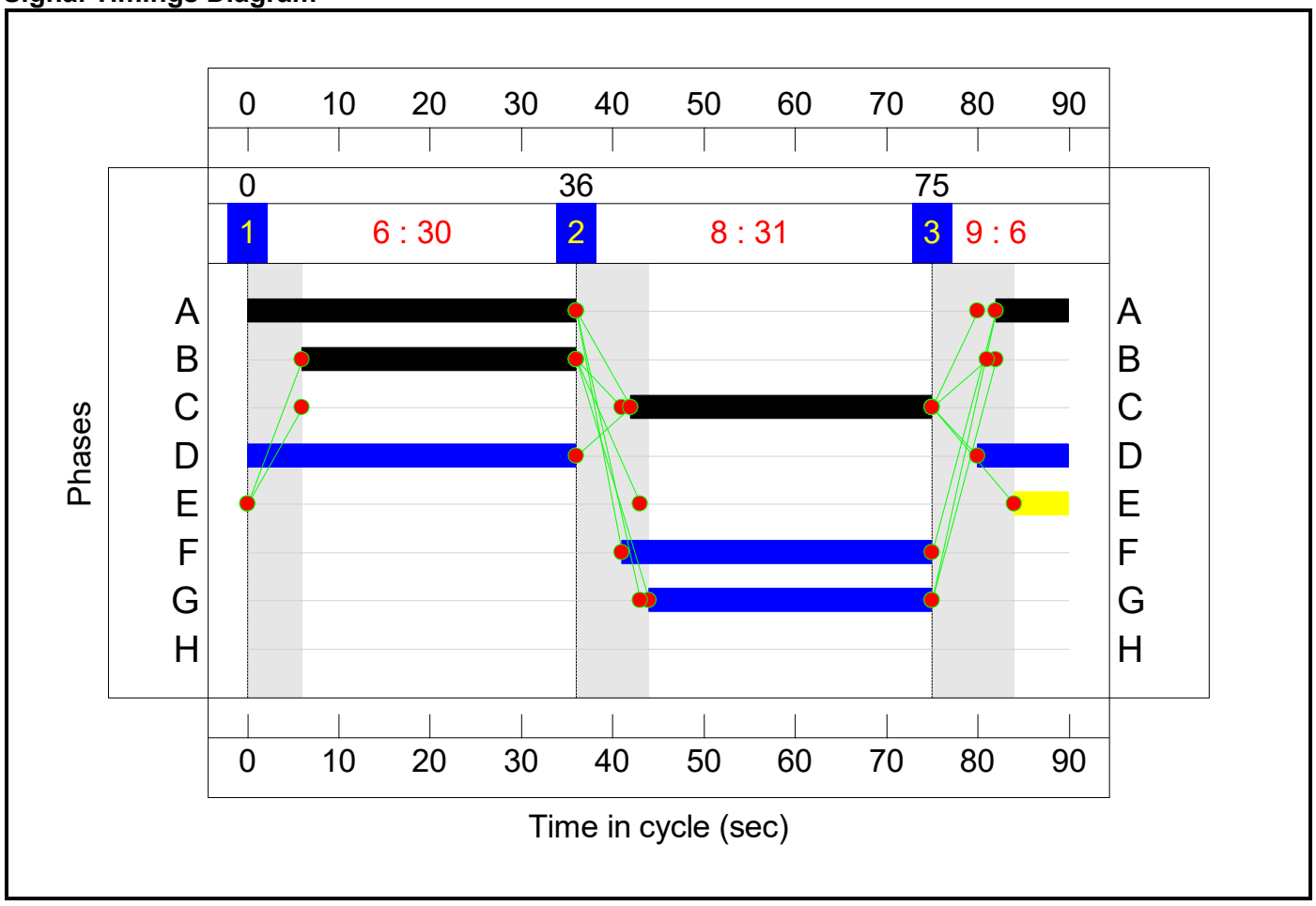
Stage Sequence Diagram



Stage Timings

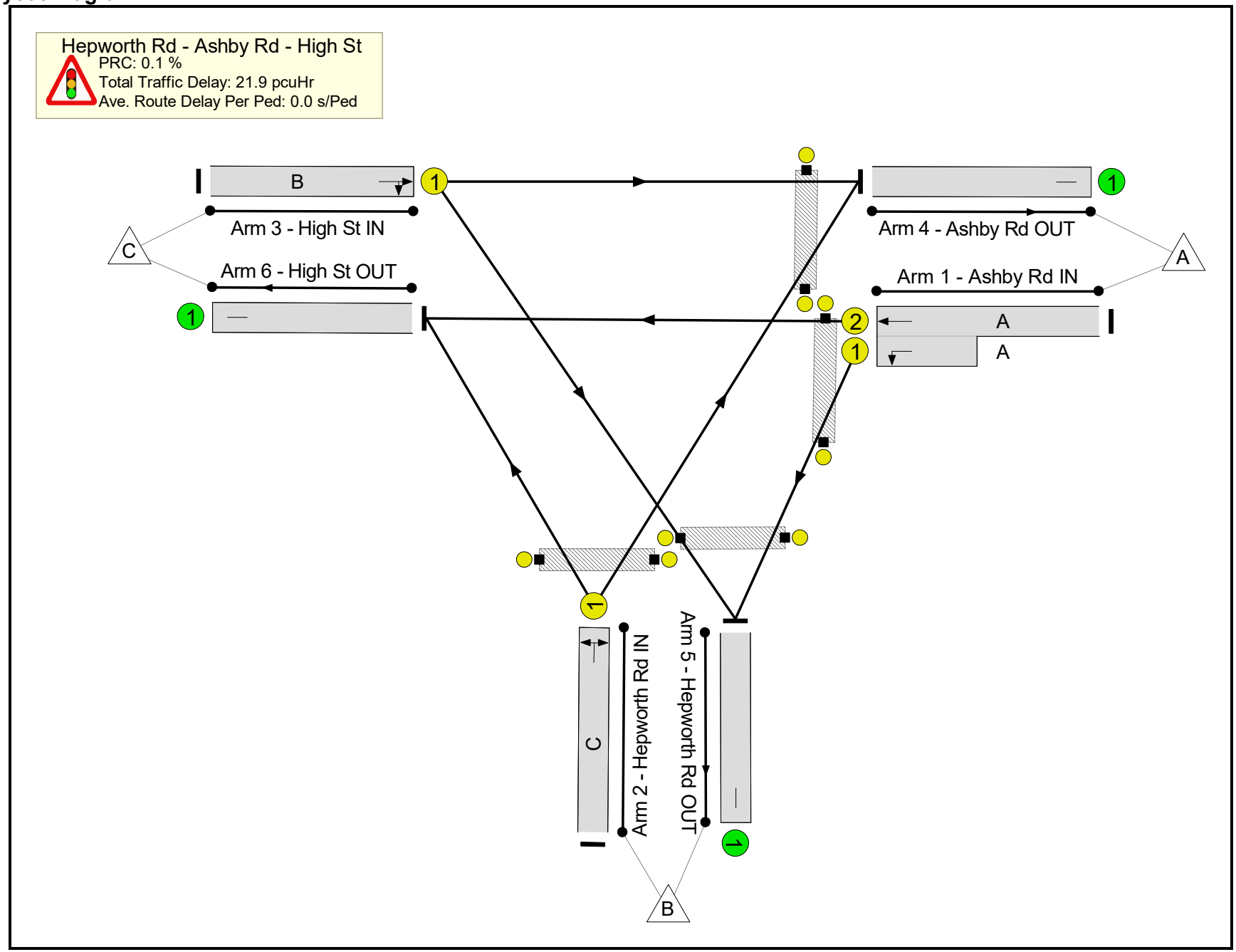
Stage	1	2	3
Duration	30	31	6
Change Point	0	36	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**89.9%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**89.9%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	44	-	765	1965:1728	696+358	72.6 : 72.6%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	33	-	591	1746	660	89.6%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	30	-	649	2096	722	89.9%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	1103	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	585	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	46	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	31	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	34	-	0	-	0	0.0%

Full Input Data And Results

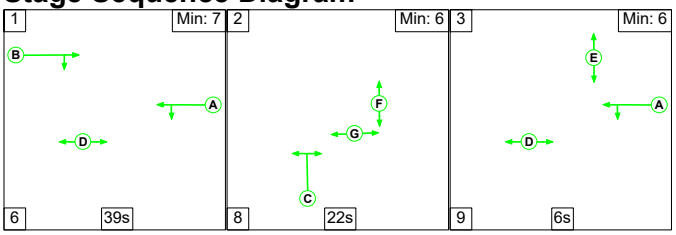
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.7**	**9.2**	**0.0**	**21.9**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**12.7**	**9.2**	**0.0**	**21.9**	**-**	**-**	**-**	**-**
1/2+1/1	765	765	-	-	-	3.3	1.3	-	4.6	21.7	11.5	1.3	12.8
2/1	591	591	-	-	-	4.3	3.9	-	8.2	49.9	13.8	3.9	17.7
3/1	649	649	-	-	-	5.1	4.0	-	9.1	50.2	15.3	4.0	19.3
4/1	1103	1103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	317	317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	585	585	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 0.1 Total Delay for Signalled Lanes (pcuHr): 21.87 Cycle Time (s): 90
PRC Over All Lanes (%): 0.1 Total Delay Over All Lanes(pcuHr): 21.87

Full Input Data And Results

Scenario 4: '2021 Base Reg Link 25% with Dev PM' (FG4: '2021 Base Reg Link 25% with Dev PM', Plan 1: 'Network Control Plan 1')

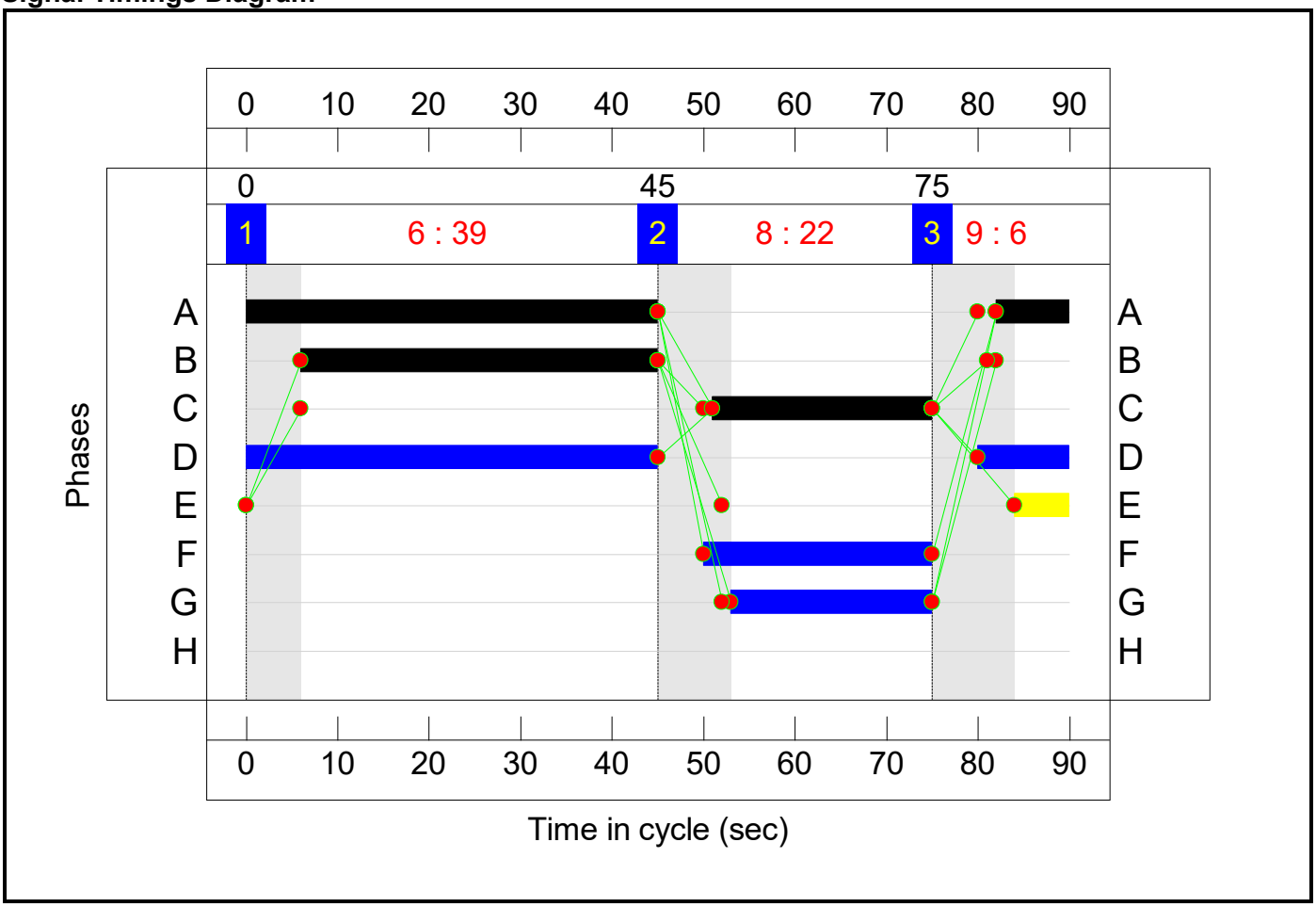
Stage Sequence Diagram



Stage Timings

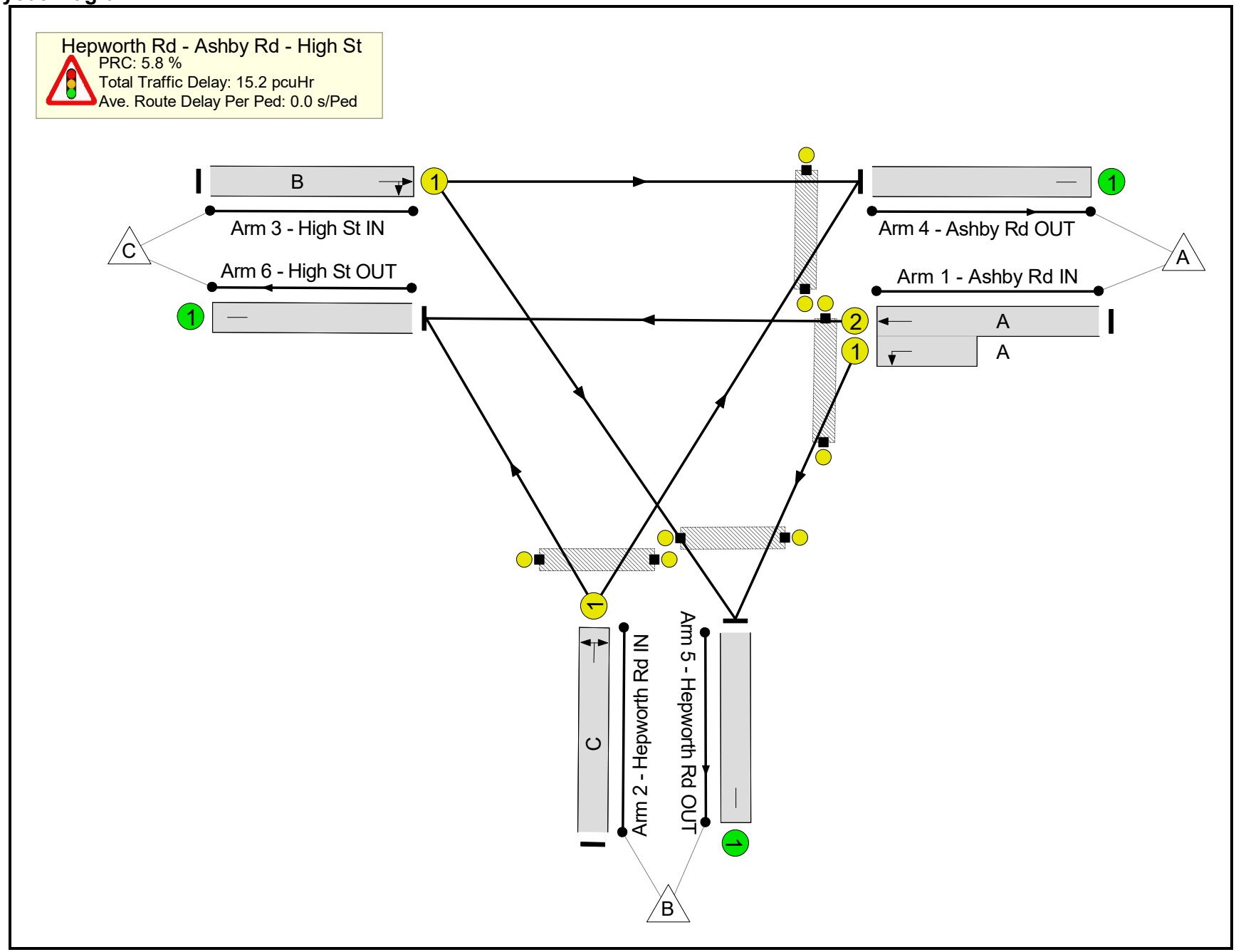
Stage	1	2	3
Duration	39	22	6
Change Point	0	45	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.1%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.1%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	53	-	1078	1965:1728	753+514	85.1 : 85.1%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	24	-	408	1745	485	84.2%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	39	-	477	2087	928	51.4%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	734	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	501	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	728	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	55	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	22	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	25	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**9.5**	**5.8**	**0.0**	**15.2**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**9.5**	**5.8**	**0.0**	**15.2**	**-**	**-**	**-**	**-**
1/2+1/1	1078	1078	-	-	-	3.6	2.8	-	6.4	21.2	17.0	2.8	19.7
2/1	408	408	-	-	-	3.5	2.5	-	6.0	52.7	9.5	2.5	12.0
3/1	477	477	-	-	-	2.4	0.5	-	2.9	22.0	8.5	0.5	9.0
4/1	734	734	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	501	501	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	728	728	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

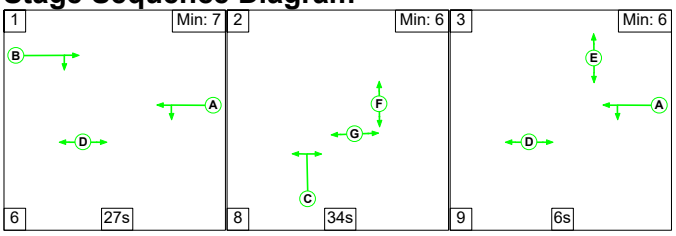
C1 PRC for Signalled Lanes (%): 5.8 Total Delay for Signalled Lanes (pcuHr): 15.24 Cycle Time (s): 90

PRC Over All Lanes (%): 5.8 Total Delay Over All Lanes(pcuHr): 15.24

Full Input Data And Results

Scenario 5: '2021 Base Reg Link 50% AM' (FG5: '2021 Base Reg Link 50% AM', Plan 1: 'Network Control Plan 1')

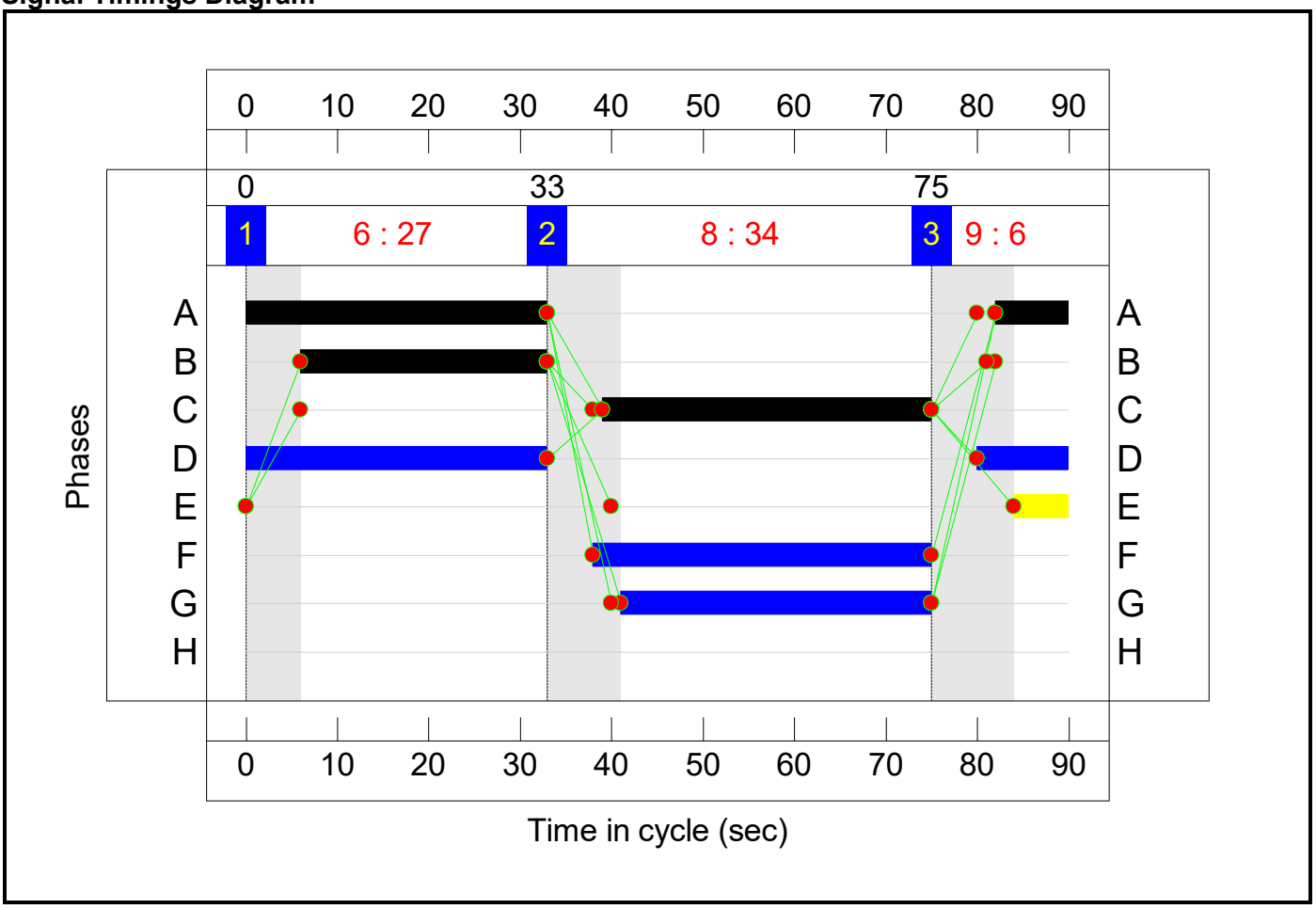
Stage Sequence Diagram



Stage Timings

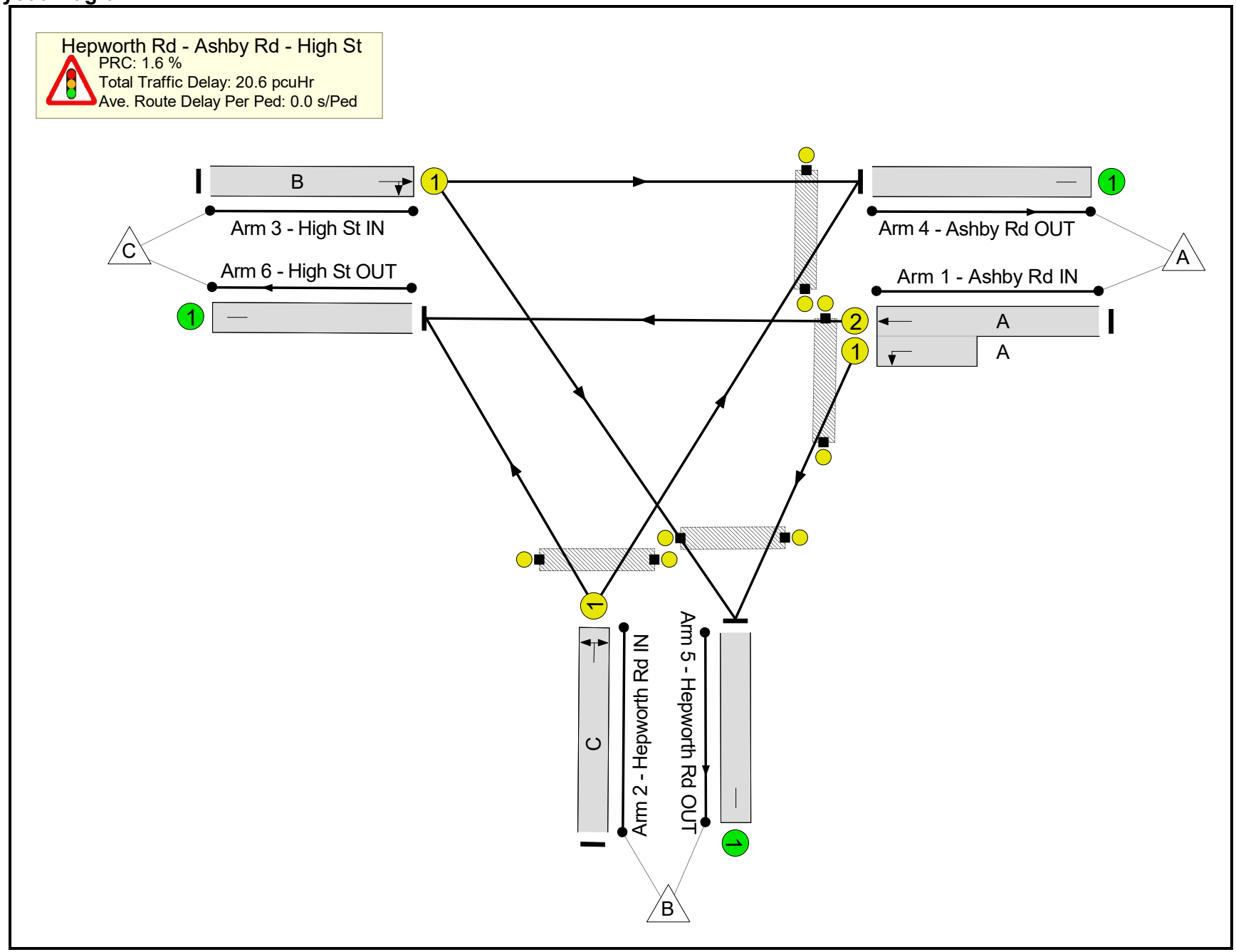
Stage	1	2	3
Duration	27	34	6
Change Point	0	33	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.6%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.6%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	41	-	744	1965:1728	588+444	72.1 : 72.1%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	36	-	636	1746	718	88.6%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	27	-	572	2094	651	87.8%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	1071	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	377	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	504	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	43	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	34	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	37	-	0	-	0	0.0%

Full Input Data And Results

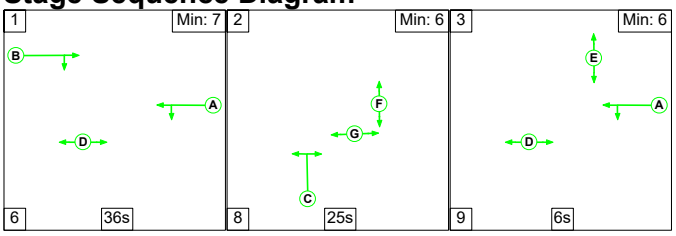
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.5**	**8.2**	**0.0**	**20.6**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**12.5**	**8.2**	**0.0**	**20.6**	**-**	**-**	**-**	**-**
1/2+1/1	744	744	-	-	-	3.4	1.3	-	4.7	22.9	9.9	1.3	11.1
2/1	636	636	-	-	-	4.3	3.6	-	7.9	44.8	14.7	3.6	18.2
3/1	572	572	-	-	-	4.7	3.3	-	8.0	50.3	13.5	3.3	16.8
4/1	1071	1071	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	377	377	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	504	504	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 1.6 Total Delay for Signalled Lanes (pcuHr): 20.63 Cycle Time (s): 90
PRC Over All Lanes (%): 1.6 Total Delay Over All Lanes(pcuHr): 20.63

Full Input Data And Results

Scenario 6: '2021 Base Reg Link 50% PM' (FG6: '2021 Base Reg Link 50% PM', Plan 1: 'Network Control Plan 1')

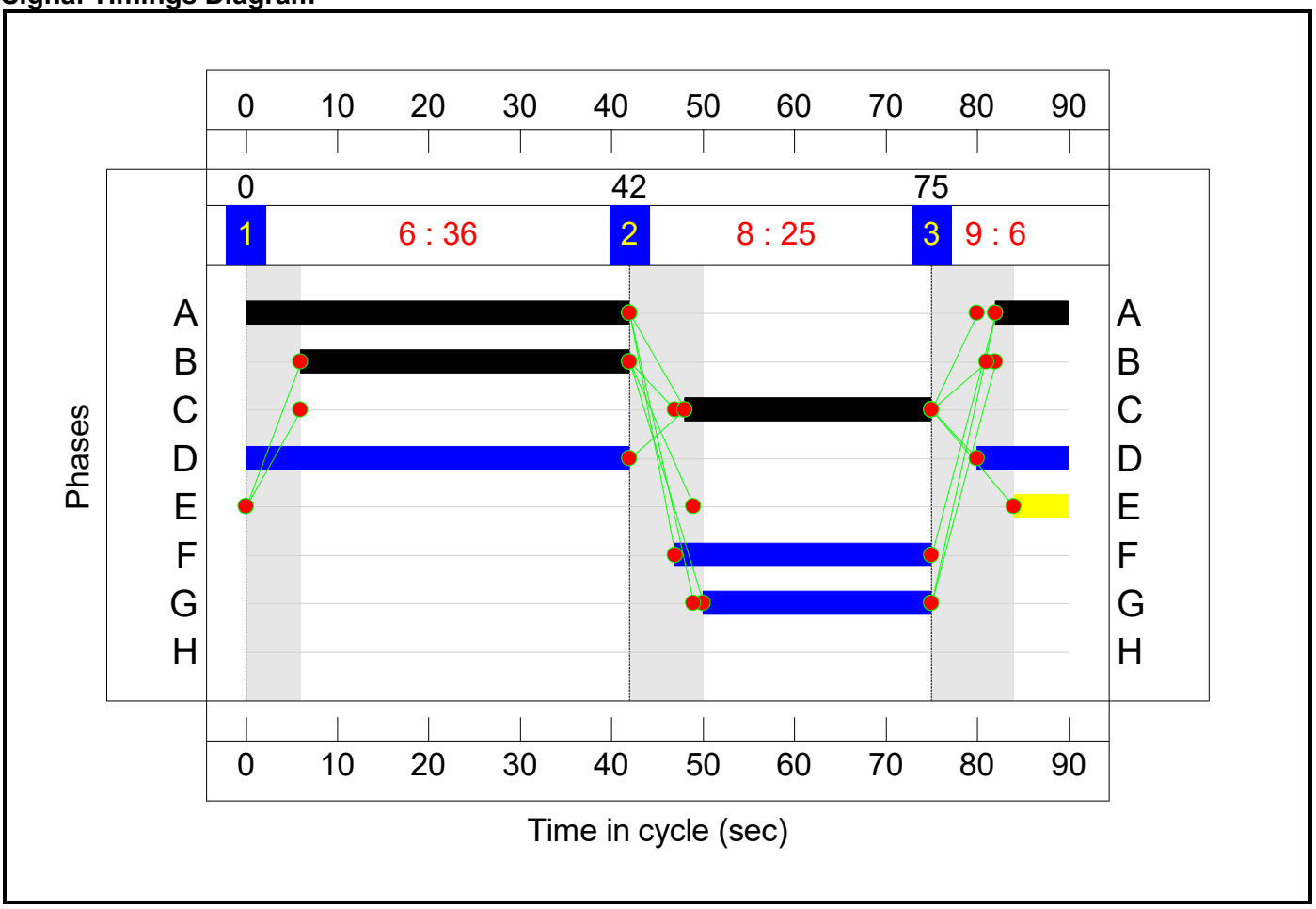
Stage Sequence Diagram



Stage Timings

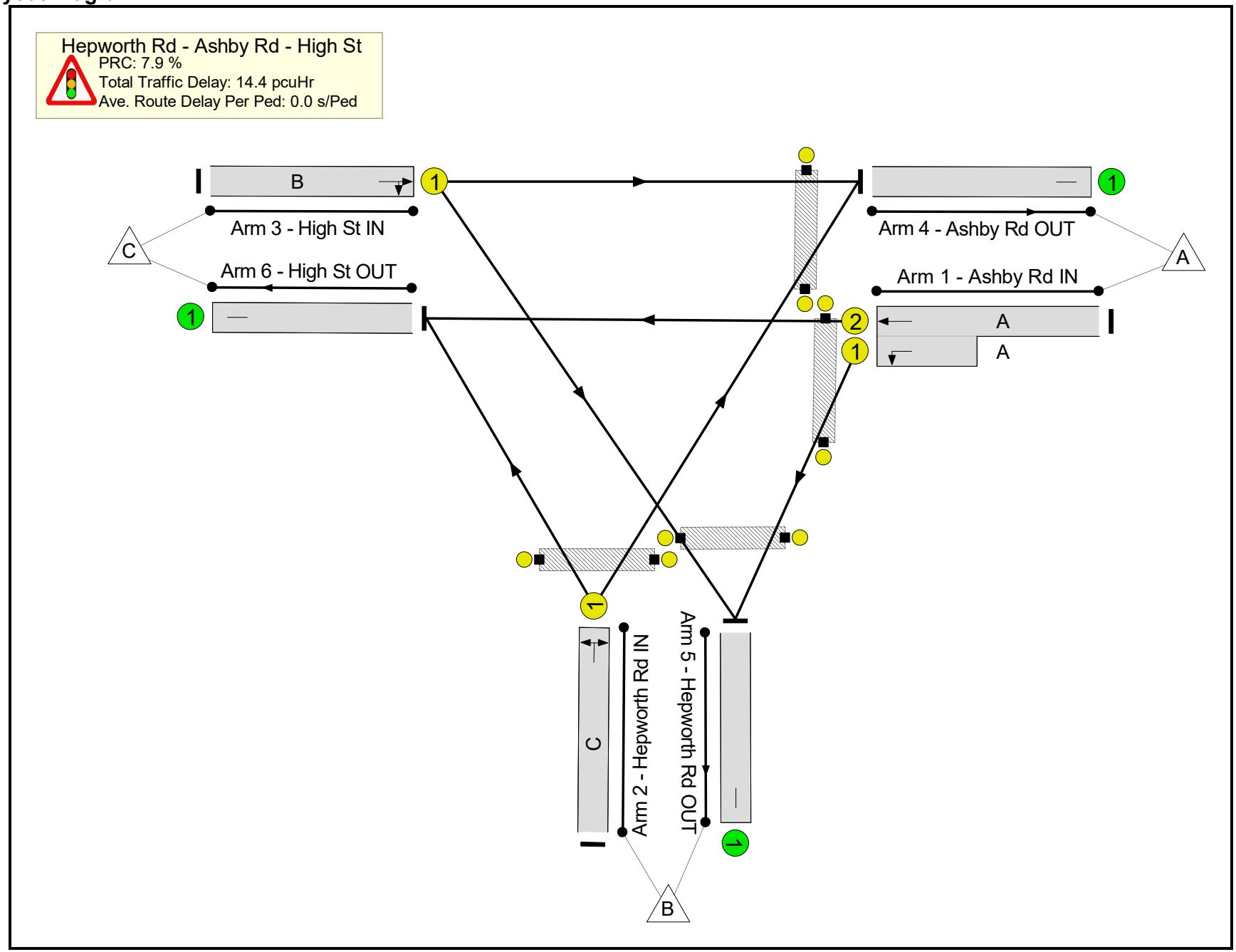
Stage	1	2	3
Duration	36	25	6
Change Point	0	42	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.4%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.4%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	50	-	1042	1965:1728	640+609	83.4 : 83.4%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	27	-	438	1745	543	80.7%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	36	-	423	2083	856	49.4%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	710	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	572	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	52	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	25	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	28	-	0	-	0	0.0%

Full Input Data And Results

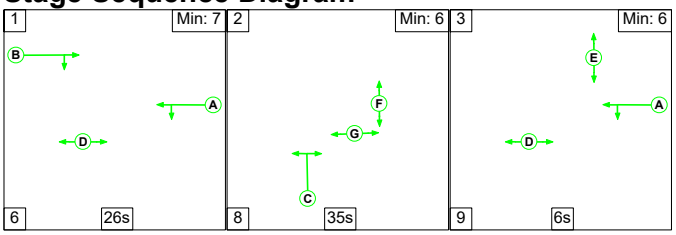
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**9.5**	**5.0**	**0.0**	**14.4**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**9.5**	**5.0**	**0.0**	**14.4**	**-**	**-**	**-**	**-**
1/2+1/1	1042	1042	-	-	-	3.7	2.5	-	6.2	21.3	14.3	2.5	16.8
2/1	438	438	-	-	-	3.5	2.0	-	5.5	45.0	10.0	2.0	12.0
3/1	423	423	-	-	-	2.3	0.5	-	2.8	23.7	7.8	0.5	8.2
4/1	710	710	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	572	572	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 7.9 Total Delay for Signalled Lanes (pcuHr): 14.42 Cycle Time (s): 90
PRC Over All Lanes (%): 7.9 Total Delay Over All Lanes(pcuHr): 14.42

Full Input Data And Results

Scenario 7: '2021 Base Reg Link 50% with Dev AM' (FG7: '2021 Base Reg Link 50% with Dev AM', Plan 1: 'Network Control Plan 1')

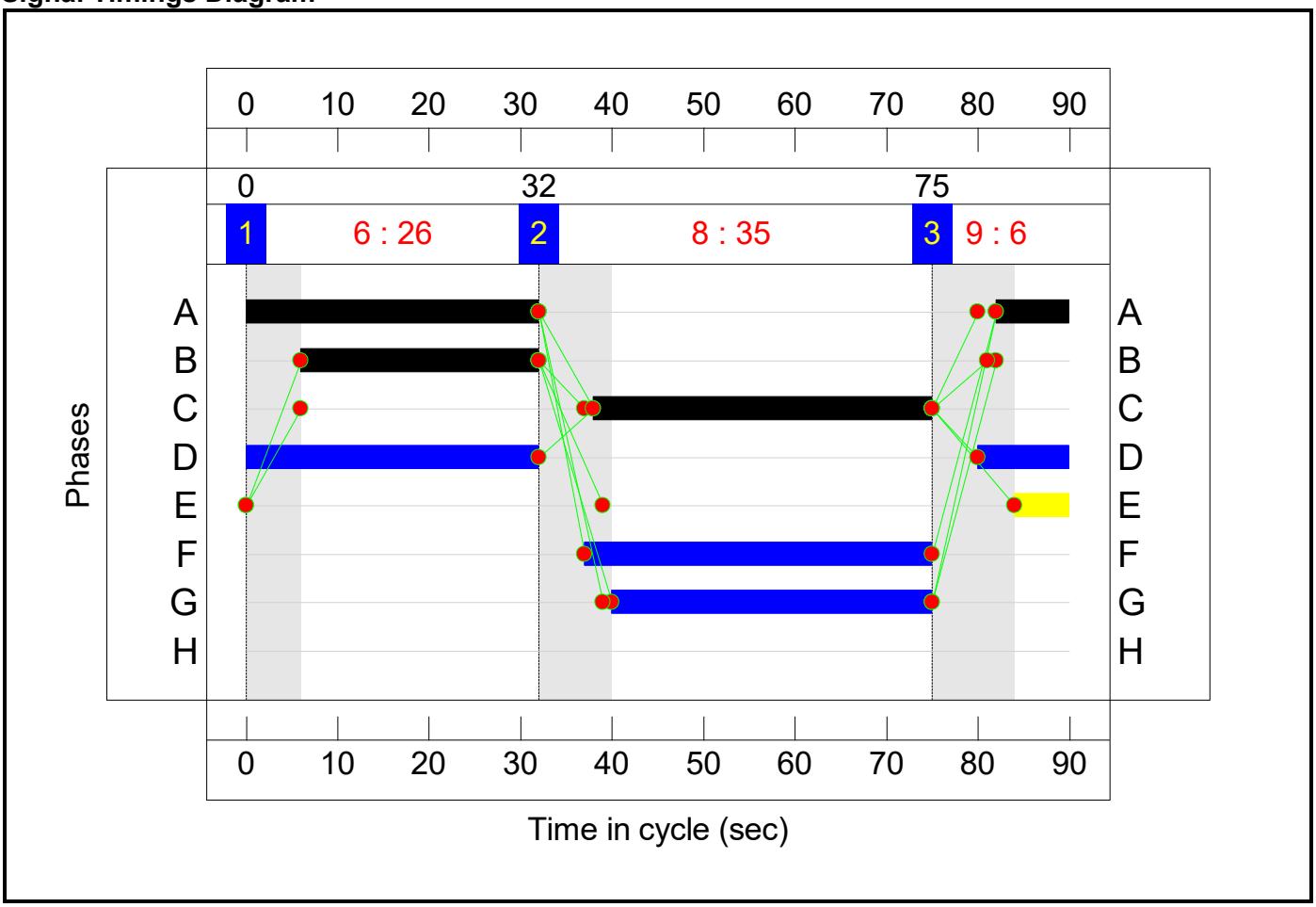
Stage Sequence Diagram



Stage Timings

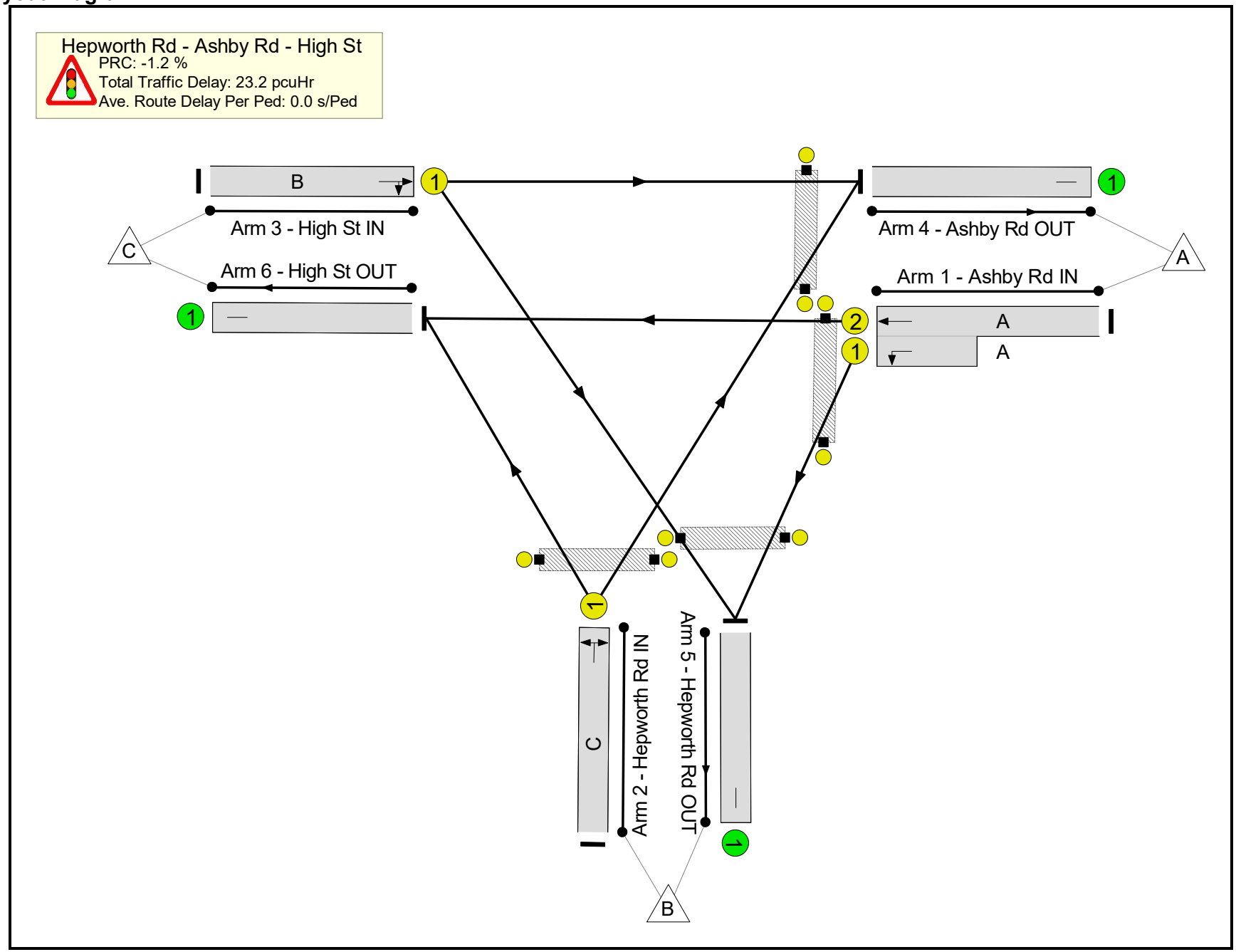
Stage	1	2	3
Duration	26	35	6
Change Point	0	32	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.1%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.1%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	40	-	765	1965:1728	565+454	75.1 : 75.1%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	37	-	668	1746	737	90.6%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	26	-	572	2094	628	91.1%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	1103	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	398	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	504	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	42	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	35	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	38	-	0	-	0	0.0%

Full Input Data And Results

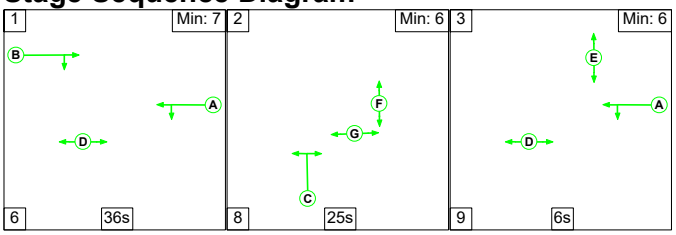
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**13.1**	**10.2**	**0.0**	**23.2**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**13.1**	**10.2**	**0.0**	**23.2**	**-**	**-**	**-**	**-**
1/2+1/1	765	765	-	-	-	3.7	1.5	-	5.2	24.5	10.4	1.5	11.9
2/1	668	668	-	-	-	4.5	4.3	-	8.8	47.5	15.6	4.3	19.9
3/1	572	572	-	-	-	4.8	4.4	-	9.2	58.0	13.7	4.4	18.1
4/1	1103	1103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	398	398	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	504	504	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -1.2 Total Delay for Signalled Lanes (pcuHr): 23.24 Cycle Time (s): 90
PRC Over All Lanes (%): -1.2 Total Delay Over All Lanes(pcuHr): 23.24

Full Input Data And Results

Scenario 8: '2021 Base Reg Link 50% with Dev PM' (FG8: '2021 Base Reg Link 50% with Dev PM', Plan 1: 'Network Control Plan 1')

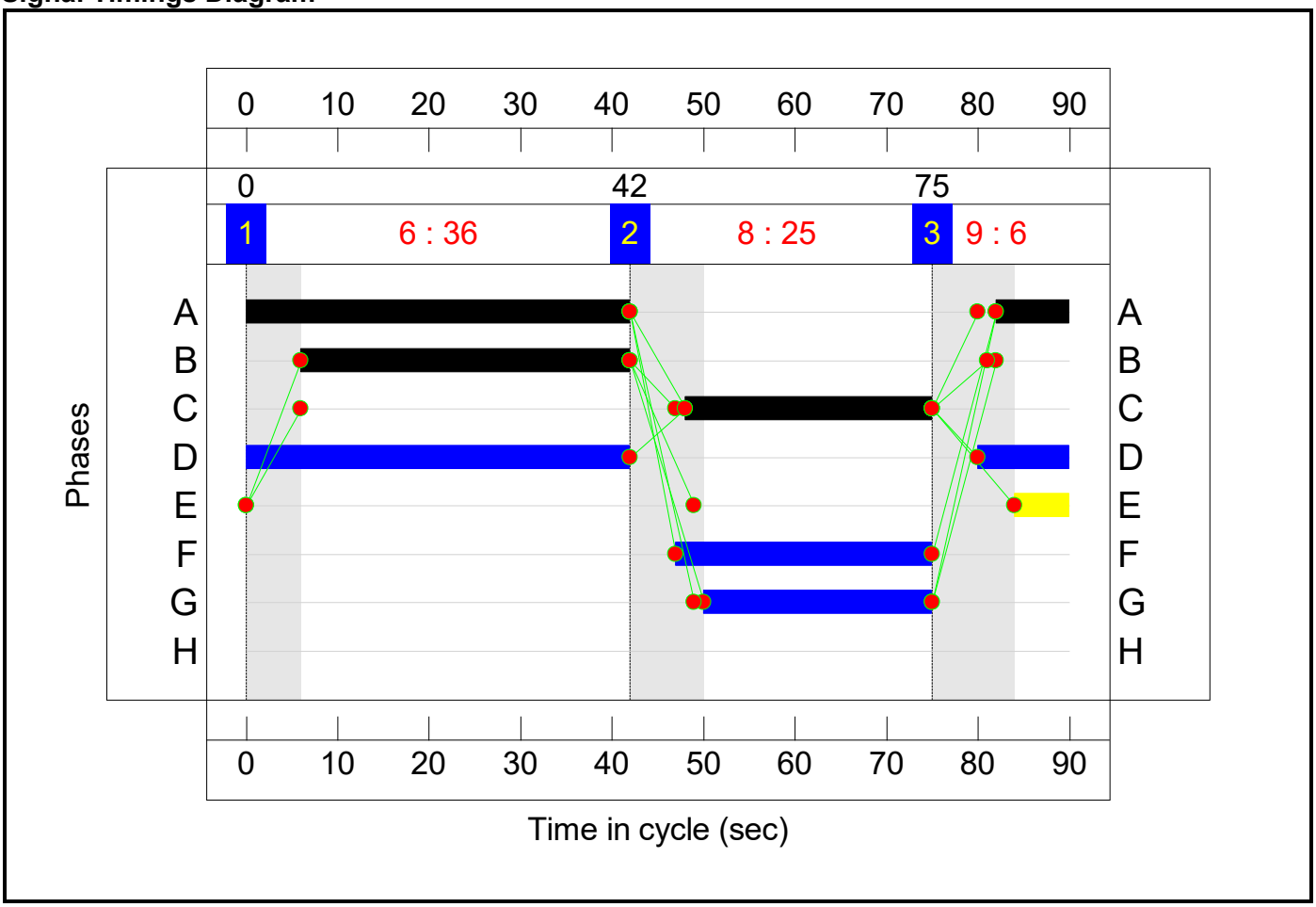
Stage Sequence Diagram



Stage Timings

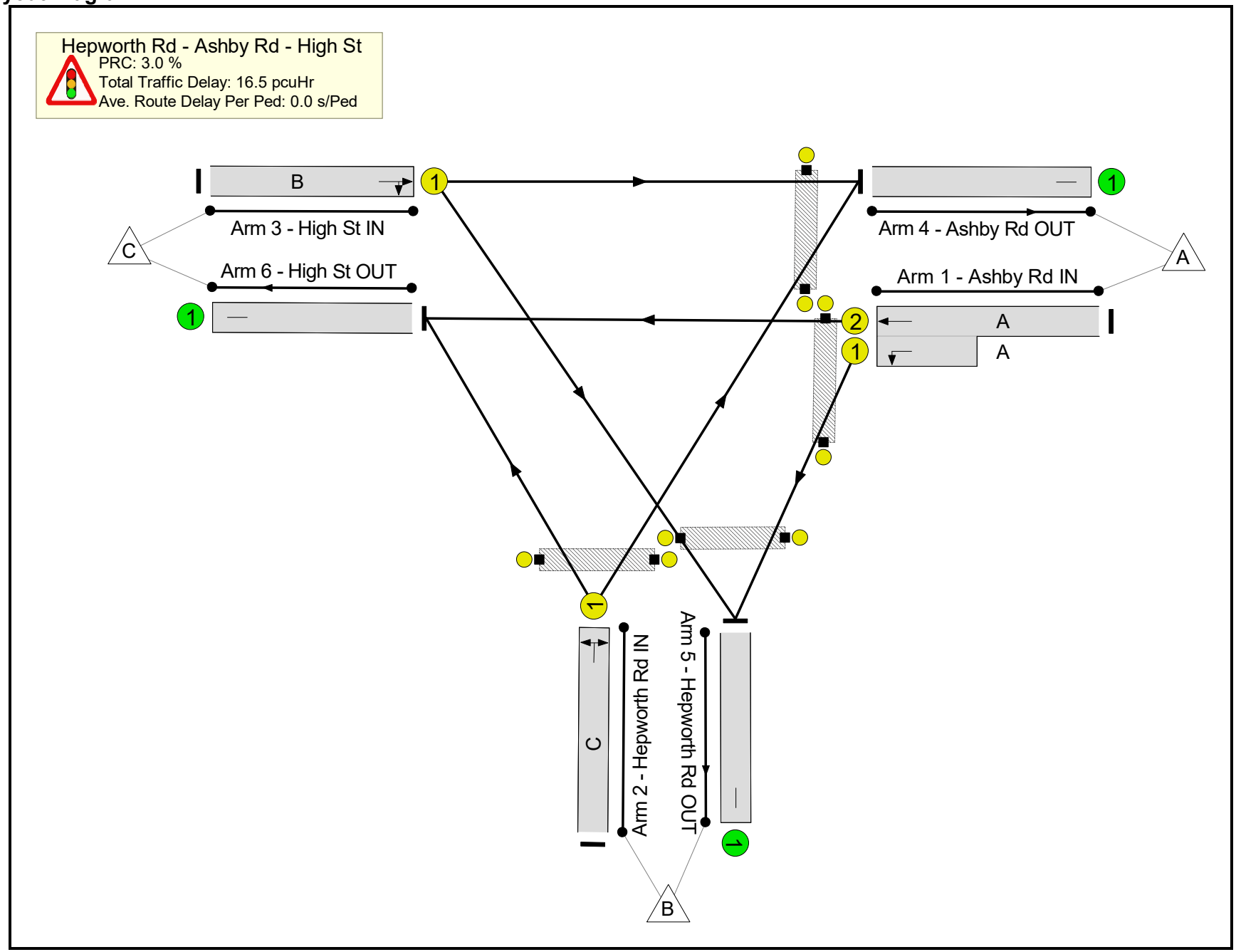
Stage	1	2	3
Duration	36	25	6
Change Point	0	42	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.4%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.4%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	50	-	1078	1965:1728	611+622	87.4 : 87.4%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	27	-	462	1745	543	85.1%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	36	-	423	2083	856	49.4%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	734	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	608	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	52	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	25	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	28	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**10.0**	**6.5**	**0.0**	**16.5**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**10.0**	**6.5**	**0.0**	**16.5**	**-**	**-**	**-**	**-**
1/2+1/1	1078	1078	-	-	-	4.0	3.3	-	7.3	24.5	16.4	3.3	19.7
2/1	462	462	-	-	-	3.7	2.7	-	6.4	49.9	10.8	2.7	13.5
3/1	423	423	-	-	-	2.3	0.5	-	2.8	23.7	7.8	0.5	8.2
4/1	734	734	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	608	608	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

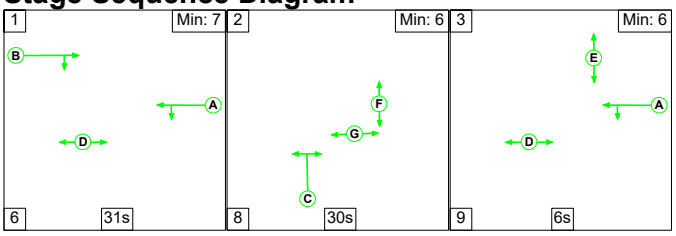
C1 PRC for Signalled Lanes (%): 3.0 Total Delay for Signalled Lanes (pcuHr): 16.52 Cycle Time (s): 90

PRC Over All Lanes (%): 3.0 Total Delay Over All Lanes(pcuHr): 16.52

Full Input Data And Results

Scenario 9: '2024 Base Reg Link 25% AM' (FG9: '2024 Base Reg Link 25% AM', Plan 1: 'Network Control Plan 1')

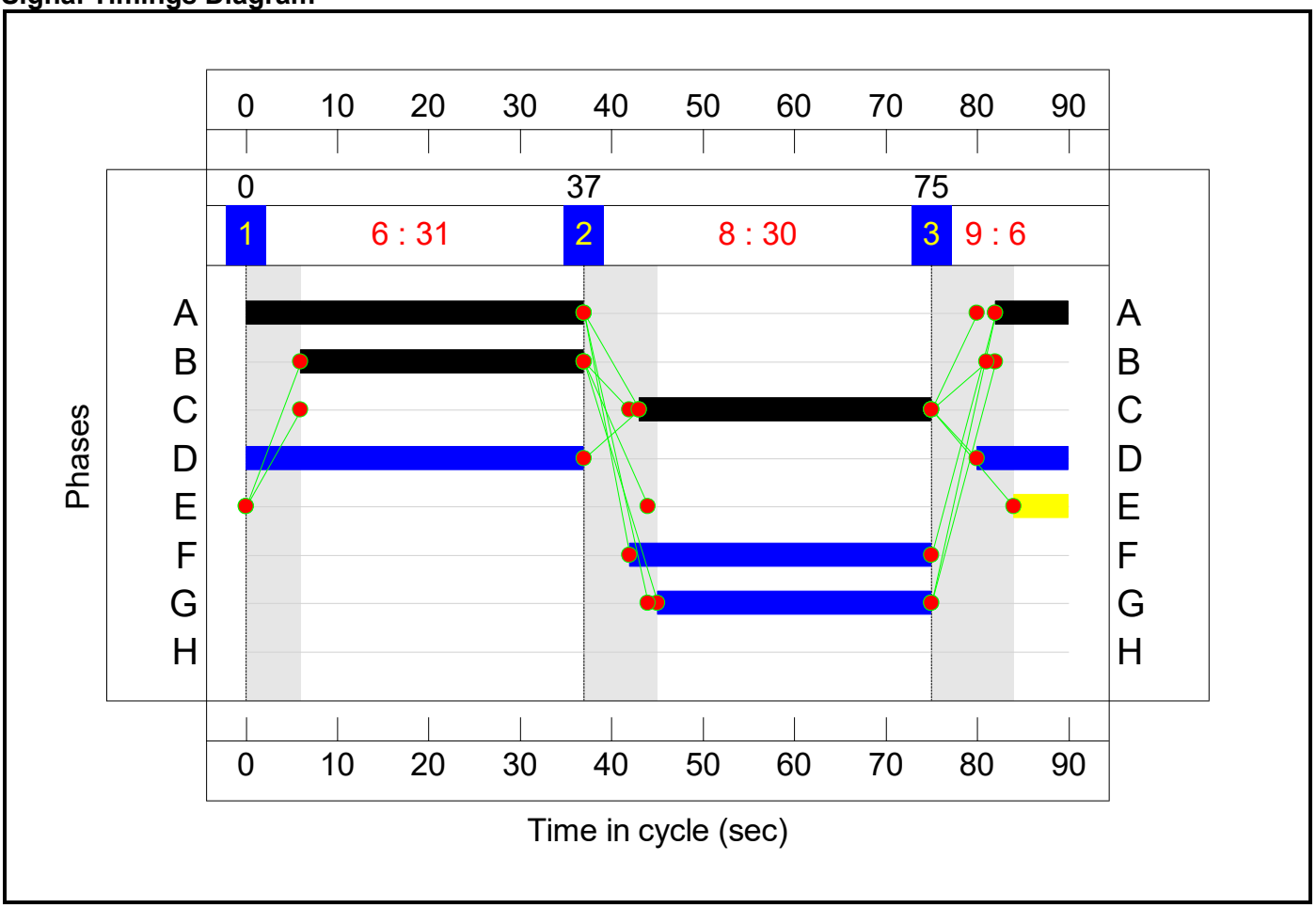
Stage Sequence Diagram



Stage Timings

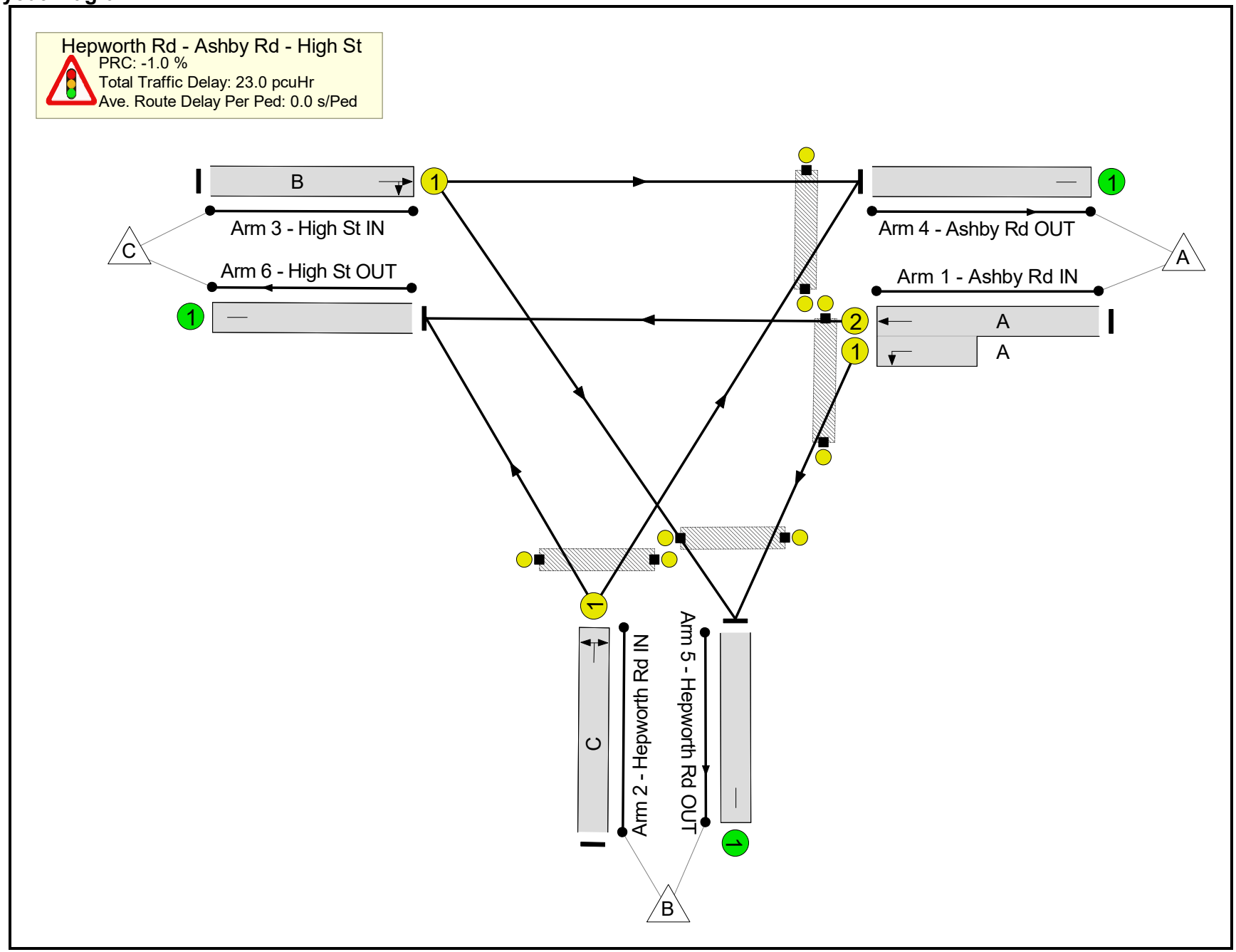
Stage	1	2	3
Duration	31	30	6
Change Point	0	37	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.9%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.9%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	45	-	778	1965:1728	725+343	72.8 : 72.8%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	32	-	582	1746	640	90.9%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	31	-	678	2097	746	90.9%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	1118	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	309	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	47	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	30	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	33	-	0	-	0	0.0%

Full Input Data And Results

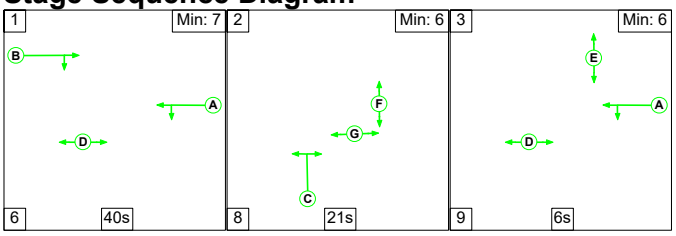
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.8**	**10.1**	**0.0**	**23.0**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**12.8**	**10.1**	**0.0**	**23.0**	**-**	**-**	**-**	**-**
1/2+1/1	778	778	-	-	-	3.3	1.3	-	4.6	21.3	11.9	1.3	13.2
2/1	582	582	-	-	-	4.4	4.3	-	8.7	54.0	13.7	4.3	18.1
3/1	678	678	-	-	-	5.2	4.4	-	9.6	51.2	16.0	4.4	20.4
4/1	1118	1118	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	309	309	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -1.0 Total Delay for Signalled Lanes (pcuHr): 22.96 Cycle Time (s): 90
PRC Over All Lanes (%): -1.0 Total Delay Over All Lanes(pcuHr): 22.96

Full Input Data And Results

Scenario 10: '2024 Base Reg Link 25% PM' (FG10: '2024 Base Reg Link 25% PM', Plan 1: 'Network Control Plan 1')

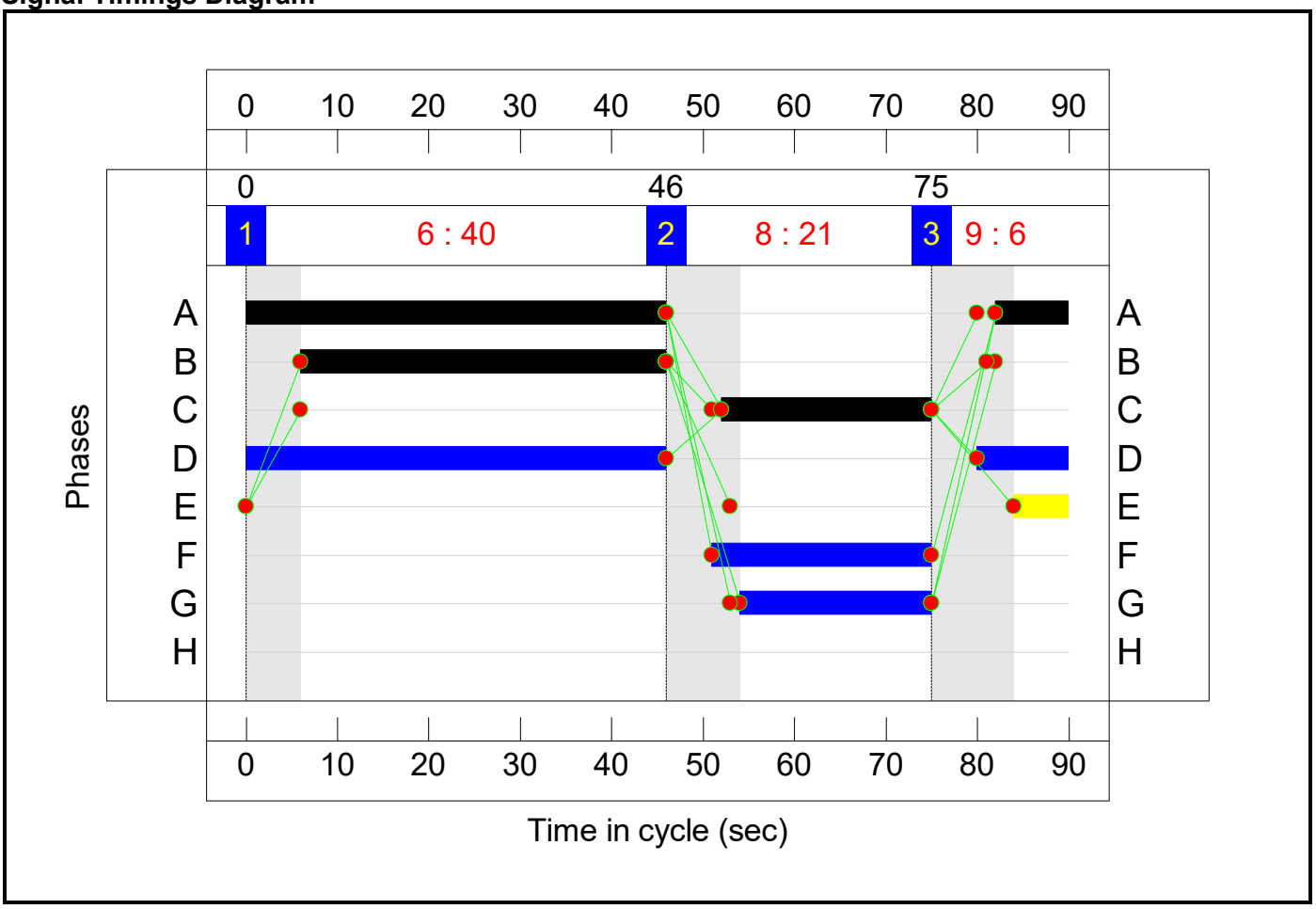
Stage Sequence Diagram



Stage Timings

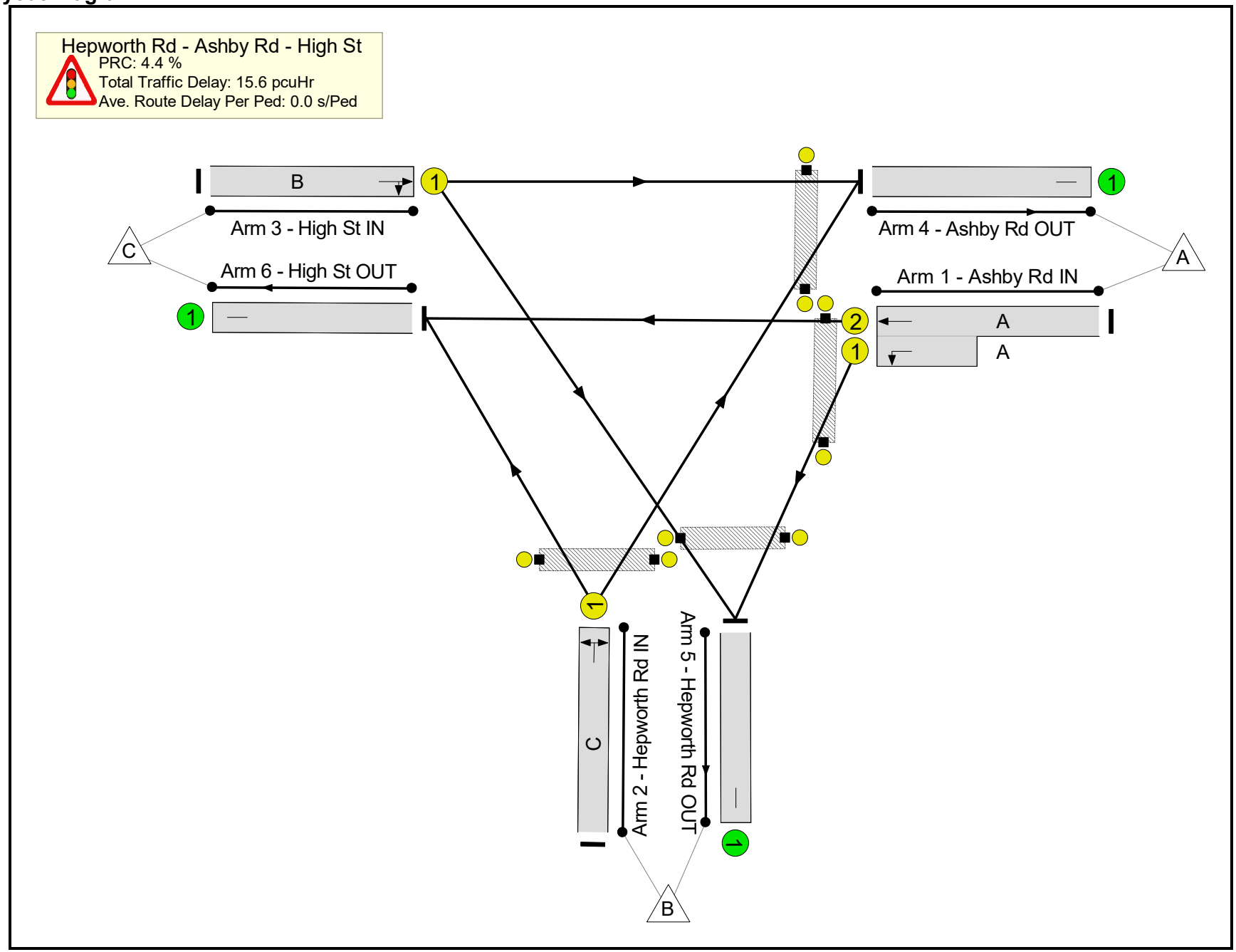
Stage	1	2	3
Duration	40	21	6
Change Point	0	46	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.2%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.2%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	54	-	1089	1965:1728	788+491	85.2 : 85.2%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	23	-	401	1745	465	86.2%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	40	-	498	2087	951	52.4%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	742	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	484	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	762	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	56	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	21	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	24	-	0	-	0	0.0%

Full Input Data And Results

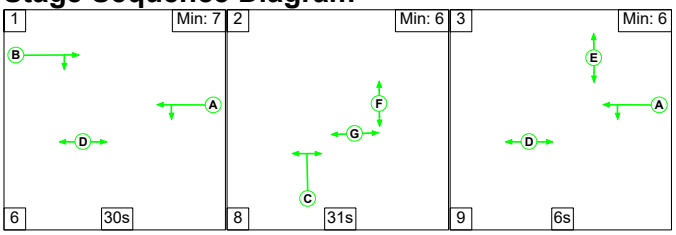
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**9.4**	**6.2**	**0.0**	**15.6**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**9.4**	**6.2**	**0.0**	**15.6**	**-**	**-**	**-**	**-**
1/2+1/1	1089	1089	-	-	-	3.5	2.8	-	6.3	20.9	17.5	2.8	20.2
2/1	401	401	-	-	-	3.5	2.9	-	6.4	57.1	9.5	2.9	12.3
3/1	498	498	-	-	-	2.4	0.5	-	3.0	21.5	8.9	0.5	9.4
4/1	742	742	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	484	484	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	762	762	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 4.4 Total Delay for Signalled Lanes (pcuHr): 15.65 Cycle Time (s): 90
PRC Over All Lanes (%): 4.4 Total Delay Over All Lanes(pcuHr): 15.65

Full Input Data And Results

Scenario 11: '2024 Base Reg Link 25% with Dev AM' (FG11: '2024 Base Reg Link 25% with Dev AM', Plan 1: 'Network Control Plan 1')

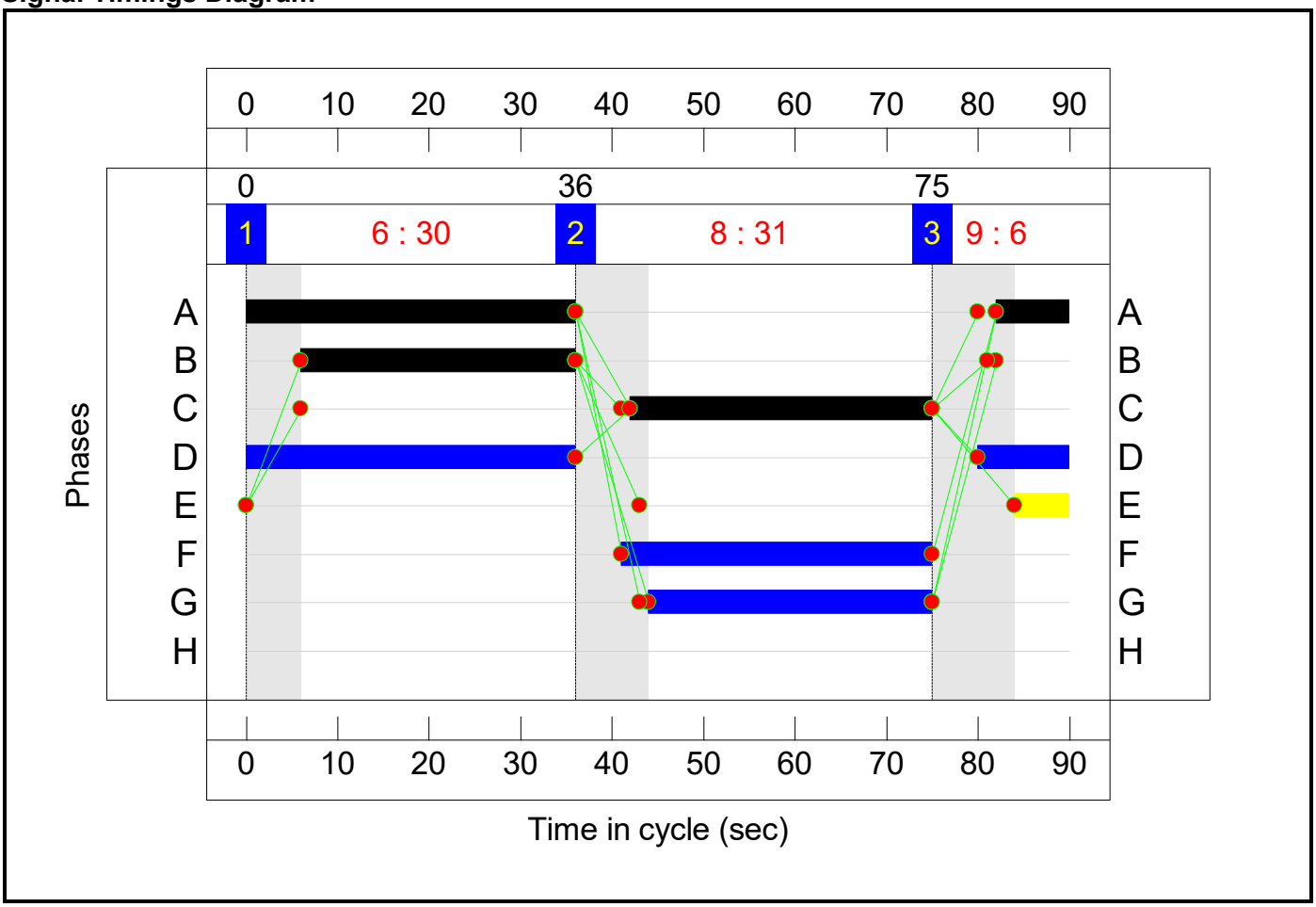
Stage Sequence Diagram



Stage Timings

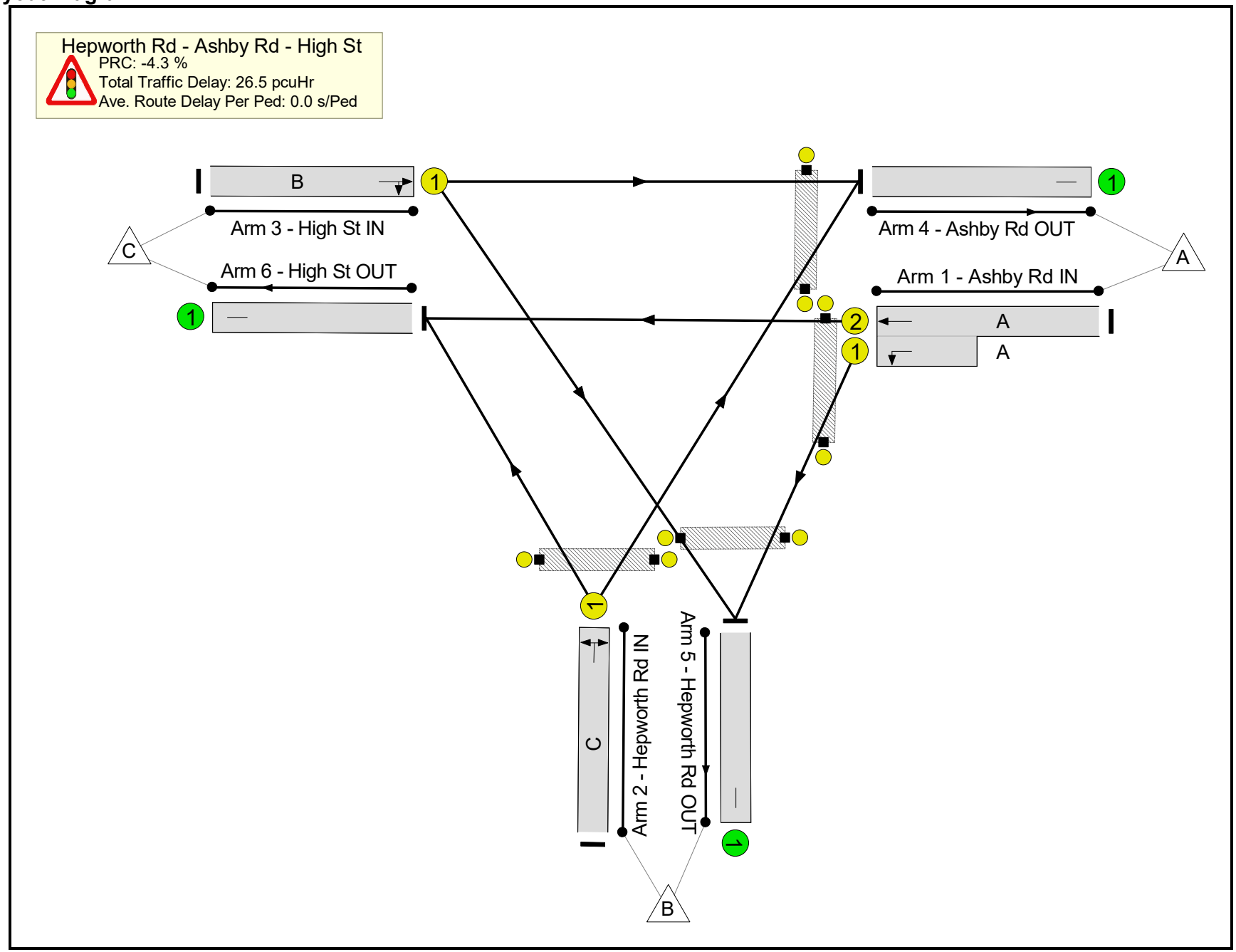
Stage	1	2	3
Duration	30	31	6
Change Point	0	36	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.9%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.9%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	44	-	799	1965:1728	696+357	75.8 : 75.8%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	33	-	614	1746	660	93.1%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	30	-	678	2097	722	93.9%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	1150	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	330	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	46	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	31	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	34	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**13.5**	**13.0**	**0.0**	**26.5**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**13.5**	**13.0**	**0.0**	**26.5**	**-**	**-**	**-**	**-**
1/2+1/1	799	799	-	-	-	3.5	1.5	-	5.1	23.0	12.5	1.5	14.1
2/1	614	614	-	-	-	4.6	5.4	-	10.0	58.7	14.7	5.4	20.1
3/1	678	678	-	-	-	5.4	6.0	-	11.4	60.5	16.4	6.0	22.4
4/1	1150	1150	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	330	330	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -4.3

PRC Over All Lanes (%): -4.3

Total Delay for Signalled Lanes (pcuHr): 26.52

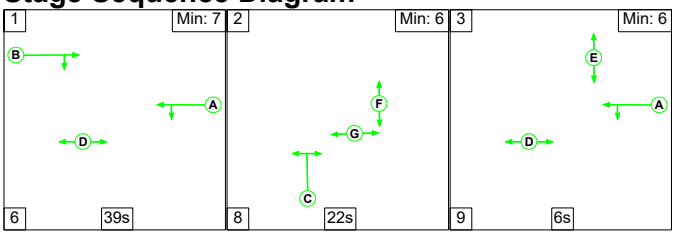
Total Delay Over All Lanes(pcuHr): 26.52

Cycle Time (s): 90

Full Input Data And Results

Scenario 12: '2024 Base Reg Link 25% with Dev PM' (FG12: '2024 Base Reg Link 25% with Dev PM', Plan 1: 'Network Control Plan 1')

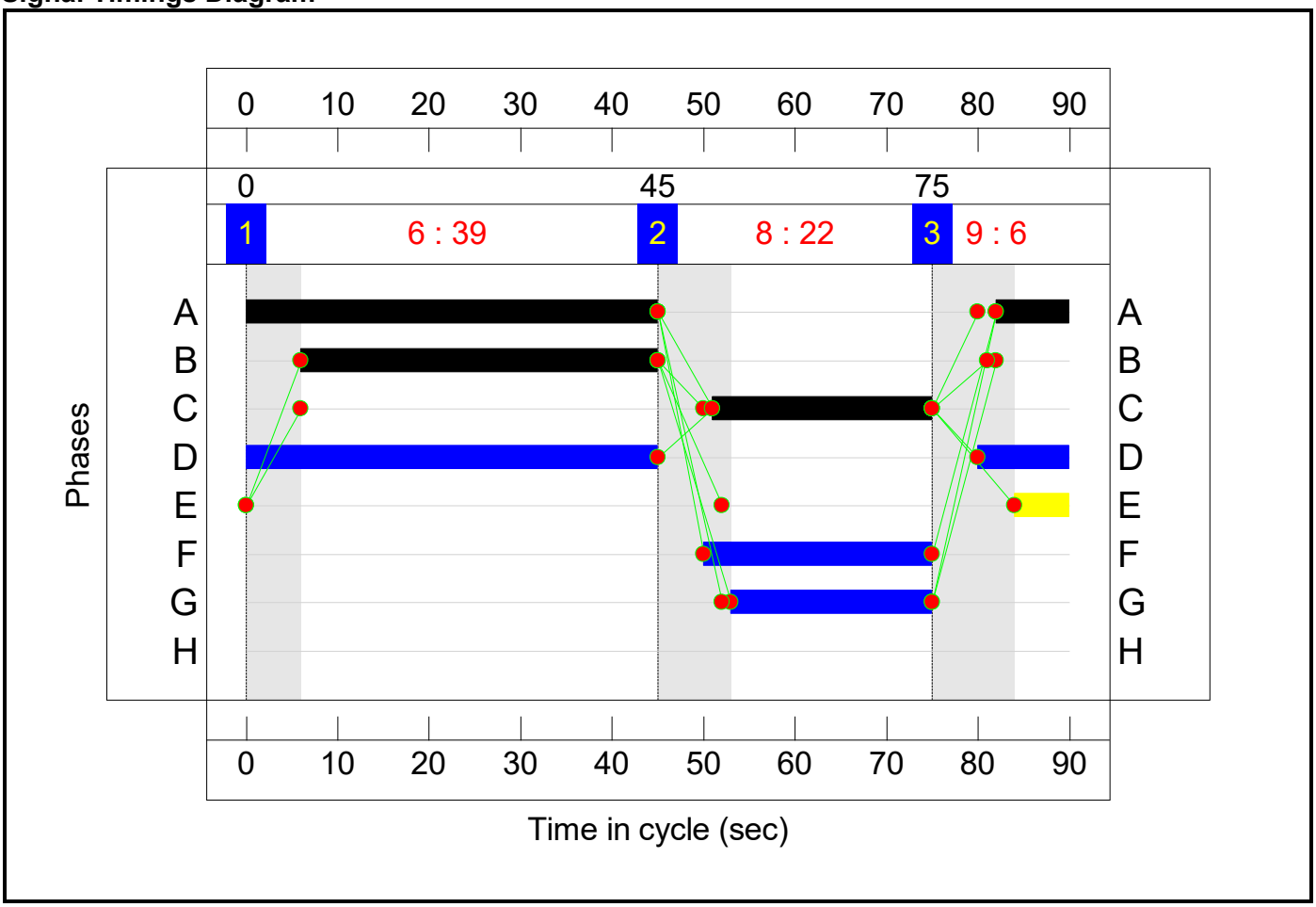
Stage Sequence Diagram



Stage Timings

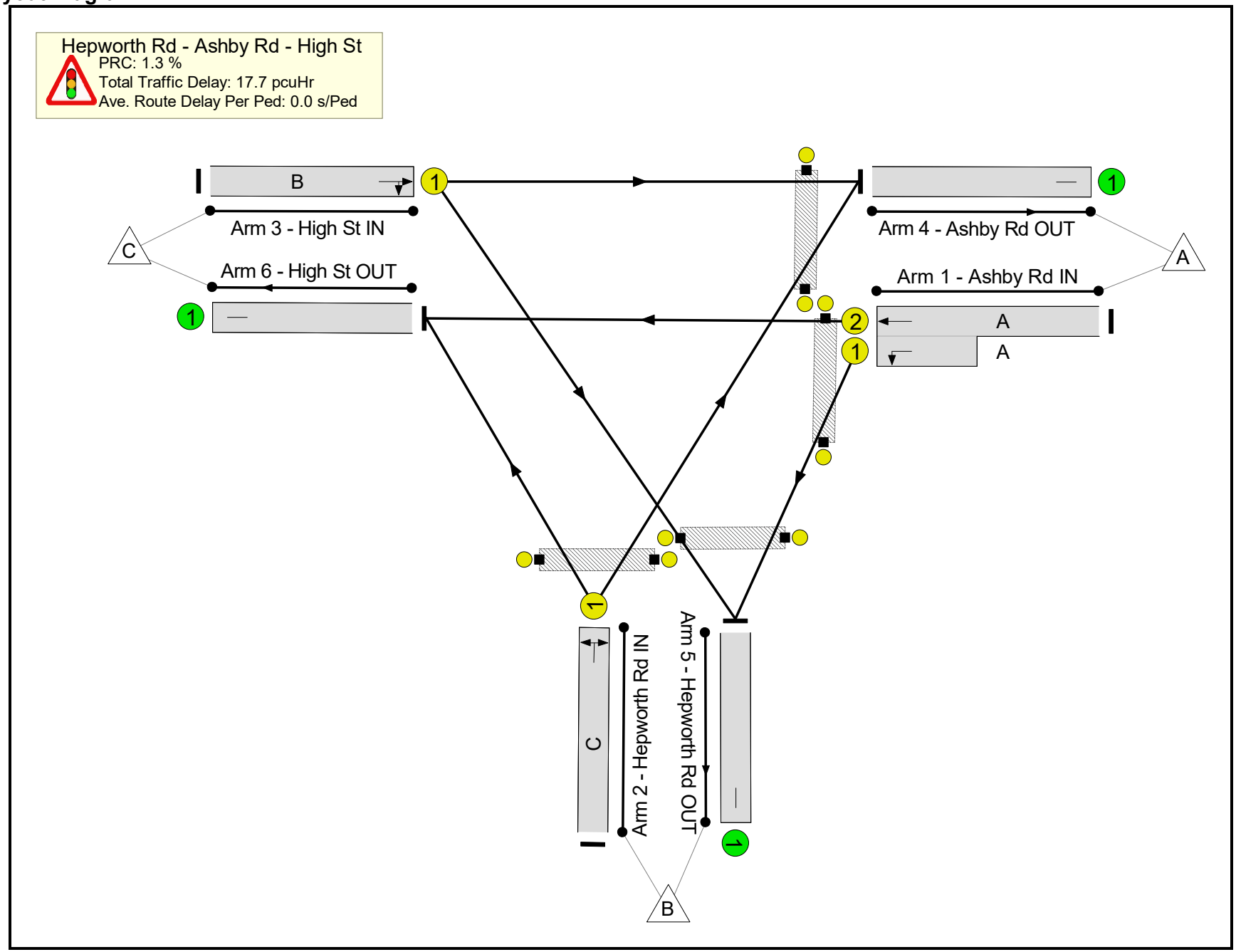
Stage	1	2	3
Duration	39	22	6
Change Point	0	45	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.8%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.8%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	53	-	1125	1965:1728	755+511	88.8 : 88.8%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	24	-	425	1745	485	87.7%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	39	-	498	2087	928	53.7%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	766	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	520	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	762	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	55	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	22	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	25	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**10.2**	**7.6**	**0.0**	**17.7**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**10.2**	**7.6**	**0.0**	**17.7**	**-**	**-**	**-**	**-**
1/2+1/1	1125	1125	-	-	-	4.0	3.8	-	7.7	24.8	19.1	3.8	22.9
2/1	425	425	-	-	-	3.7	3.2	-	6.9	58.2	10.0	3.2	13.2
3/1	498	498	-	-	-	2.5	0.6	-	3.1	22.4	9.0	0.6	9.6
4/1	766	766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	762	762	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

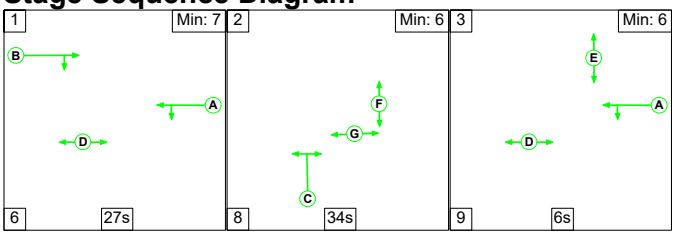
C1 PRC for Signalled Lanes (%): 1.3 Total Delay for Signalled Lanes (pcuHr): 17.72 Cycle Time (s): 90

PRC Over All Lanes (%): 1.3 Total Delay Over All Lanes(pcuHr): 17.72

Full Input Data And Results

Scenario 13: '2024 Base Reg Link 50% AM' (FG13: '2024 Base Reg Link 50% AM', Plan 1: 'Network Control Plan 1')

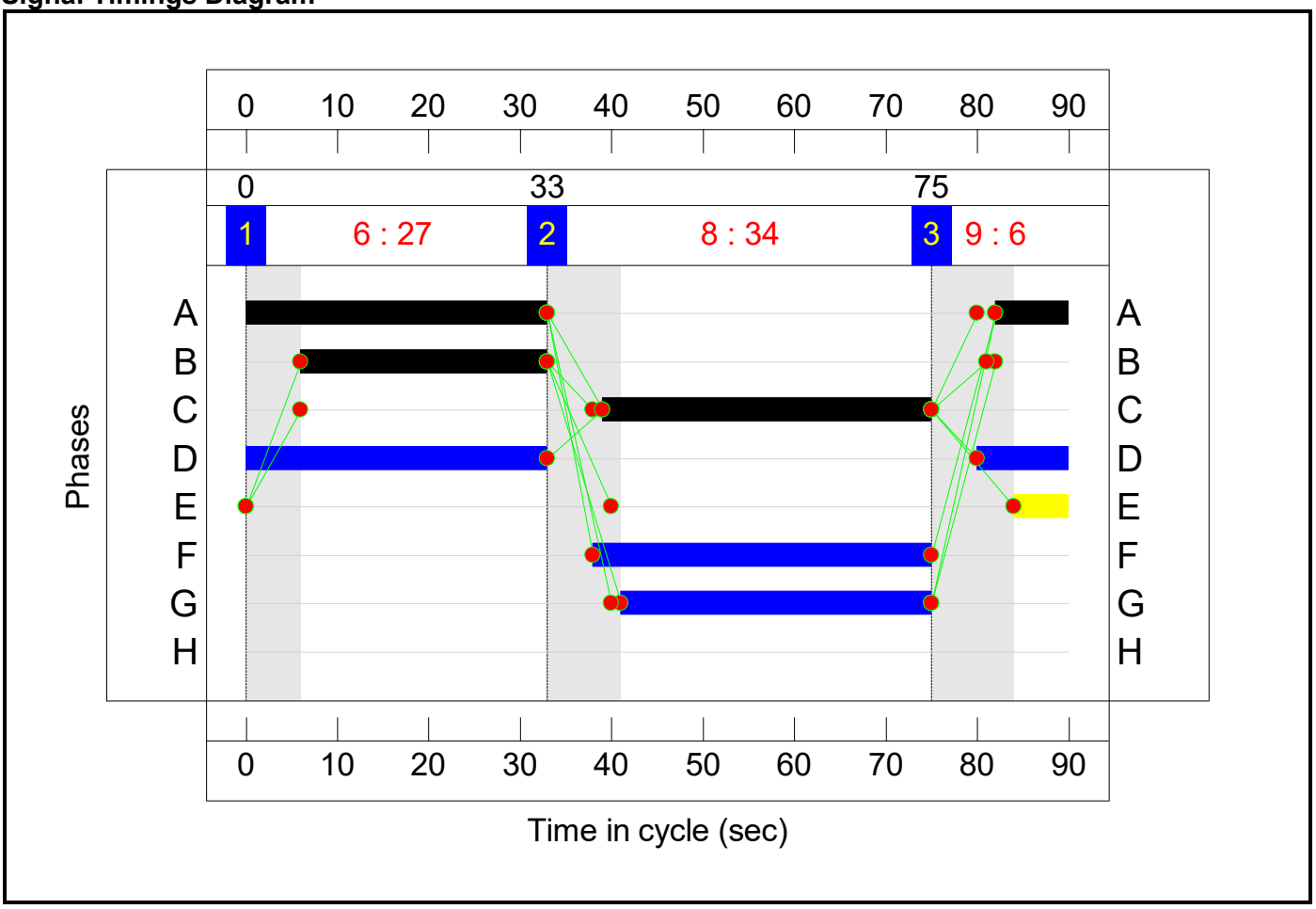
Stage Sequence Diagram



Stage Timings

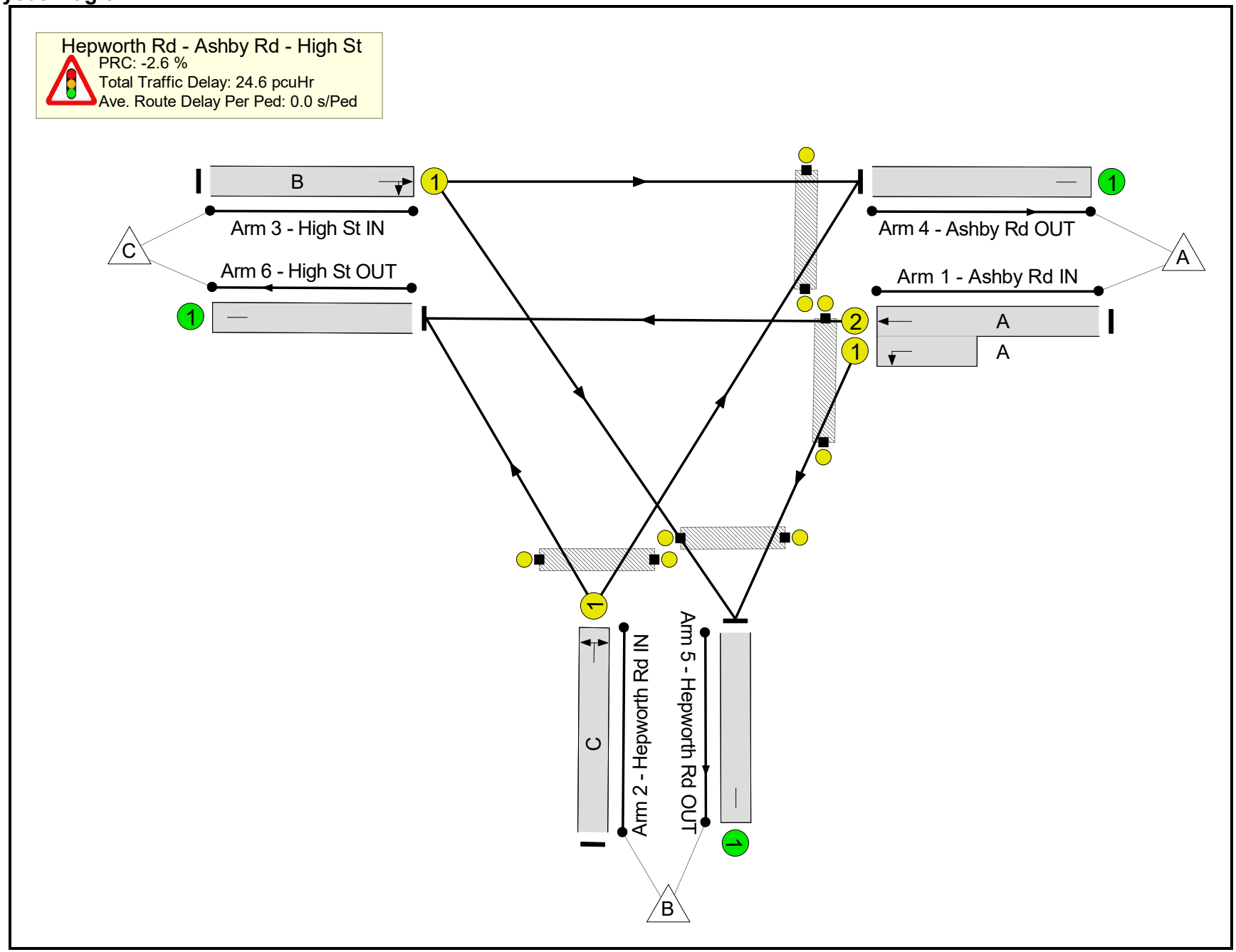
Stage	1	2	3
Duration	27	34	6
Change Point	0	33	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.4%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.4%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	41	-	777	1965:1728	588+443	75.4 : 75.4%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	36	-	663	1746	718	92.4%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	27	-	597	2094	651	91.6%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	1118	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	393	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	526	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	43	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	34	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	37	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**13.3**	**11.3**	**0.0**	**24.6**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**13.3**	**11.3**	**0.0**	**24.6**	**-**	**-**	**-**	**-**
1/2+1/1	777	777	-	-	-	3.7	1.5	-	5.2	24.1	10.9	1.5	12.4
2/1	663	663	-	-	-	4.6	5.1	-	9.7	52.9	15.7	5.1	20.8
3/1	597	597	-	-	-	5.0	4.7	-	9.6	58.1	14.3	4.7	18.9
4/1	1118	1118	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	526	526	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -2.6
PRC Over All Lanes (%): -2.6

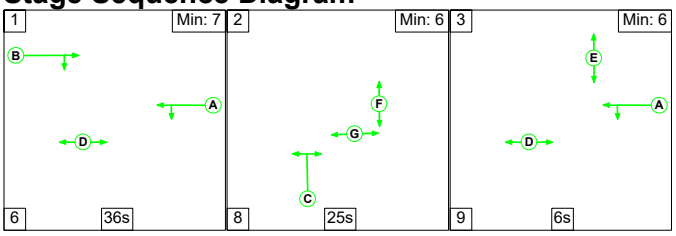
Total Delay for Signalled Lanes (pcuHr): 24.56
Total Delay Over All Lanes(pcuHr): 24.56

Cycle Time (s): 90

Full Input Data And Results

Scenario 14: '2024 Base Reg Link 50% PM' (FG14: '2024 Base Reg Link 50% PM', Plan 1: 'Network Control Plan 1')

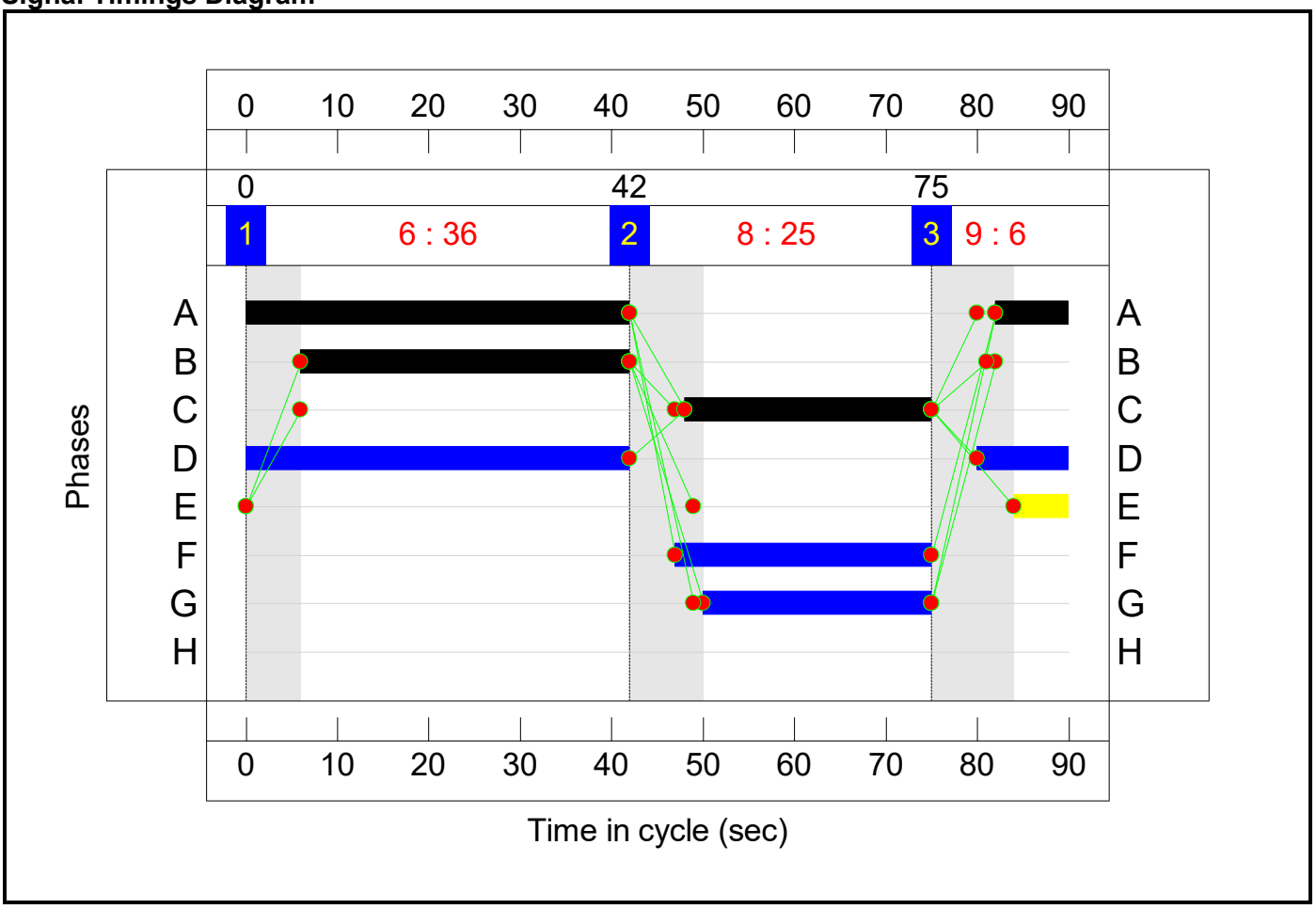
Stage Sequence Diagram



Stage Timings

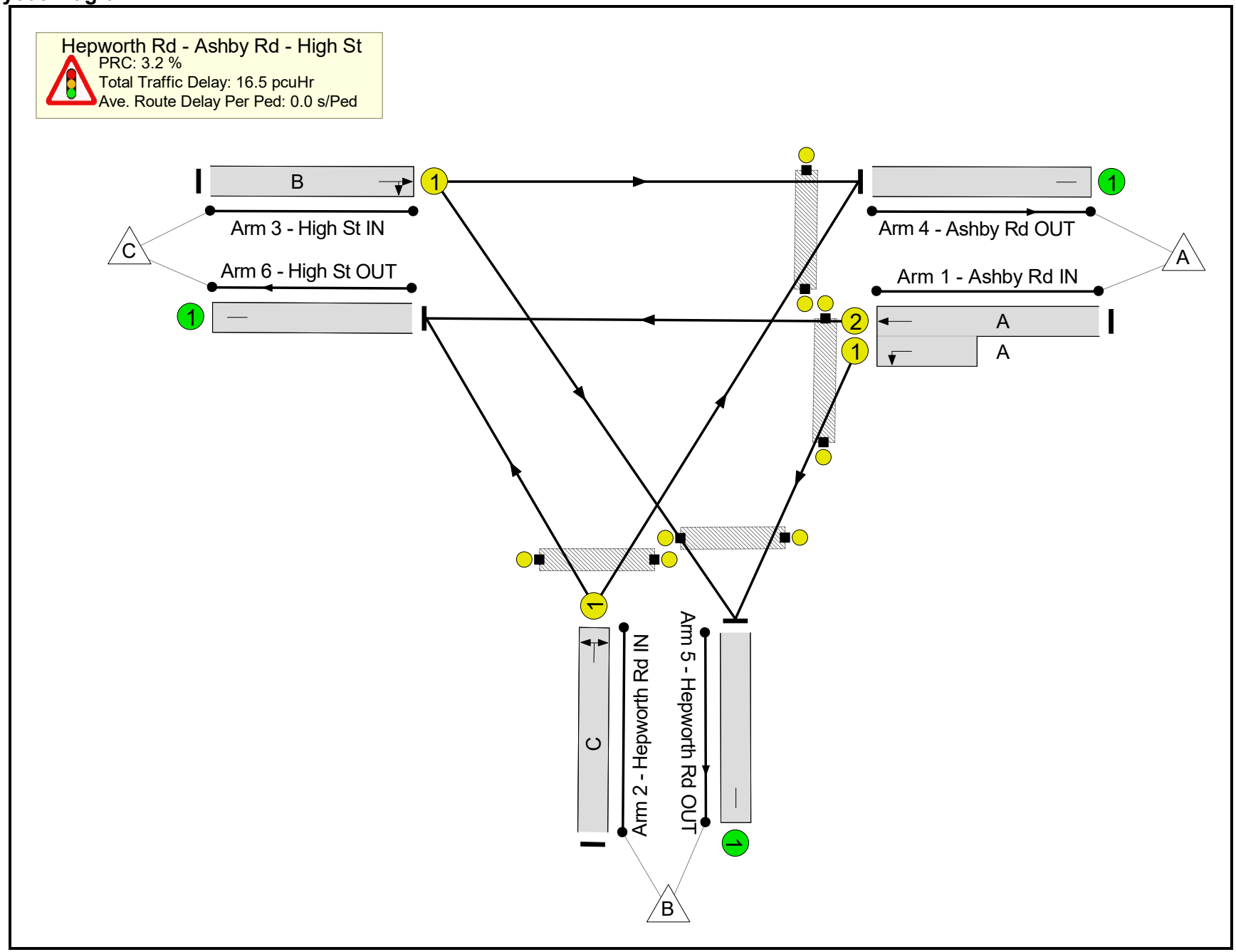
Stage	1	2	3
Duration	36	25	6
Change Point	0	42	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.2%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.2%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	50	-	1089	1965:1728	641+608	87.2 : 87.2%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	27	-	458	1745	543	84.4%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	36	-	441	2083	856	51.5%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	742	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	52	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	25	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	28	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**10.2**	**6.3**	**0.0**	**16.5**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**10.2**	**6.3**	**0.0**	**16.5**	**-**	**-**	**-**	**-**
1/2+1/1	1089	1089	-	-	-	4.0	3.3	-	7.3	24.2	16.4	3.3	19.7
2/1	458	458	-	-	-	3.7	2.5	-	6.2	49.0	10.7	2.5	13.2
3/1	441	441	-	-	-	2.4	0.5	-	3.0	24.1	8.2	0.5	8.7
4/1	742	742	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 3.2
PRC Over All Lanes (%): 3.2

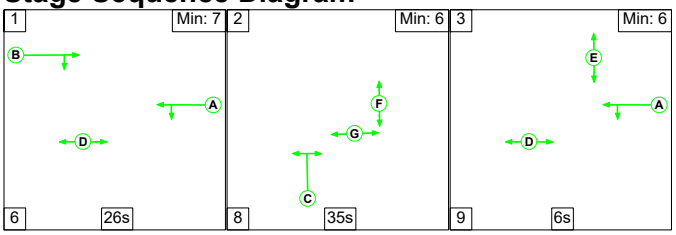
Total Delay for Signalled Lanes (pcuHr): 16.50
Total Delay Over All Lanes(pcuHr): 16.50

Cycle Time (s): 90

Full Input Data And Results

Scenario 15: '2024 Base Reg Link 50% with Dev AM' (FG15: '2024 Base Reg Link 50% with Dev AM', Plan 1: 'Network Control Plan 1')

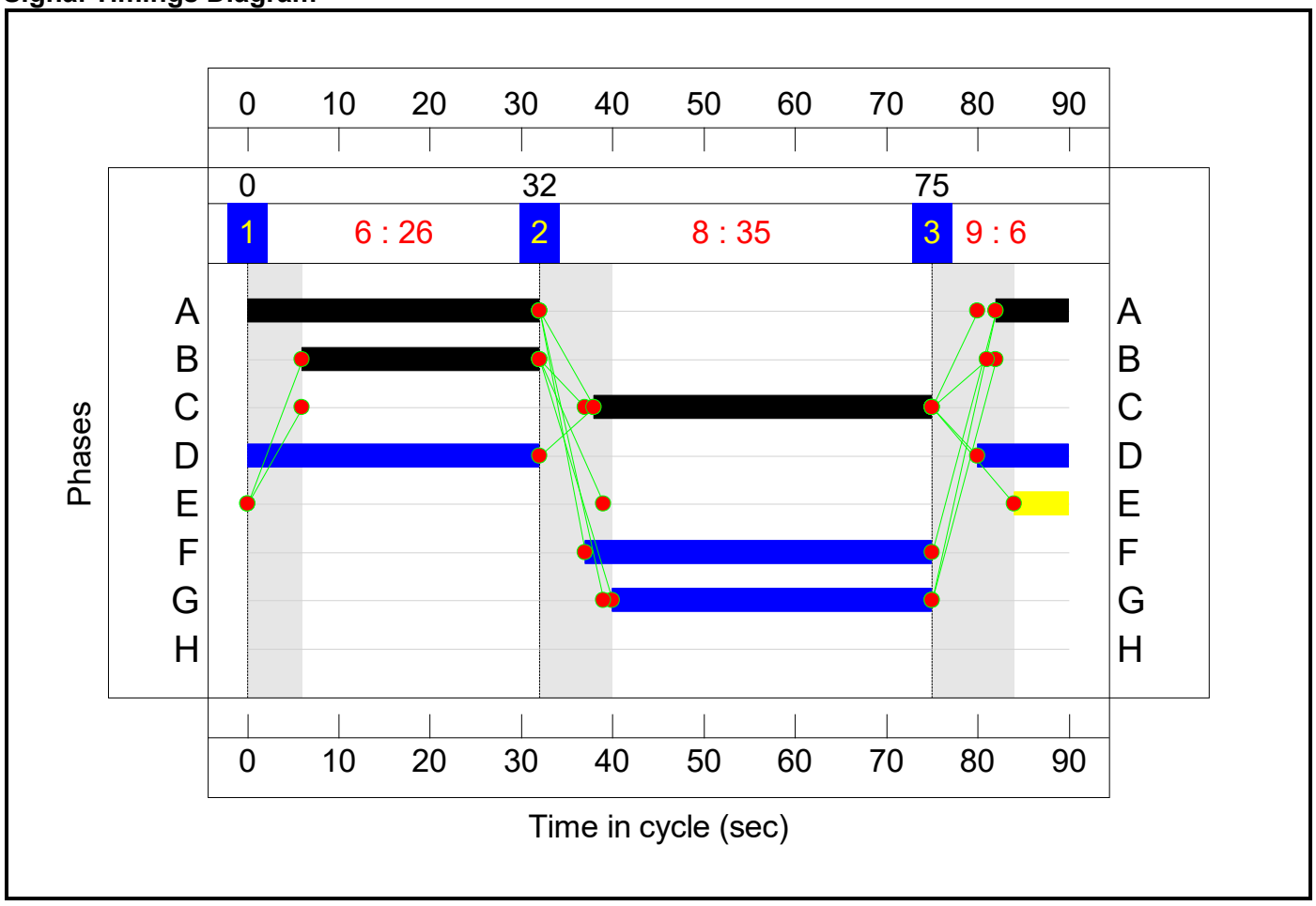
Stage Sequence Diagram



Stage Timings

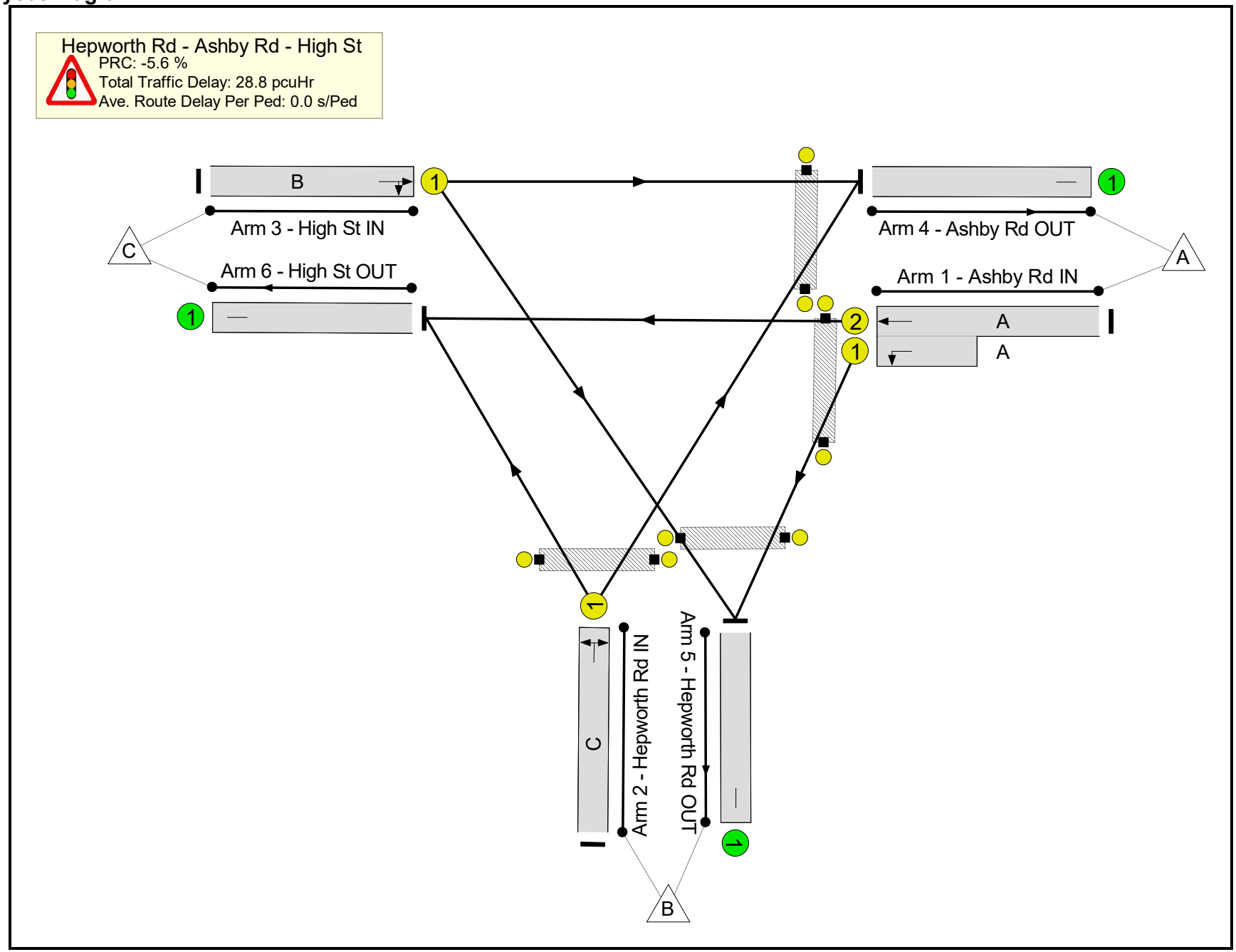
Stage	1	2	3
Duration	26	35	6
Change Point	0	32	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.0%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.0%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	40	-	798	1965:1728	566+453	78.3 : 78.3%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	37	-	696	1746	737	94.4%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	26	-	597	2094	628	95.0%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	1151	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	414	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	526	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	42	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	35	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	38	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**13.9**	**14.9**	**0.0**	**28.8**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**13.9**	**14.9**	**0.0**	**28.8**	**-**	**-**	**-**	**-**
1/2+1/1	798	798	-	-	-	4.0	1.8	-	5.8	26.0	11.7	1.8	13.5
2/1	696	696	-	-	-	4.8	6.4	-	11.3	58.3	16.6	6.4	23.1
3/1	597	597	-	-	-	5.1	6.7	-	11.8	71.2	14.6	6.7	21.3
4/1	1151	1151	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	414	414	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	526	526	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -5.6
PRC Over All Lanes (%): -5.6

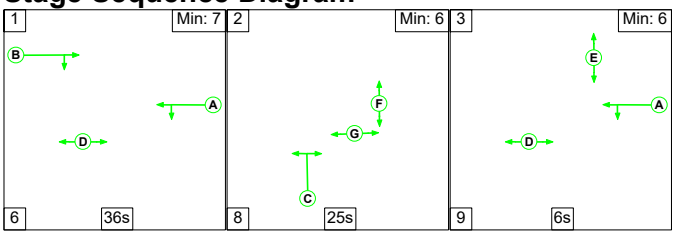
Total Delay for Signalled Lanes (pcuHr): 28.84
Total Delay Over All Lanes(pcuHr): 28.84

Cycle Time (s): 90

Full Input Data And Results

Scenario 16: '2024 Base Reg Link 50% with Dev PM' (FG16: '2024 Base Reg Link 50% with Dev PM', Plan 1: 'Network Control Plan 1')

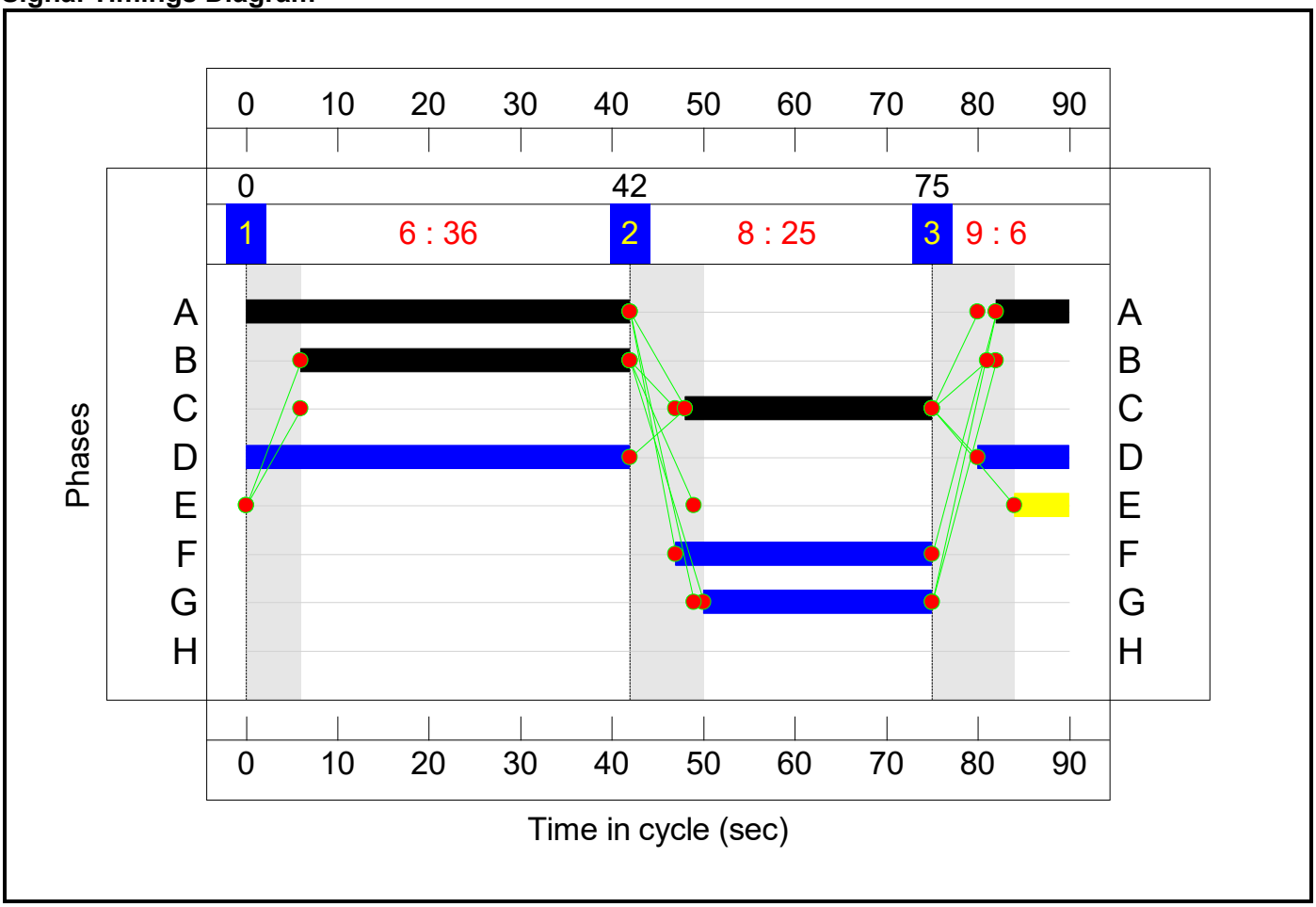
Stage Sequence Diagram



Stage Timings

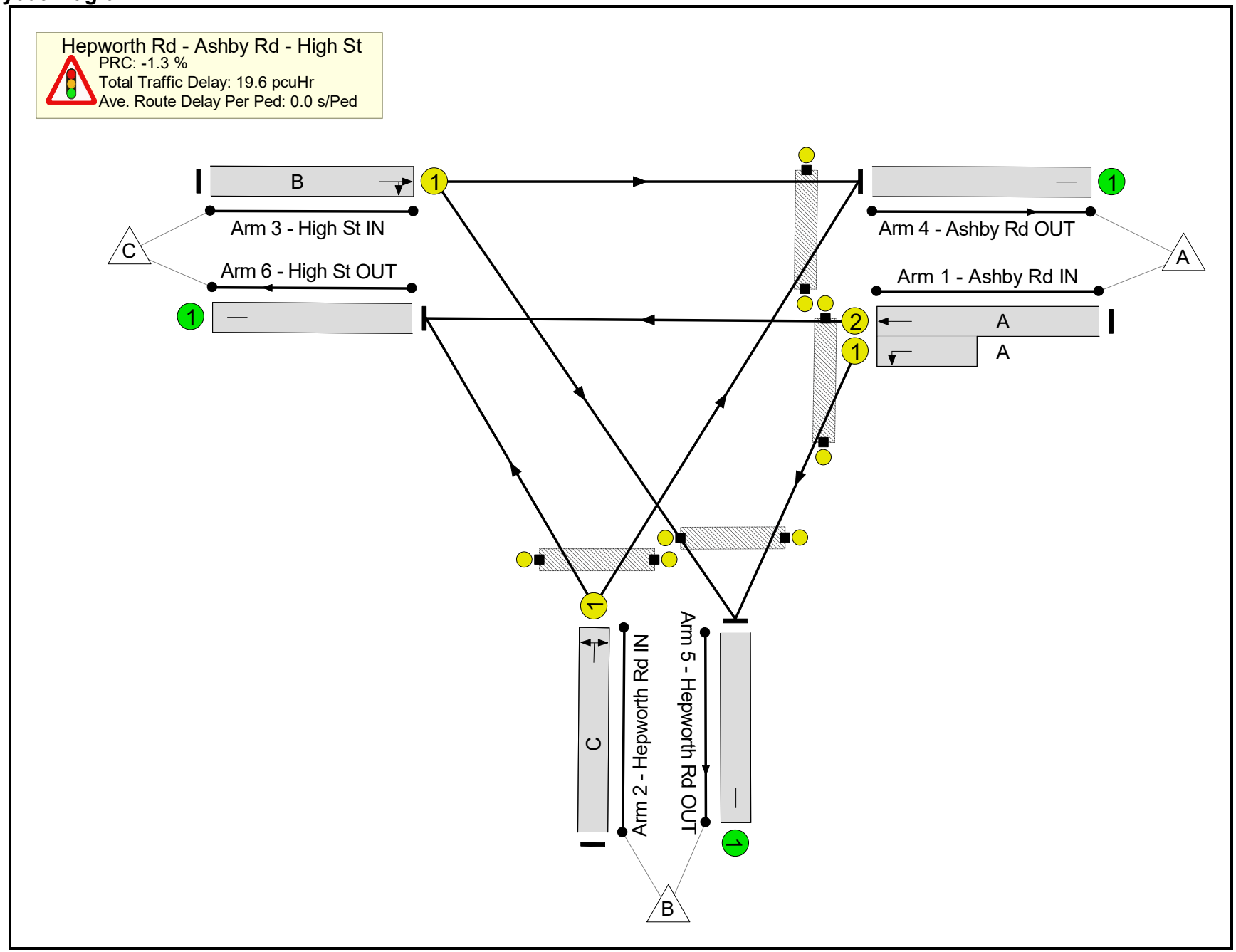
Stage	1	2	3
Duration	36	25	6
Change Point	0	42	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.2%**
Hepworth Rd - Ashby Rd - High St	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.2%**
1/2+1/1	Ashby Rd IN Left Ahead	U	N/A	N/A	A		1	50	-	1126	1965:1728	613+622	91.2 : 91.2%
2/1	Hepworth Rd IN Right Left	U	N/A	N/A	C		1	27	-	482	1745	543	88.8%
3/1	High St IN Ahead Right	U	N/A	N/A	B		1	36	-	441	2083	856	51.5%
4/1	Ashby Rd OUT	U	N/A	N/A	-		-	-	-	766	Inf	Inf	0.0%
5/1	Hepworth Rd OUT	U	N/A	N/A	-		-	-	-	633	Inf	Inf	0.0%
6/1	High St OUT	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
Ped Link: P1	Hepworth Rd IN	-	N/A	-	D		1	52	-	0	-	0	0.0%
Ped Link: P2	Hepworth Rd OUT	-	N/A	-	G		1	25	-	0	-	0	0.0%
Ped Link: P3	Ashby Rd OUT	-	N/A	-	E		1	6	-	0	-	0	0.0%
Ped Link: P4	Ashby Rd IN	-	N/A	-	F		1	28	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**10.8**	**8.8**	**0.0**	**19.6**	**-**	**-**	**-**	**-**
Hepworth Rd - Ashby Rd - High St	**-**	**-**	**0**	**0**	**0**	**10.8**	**8.8**	**0.0**	**19.6**	**-**	**-**	**-**	**-**
1/2+1/1	1126	1126	-	-	-	4.4	4.8	-	9.2	29.3	18.8	4.8	23.6
2/1	482	482	-	-	-	4.0	3.5	-	7.5	56.0	11.4	3.5	14.9
3/1	441	441	-	-	-	2.4	0.5	-	3.0	24.1	8.2	0.5	8.7
4/1	766	766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	633	633	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -1.3

PRC Over All Lanes (%): -1.3

Total Delay for Signalled Lanes (pcuHr): 19.62

Total Delay Over All Lanes(pcuHr): 19.62

Cycle Time (s): 90

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]
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Filename: HepworthRd-Forest Rd Roundabout_v01.arc8
Path: \\lefs02\Projects\067895.100 TPLE Woodville\Q3-Design\3A-Calculations\TP\Junction Modelling\Junction Models for 24.07.2019 Submission
Report generation date: 24/07/2019 11:18:49

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2021 Base Reg Link 25%							
1 - Hepworth N	0.31	3.27	0.24	A	0.68	4.27	0.41	A
2 - Forest Rd	0.12	3.23	0.11	A	0.28	4.04	0.22	A
3 - Hepworth Rd W	0.74	4.58	0.43	A	0.50	3.91	0.33	A
	A1 - 2021 Base Reg Link 25% with Dev							
1 - Hepworth N	0.33	3.34	0.25	A	0.77	4.48	0.44	A
2 - Forest Rd	0.12	3.27	0.11	A	0.29	4.15	0.22	A
3 - Hepworth Rd W	0.83	4.80	0.45	A	0.54	4.03	0.35	A
	A1 - 2021 Base Reg Link 50%							
1 - Hepworth N	0.42	3.56	0.30	A	0.96	4.97	0.49	A
2 - Forest Rd	0.13	3.39	0.11	A	0.30	4.39	0.23	A
3 - Hepworth Rd W	0.95	5.15	0.49	A	0.60	4.18	0.38	A
	A1 - 2021 Base Reg Link 50% with Dev							
1 - Hepworth N	0.45	3.64	0.31	A	1.07	5.26	0.52	A
2 - Forest Rd	0.13	3.44	0.12	A	0.31	4.52	0.24	A
3 - Hepworth Rd W	1.06	5.42	0.52	A	0.65	4.32	0.40	A
	A1 - 2024 Base Reg Link 25%							
1 - Hepworth N	0.32	3.32	0.25	A	0.74	4.41	0.43	A
2 - Forest Rd	0.13	3.26	0.11	A	0.30	4.15	0.23	A
3 - Hepworth Rd W	0.80	4.74	0.45	A	0.53	4.01	0.35	A
	A1 - 2024 Base Reg Link 25% with Dev							
1 - Hepworth N	0.35	3.39	0.26	A	0.83	4.64	0.45	A
2 - Forest Rd	0.13	3.30	0.11	A	0.31	4.27	0.23	A
3 - Hepworth Rd W	0.89	4.98	0.47	A	0.58	4.13	0.37	A
	A1 - 2024 Base Reg Link 50%							
1 - Hepworth N	0.45	3.63	0.31	A	1.05	5.24	0.51	A
2 - Forest Rd	0.13	3.44	0.12	A	0.32	4.54	0.25	A
3 - Hepworth Rd W	1.04	5.38	0.51	A	0.66	4.35	0.40	A
	A1 - 2024 Base Reg Link 50% with Dev							
1 - Hepworth N	0.48	3.71	0.33	A	1.17	5.52	0.54	A
2 - Forest Rd	0.14	3.48	0.12	A	0.33	4.68	0.25	A
3 - Hepworth Rd W	1.16	5.68	0.54	A	0.70	4.45	0.41	A

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

"D1 - 2021 Base Reg Link 25%, AM " model duration: 07:15 - 08:45
"D2 - 2021 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D3 - 2021 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D4 - 2021 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D5 - 2021 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D6 - 2021 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D7 - 2021 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D8 - 2021 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15
"D9 - 2024 Base Reg Link 25%, AM" model duration: 07:15 - 08:45
"D10 - 2024 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D11 - 2024 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D12 - 2024 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D13 - 2024 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D14 - 2024 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D15 - 2024 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D16 - 2024 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 24/07/2019 11:18:39

File summary

Title	(untitled)
Location	
Site Number	
Date	12/06/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	RodriguezMartin_d
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) - 2021 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, AM	2021 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				3.99	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	308.00	100.000
2 - Forest Rd	ONE HOUR	✓	125.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	532.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	49.000	259.000
	2 - Forest Rd	85.000	0.000	40.000
	3 - Hepworth Rd W	494.000	38.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.16	0.84
	2 - Forest Rd	0.68	0.00	0.32

	3 - Hepworth Rd W	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.24	3.27	0.31	A	282.63	423.94	21.98	3.11	0.24	21.98	3.11
2 - Forest Rd	0.11	3.23	0.12	A	114.70	172.05	8.88	3.10	0.10	8.88	3.10
3 - Hepworth Rd W	0.43	4.58	0.74	A	488.17	732.26	49.99	4.10	0.56	50.00	4.10

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	231.88	57.97	231.12	434.19	28.49	0.00	1447.37	1415.47	0.160	0.00	0.19	2.958	A
2 - Forest Rd	94.11	23.53	93.80	65.26	194.35	0.00	1305.66	706.14	0.072	0.00	0.08	2.970	A
3 - Hepworth Rd W	400.52	100.13	398.91	224.36	63.78	0.00	1388.82	1142.05	0.288	0.00	0.40	3.630	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	276.89	69.22	276.70	520.00	34.13	0.00	1443.98	1415.47	0.192	0.19	0.24	3.083	A
2 - Forest Rd	112.37	28.09	112.30	78.15	232.68	0.00	1282.59	706.14	0.088	0.08	0.10	3.075	A
3 - Hepworth Rd W	478.26	119.56	477.76	268.62	76.36	0.00	1381.36	1142.05	0.346	0.40	0.53	3.982	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 -													

Hepworth N	339.11	84.78	338.83	636.62	41.78	0.00	1439.38	1415.47	0.236	0.24	0.31	3.271	A
2 - Forest Rd	137.63	34.41	137.52	95.68	284.93	0.00	1251.14	706.14	0.110	0.10	0.12	3.232	A
3 - Hepworth Rd W	585.74	146.44	584.89	328.93	93.51	0.00	1371.20	1142.05	0.427	0.53	0.74	4.573	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	339.11	84.78	339.11	637.48	41.84	0.00	1439.35	1415.47	0.236	0.31	0.31	3.271	A
2 - Forest Rd	137.63	34.41	137.63	95.79	285.16	0.00	1251.00	706.14	0.110	0.12	0.12	3.232	A
3 - Hepworth Rd W	585.74	146.44	585.73	329.20	93.59	0.00	1371.15	1142.05	0.427	0.74	0.74	4.583	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	276.89	69.22	277.16	521.36	34.22	0.00	1443.93	1415.47	0.192	0.31	0.24	3.085	A
2 - Forest Rd	112.37	28.09	112.48	78.32	233.07	0.00	1282.36	706.14	0.088	0.12	0.10	3.076	A
3 - Hepworth Rd W	478.26	119.56	479.09	269.06	76.49	0.00	1381.29	1142.05	0.346	0.74	0.53	3.993	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	231.88	57.97	232.07	436.42	28.64	0.00	1447.28	1415.47	0.160	0.24	0.19	2.964	A
2 - Forest Rd	94.11	23.53	94.18	65.56	195.15	0.00	1305.18	706.14	0.072	0.10	0.08	2.972	A
3 - Hepworth Rd W	400.52	100.13	401.02	225.28	64.04	0.00	1388.66	1142.05	0.288	0.53	0.41	3.646	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	2.80	0.19	2.958	A	A
2 - Forest Rd	1.14	0.08	2.970	A	A
3 - Hepworth Rd W	5.90	0.39	3.630	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.50	0.23	3.083	A	A
2 - Forest Rd	1.42	0.09	3.075	A	A
3 - Hepworth Rd W	7.75	0.52	3.982	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.54	0.30	3.271	A	A
2 - Forest Rd	1.82	0.12	3.232	A	A
3 - Hepworth Rd W	10.84	0.72	4.573	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.61	0.31	3.271	A	A

2 - Forest Rd	1.85	0.12	3.232	A	A
3 - Hepworth Rd W	11.12	0.74	4.583	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.62	0.24	3.085	A	A
2 - Forest Rd	1.46	0.10	3.076	A	A
3 - Hepworth Rd W	8.16	0.54	3.993	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	2.91	0.19	2.964	A	A
2 - Forest Rd	1.18	0.08	2.972	A	A
3 - Hepworth Rd W	6.22	0.41	3.646	A	A

(Default Analysis Set) - 2021 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, PM	2021 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.10	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	526.00	100.000
2 - Forest Rd	ONE HOUR	✓	226.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	417.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	99.000	427.000
	2 - Forest Rd	73.000	0.000	153.000
	3 - Hepworth Rd W	352.000	65.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.19	0.81
	2 - Forest Rd	0.32	0.00	0.68
	3 - Hepworth Rd W	0.84	0.16	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.41	4.27	0.68	A	482.67	724.00	46.53	3.86	0.52	46.53	3.86
2 - Forest Rd	0.22	4.04	0.28	A	207.38	311.07	19.25	3.71	0.21	19.25	3.71
3 - Hepworth Rd W	0.33	3.91	0.50	A	382.65	573.97	34.57	3.61	0.38	34.57	3.61

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	396.00	99.00	394.48	318.78	48.76	0.00	1435.19	1344.58	0.276	0.00	0.38	3.455	A
2 - Forest Rd	170.14	42.54	169.51	123.00	320.24	0.00	1229.88	765.60	0.138	0.00	0.16	3.393	A
3 - Hepworth Rd W	313.94	78.48	312.78	434.99	54.75	0.00	1394.17	1280.06	0.225	0.00	0.29	3.326	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	472.86	118.22	472.41	381.74	58.38	0.00	1429.40	1344.58	0.331	0.38	0.49	3.759	A
2 - Forest Rd	203.17	50.79	202.99	147.30	383.50	0.00	1191.80	765.60	0.170	0.16	0.20	3.640	A
3 - Hepworth Rd W	374.87	93.72	374.56	520.92	65.57	0.00	1387.76	1280.06	0.270	0.29	0.37	3.553	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	579.14	144.78	578.37	467.41	71.49	0.00	1421.53	1344.57	0.407	0.49	0.68	4.266	A
2 - Forest Rd	248.83	62.21	248.54	180.34	469.52	0.00	1140.02	765.60	0.218	0.20	0.28	4.037	A
3 - Hepworth Rd W	459.13	114.78	458.61	637.77	80.28	0.00	1379.04	1280.06	0.333	0.37	0.50	3.910	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	579.14	144.78	579.13	467.93	71.57	0.00	1421.48	1344.57	0.407	0.68	0.68	4.273	A
2 - Forest Rd	248.83	62.21	248.83	180.56	470.13	0.00	1139.65	765.60	0.218	0.28	0.28	4.040	A
3 - Hepworth Rd W	459.13	114.78	459.12	638.58	80.37	0.00	1378.98	1280.06	0.333	0.50	0.50	3.913	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	472.86	118.22	473.61	382.58	58.51	0.00	1429.33	1344.58	0.331	0.68	0.50	3.771	A
2 - Forest Rd	203.17	50.79	203.46	147.65	384.47	0.00	1191.21	765.60	0.171	0.28	0.21	3.647	A
3 - Hepworth Rd W	374.87	93.72	375.38	522.21	65.72	0.00	1387.67	1280.06	0.270	0.50	0.37	3.557	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	396.00	99.00	396.46	320.29	48.99	0.00	1435.05	1344.58	0.276	0.50	0.38	3.466	A
2 - Forest Rd	170.14	42.54	170.33	123.60	321.84	0.00	1228.92	765.60	0.138	0.21	0.16	3.400	A
3 - Hepworth Rd W	313.94	78.48	314.26	437.15	55.02	0.00	1394.01	1280.06	0.225	0.37	0.29	3.336	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	5.56	0.37	3.455	A	A
2 - Forest Rd	2.35	0.16	3.393	A	A
3 - Hepworth Rd W	4.25	0.28	3.326	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	7.25	0.48	3.759	A	A
2 - Forest Rd	3.02	0.20	3.640	A	A
3 - Hepworth Rd W	5.44	0.36	3.553	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	10.02	0.67	4.266	A	A
2 - Forest Rd	4.10	0.27	4.037	A	A
3 - Hepworth Rd W	7.31	0.49	3.910	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	10.26	0.68	4.273	A	A
2 - Forest Rd	4.17	0.28	4.040	A	A
3 - Hepworth Rd W	7.45	0.50	3.913	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service

1 - Hepworth N	7.61	0.51	3.771	A	A
2 - Forest Rd	3.15	0.21	3.647	A	A
3 - Hepworth Rd W	5.68	0.38	3.557	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	5.84	0.39	3.466	A	A
2 - Forest Rd	2.45	0.16	3.400	A	A
3 - Hepworth Rd W	4.45	0.30	3.336	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, AM	2021 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.14	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00

3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	328.00	100.000
2 - Forest Rd	ONE HOUR	✓	125.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	565.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	49.000	279.000
	2 - Forest Rd	85.000	0.000	40.000
	3 - Hepworth Rd W	527.000	38.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.15	0.85
	2 - Forest Rd	0.68	0.00	0.32
	3 - Hepworth Rd W	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
	1 - Hepworth N	1.000	1.000	1.000

From	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.25	3.34	0.33	A	300.98	451.47	23.79	3.16	0.26	23.80	3.16
2 - Forest Rd	0.11	3.27	0.12	A	114.70	172.05	8.97	3.13	0.10	8.97	3.13
3 - Hepworth Rd W	0.45	4.80	0.83	A	518.45	777.68	55.10	4.25	0.61	55.10	4.25

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	246.94	61.73	246.12	458.90	28.49	0.00	1447.37	1418.17	0.171	0.00	0.20	2.995	A
2 - Forest Rd	94.11	23.53	93.79	65.26	209.35	0.00	1296.63	696.49	0.073	0.00	0.08	2.993	A
3 - Hepworth Rd W	425.36	106.34	423.61	239.36	63.78	0.00	1388.82	1145.94	0.306	0.00	0.44	3.723	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	294.87	73.72	294.66	549.61	34.12	0.00	1443.98	1418.17	0.204	0.20	0.26	3.132	A
2 - Forest Rd	112.37	28.09	112.30	78.14	250.64	0.00	1271.78	696.49	0.088	0.08	0.10	3.104	A
3 - Hepworth Rd W	507.92	126.98	507.37	286.58	76.36	0.00	1381.36	1145.94	0.368	0.44	0.58	4.116	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	361.13	90.28	360.82	672.83	41.77	0.00	1439.39	1418.17	0.251	0.26	0.33	3.337	A
2 - Forest Rd	137.63	34.41	137.52	95.68	306.92	0.00	1237.90	696.49	0.111	0.10	0.12	3.271	A
3 - Hepworth Rd W	622.08	155.52	621.10	350.92	93.51	0.00	1371.20	1145.94	0.454	0.58	0.82	4.793	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Hepworth N	361.13	90.28	361.13	673.81	41.84	0.00	1439.35	1418.17	0.251	0.33	0.33	3.338	A
2 - Forest Rd	137.63	34.41	137.63	95.79	307.18	0.00	1237.74	696.49	0.111	0.12	0.12	3.271	A
3 - Hepworth Rd W	622.08	155.52	622.06	351.22	93.59	0.00	1371.15	1145.94	0.454	0.82	0.83	4.805	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	294.87	73.72	295.17	551.15	34.23	0.00	1443.92	1418.17	0.204	0.33	0.26	3.133	A
2 - Forest Rd	112.37	28.09	112.48	78.32	251.08	0.00	1271.52	696.49	0.088	0.12	0.10	3.108	A
3 - Hepworth Rd W	507.92	126.98	508.89	287.07	76.49	0.00	1381.29	1145.94	0.368	0.83	0.59	4.130	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	246.94	61.73	247.14	461.32	28.65	0.00	1447.28	1418.17	0.171	0.26	0.21	2.999	A
2 - Forest Rd	94.11	23.53	94.18	65.57	210.22	0.00	1296.11	696.49	0.073	0.10	0.08	2.994	A
3 - Hepworth Rd W	425.36	106.34	425.93	240.36	64.04	0.00	1388.66	1145.94	0.306	0.59	0.44	3.740	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.02	0.20	2.995	A	A
2 - Forest Rd	1.15	0.08	2.993	A	A
3 - Hepworth Rd W	6.43	0.43	3.723	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.78	0.25	3.132	A	A
2 - Forest Rd	1.43	0.10	3.104	A	A
3 - Hepworth Rd W	8.50	0.57	4.116	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.93	0.33	3.337	A	A
2 - Forest Rd	1.85	0.12	3.271	A	A
3 - Hepworth Rd W	12.04	0.80	4.793	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	5.01	0.33	3.338	A	A
2 - Forest Rd	1.87	0.12	3.271	A	A
3 - Hepworth Rd W	12.37	0.82	4.805	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.92	0.26	3.133	A	A
2 - Forest Rd	1.48	0.10	3.108	A	A
3 - Hepworth Rd W	8.98	0.60	4.130	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.14	0.21	2.999	A	A
2 - Forest Rd	1.19	0.08	2.994	A	A
3 - Hepworth Rd W	6.78	0.45	3.740	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, PM	2021 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.26	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	562.00	100.000
2 - Forest Rd	ONE HOUR	✓	226.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	441.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	99.000	463.000
	2 - Forest Rd	73.000	0.000	153.000
	3 - Hepworth Rd W	376.000	65.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.18	0.82
	2 - Forest Rd	0.32	0.00	0.68
	3 - Hepworth Rd W	0.85	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To

From		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.44	4.48	0.77	A	515.70	773.55	51.63	4.00	0.57	51.63	4.01
2 - Forest Rd	0.22	4.15	0.29	A	207.38	311.07	19.67	3.79	0.22	19.67	3.79
3 - Hepworth Rd W	0.35	4.03	0.54	A	404.67	607.00	37.42	3.70	0.42	37.43	3.70

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	423.10	105.78	421.44	336.76	48.75	0.00	1435.19	1350.89	0.295	0.00	0.42	3.544	A
2 - Forest Rd	170.14	42.54	169.50	122.99	347.20	0.00	1213.65	752.71	0.140	0.00	0.16	3.446	A
3 - Hepworth Rd W	332.01	83.00	330.76	461.95	54.75	0.00	1394.17	1282.53	0.238	0.00	0.31	3.383	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	505.23	126.31	504.72	403.29	58.38	0.00	1429.40	1350.89	0.353	0.42	0.54	3.892	A
2 - Forest Rd	203.17	50.79	202.98	147.29	415.81	0.00	1172.35	752.71	0.173	0.16	0.21	3.713	A
3 - Hepworth Rd W	396.45	99.11	396.10	553.23	65.57	0.00	1387.76	1282.53	0.286	0.31	0.40	3.630	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	618.77	154.69	617.89	493.77	71.48	0.00	1421.53	1350.88	0.435	0.54	0.76	4.475	A
2 - Forest Rd	248.83	62.21	248.52	180.33	509.04	0.00	1116.23	752.72	0.223	0.21	0.29	4.148	A
3 - Hepworth Rd W	485.55	121.39	484.98	677.29	80.28	0.00	1379.04	1282.53	0.352	0.40	0.54	4.024	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	618.77	154.69	618.76	494.35	71.57	0.00	1421.48	1350.88	0.435	0.76	0.77	4.484	A
2 - Forest Rd	248.83	62.21	248.83	180.56	509.76	0.00	1115.79	752.72	0.223	0.29	0.29	4.152	A
3 - Hepworth Rd W	485.55	121.39	485.54	678.22	80.37	0.00	1378.98	1282.53	0.352	0.54	0.54	4.029	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	505.23	126.31	506.10	404.21	58.52	0.00	1429.32	1350.89	0.353	0.77	0.55	3.902	A
2 - Forest Rd	203.17	50.79	203.47	147.67	416.94	0.00	1171.67	752.71	0.173	0.29	0.21	3.721	A
3 - Hepworth Rd W	396.45	99.11	397.01	554.69	65.72	0.00	1387.67	1282.53	0.286	0.54	0.40	3.635	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	423.10	105.78	423.62	338.39	48.99	0.00	1435.05	1350.89	0.295	0.55	0.42	3.563	A
2 - Forest Rd	170.14	42.54	170.33	123.61	349.00	0.00	1212.57	752.71	0.140	0.21	0.16	3.453	A
3 - Hepworth Rd W	332.01	83.00	332.36	464.31	55.02	0.00	1394.01	1282.53	0.238	0.40	0.31	3.393	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	6.09	0.41	3.544	A	A
2 - Forest Rd	2.39	0.16	3.446	A	A
3 - Hepworth Rd W	4.57	0.30	3.383	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	8.00	0.53	3.892	A	A
2 - Forest Rd	3.08	0.21	3.713	A	A
3 - Hepworth Rd W	5.87	0.39	3.630	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	11.20	0.75	4.475	A	A
2 - Forest Rd	4.20	0.28	4.148	A	A
3 - Hepworth Rd W	7.94	0.53	4.024	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	11.49	0.77	4.484	A	A
2 - Forest Rd	4.29	0.29	4.152	A	A
3 - Hepworth Rd W	8.11	0.54	4.029	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	8.43	0.56	3.902	A	A
2 - Forest Rd	3.21	0.21	3.721	A	A
3 - Hepworth Rd W	6.14	0.41	3.635	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	6.41	0.43	3.563	A	A
2 - Forest Rd	2.49	0.17	3.453	A	A
3 - Hepworth Rd W	4.78	0.32	3.393	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, AM	2021 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.40	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	388.00	100.000
2 - Forest Rd	ONE HOUR	✓	125.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	610.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	49.000	339.000
	2 - Forest Rd	85.000	0.000	40.000
	3 - Hepworth Rd W	572.000	38.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.13	0.87
	2 - Forest Rd	0.68	0.00	0.32
	3 - Hepworth Rd W	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.30	3.56	0.42	A	356.04	534.05	29.63	3.33	0.33	29.63	3.33
2 - Forest Rd	0.11	3.39	0.13	A	114.70	172.05	9.24	3.22	0.10	9.25	3.22
3 - Hepworth Rd W	0.49	5.15	0.95	A	559.75	839.62	62.72	4.48	0.70	62.73	4.48

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	292.11	73.03	291.10	492.57	28.49	0.00	1447.37	1421.27	0.202	0.00	0.25	3.110	A
2 - Forest Rd	94.11	23.53	93.79	65.25	254.34	0.00	1269.55	675.14	0.074	0.00	0.08	3.061	A
3 - Hepworth Rd W	459.24	114.81	457.28	284.35	63.78	0.00	1388.82	1154.54	0.331	0.00	0.49	3.857	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	348.80	87.20	348.54	589.97	34.12	0.00	1443.99	1421.27	0.242	0.25	0.32	3.286	A
2 - Forest Rd	112.37	28.09	112.29	78.14	304.53	0.00	1239.34	675.14	0.091	0.08	0.10	3.193	A
3 - Hepworth Rd W	548.38	137.09	547.73	340.46	76.36	0.00	1381.36	1154.54	0.397	0.49	0.65	4.314	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	427.20	106.80	426.79	722.18	41.76	0.00	1439.39	1421.27	0.297	0.32	0.42	3.552	A
2 - Forest Rd	137.63	34.41	137.51	95.66	372.89	0.00	1198.19	675.14	0.115	0.10	0.13	3.393	A
3 - Hepworth Rd W	671.62	167.91	670.44	416.89	93.51	0.00	1371.20	1154.54	0.490	0.65	0.95	5.129	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	427.20	106.80	427.19	723.35	41.84	0.00	1439.35	1421.27	0.297	0.42	0.42	3.555	A
2 - Forest Rd	137.63	34.41	137.63	95.79	373.24	0.00	1197.98	675.14	0.115	0.13	0.13	3.394	A
3 - Hepworth Rd W	671.62	167.91	671.60	417.28	93.59	0.00	1371.15	1154.54	0.490	0.95	0.95	5.145	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	348.80	87.20	349.21	591.80	34.23	0.00	1443.92	1421.27	0.242	0.42	0.32	3.288	A
2 - Forest Rd	112.37	28.09	112.49	78.33	305.11	0.00	1238.99	675.14	0.091	0.13	0.10	3.197	A

3 - Hepworth Rd W	548.38	137.09	549.54	341.10	76.49	0.00	1381.28	1154.54	0.397	0.95	0.66	4.334	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	292.11	73.03	292.37	495.30	28.65	0.00	1447.27	1421.27	0.202	0.32	0.25	3.117	A
2 - Forest Rd	94.11	23.53	94.19	65.57	255.45	0.00	1268.88	675.14	0.074	0.10	0.08	3.064	A
3 - Hepworth Rd W	459.24	114.81	459.91	285.59	64.05	0.00	1388.66	1154.54	0.331	0.66	0.50	3.878	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.70	0.25	3.110	A	A
2 - Forest Rd	1.18	0.08	3.061	A	A
3 - Hepworth Rd W	7.18	0.48	3.857	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.69	0.31	3.286	A	A
2 - Forest Rd	1.47	0.10	3.193	A	A
3 - Hepworth Rd W	9.60	0.64	4.314	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	6.20	0.41	3.552	A	A
2 - Forest Rd	1.91	0.13	3.393	A	A
3 - Hepworth Rd W	13.86	0.92	5.129	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	6.31	0.42	3.555	A	A
2 - Forest Rd	1.94	0.13	3.394	A	A
3 - Hepworth Rd W	14.29	0.95	5.145	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.87	0.32	3.288	A	A
2 - Forest Rd	1.52	0.10	3.197	A	A
3 - Hepworth Rd W	10.19	0.68	4.334	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.86	0.26	3.117	A	A
2 - Forest Rd	1.22	0.08	3.064	A	A
3 - Hepworth Rd W	7.60	0.51	3.878	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, PM	2021 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.59	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	633.00	100.000
2 - Forest Rd	ONE HOUR	✓	226.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	471.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	99.000	534.000
	2 - Forest Rd	73.000	0.000	153.000
	3 - Hepworth Rd W	406.000	65.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.16	0.84
	2 - Forest Rd	0.32	0.00	0.68
	3 - Hepworth Rd W	0.86	0.14	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)

1 - Hepworth N	0.49	4.97	0.96	A	580.85	871.28	62.98	4.34	0.70	62.98	4.34
2 - Forest Rd	0.23	4.39	0.30	A	207.38	311.07	20.57	3.97	0.23	20.57	3.97
3 - Hepworth Rd W	0.38	4.18	0.60	A	432.20	648.30	41.19	3.81	0.46	41.19	3.81

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	476.56	119.14	474.58	359.23	48.75	0.00	1435.19	1357.81	0.332	0.00	0.49	3.739	A
2 - Forest Rd	170.14	42.54	169.47	122.97	400.36	0.00	1181.65	733.13	0.144	0.00	0.17	3.555	A
3 - Hepworth Rd W	354.59	88.65	353.24	515.09	54.74	0.00	1394.17	1286.28	0.254	0.00	0.34	3.453	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	569.05	142.26	568.40	430.21	58.38	0.00	1429.41	1357.81	0.398	0.49	0.66	4.179	A
2 - Forest Rd	203.17	50.79	202.97	147.28	479.51	0.00	1134.01	733.13	0.179	0.17	0.22	3.865	A
3 - Hepworth Rd W	423.42	105.85	423.03	616.92	65.56	0.00	1387.76	1286.28	0.305	0.34	0.44	3.729	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	696.95	174.24	695.76	526.72	71.48	0.00	1421.53	1357.81	0.490	0.66	0.95	4.952	A
2 - Forest Rd	248.83	62.21	248.49	180.29	586.95	0.00	1069.33	733.13	0.233	0.22	0.30	4.383	A
3 - Hepworth Rd W	518.58	129.65	517.93	755.18	80.27	0.00	1379.05	1286.28	0.376	0.44	0.60	4.178	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	696.95	174.24	696.93	527.38	71.57	0.00	1421.48	1357.81	0.490	0.95	0.96	4.968	A
2 - Forest Rd	248.83	62.21	248.83	180.56	587.93	0.00	1068.74	733.13	0.233	0.30	0.30	4.390	A
3 - Hepworth Rd W	518.58	129.65	518.57	756.38	80.37	0.00	1378.98	1286.28	0.376	0.60	0.60	4.183	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	569.05	142.26	570.22	431.27	58.52	0.00	1429.32	1357.81	0.398	0.96	0.67	4.197	A
2 - Forest Rd	203.17	50.79	203.50	147.70	481.03	0.00	1133.09	733.13	0.179	0.30	0.22	3.873	A
3 - Hepworth Rd W	423.42	105.85	424.05	618.80	65.73	0.00	1387.66	1286.28	0.305	0.60	0.44	3.737	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	476.56	119.14	477.22	361.02	48.99	0.00	1435.05	1357.81	0.332	0.67	0.50	3.760	A
2 - Forest Rd	170.14	42.54	170.35	123.63	402.58	0.00	1180.31	733.13	0.144	0.22	0.17	3.567	A
3 - Hepworth Rd W	354.59	88.65	354.99	517.91	55.02	0.00	1394.01	1286.28	0.254	0.44	0.34	3.465	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	7.23	0.48	3.739	A	A
2 - Forest Rd	2.46	0.16	3.555	A	A
3 - Hepworth Rd W	4.98	0.33	3.453	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	9.65	0.64	4.179	A	A
2 - Forest Rd	3.21	0.21	3.865	A	A
3 - Hepworth Rd W	6.44	0.43	3.729	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	13.90	0.93	4.952	A	A
2 - Forest Rd	4.44	0.30	4.383	A	A
3 - Hepworth Rd W	8.80	0.59	4.178	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	14.32	0.95	4.968	A	A
2 - Forest Rd	4.53	0.30	4.390	A	A
3 - Hepworth Rd W	8.99	0.60	4.183	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	10.23	0.68	4.197	A	A
2 - Forest Rd	3.35	0.22	3.873	A	A
3 - Hepworth Rd W	6.75	0.45	3.737	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	7.64	0.51	3.760	A	A
2 - Forest Rd	2.58	0.17	3.567	A	A
3 - Hepworth Rd W	5.22	0.35	3.465	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, AM	2021 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.59	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	409.00	100.000
2 - Forest Rd	ONE HOUR	✓	125.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	642.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	49.000	360.000
	2 - Forest Rd	85.000	0.000	40.000
	3 - Hepworth Rd W	604.000	38.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.12	0.88
	2 - Forest Rd	0.68	0.00	0.32
	3 - Hepworth Rd W	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.31	3.64	0.45	A	375.31	562.96	31.82	3.39	0.35	31.83	3.39
2 - Forest Rd	0.12	3.44	0.13	A	114.70	172.05	9.35	3.26	0.10	9.35	3.26
3 - Hepworth	0.52	5.42	1.06	A	589.11	883.67	68.68	4.66	0.76	68.69	4.66

Rd W												

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	307.92	76.98	306.84	516.50	28.48	0.00	1447.37	1423.33	0.213	0.00	0.27	3.153	A
2 - Forest Rd	94.11	23.53	93.78	65.24	270.08	0.00	1260.08	668.50	0.075	0.00	0.08	3.086	A
3 - Hepworth Rd W	483.33	120.83	481.21	300.09	63.77	0.00	1388.82	1157.22	0.348	0.00	0.53	3.958	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	367.68	91.92	367.40	618.66	34.12	0.00	1443.99	1423.33	0.255	0.27	0.34	3.343	A
2 - Forest Rd	112.37	28.09	112.29	78.13	323.38	0.00	1227.99	668.50	0.092	0.08	0.10	3.226	A
3 - Hepworth Rd W	577.14	144.29	576.42	359.32	76.36	0.00	1381.36	1157.22	0.418	0.53	0.71	4.469	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	450.32	112.58	449.87	757.24	41.76	0.00	1439.40	1423.33	0.313	0.34	0.45	3.635	A
2 - Forest Rd	137.63	34.41	137.51	95.65	395.97	0.00	1184.29	668.50	0.116	0.10	0.13	3.438	A
3 - Hepworth Rd W	706.86	176.71	705.50	439.97	93.50	0.00	1371.20	1157.22	0.516	0.71	1.05	5.397	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	450.32	112.58	450.31	758.58	41.84	0.00	1439.35	1423.33	0.313	0.45	0.45	3.639	A
2 - Forest Rd	137.63	34.41	137.63	95.79	396.36	0.00	1184.06	668.50	0.116	0.13	0.13	3.439	A
3 - Hepworth Rd W	706.86	176.71	706.83	440.40	93.59	0.00	1371.15	1157.22	0.516	1.05	1.06	5.418	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	367.68	91.92	368.13	620.73	34.24	0.00	1443.91	1423.33	0.255	0.45	0.34	3.349	A
2 - Forest Rd	112.37	28.09	112.49	78.34	324.02	0.00	1227.60	668.50	0.092	0.13	0.10	3.230	A
3 - Hepworth Rd W	577.14	144.29	578.48	360.02	76.50	0.00	1381.28	1157.22	0.418	1.06	0.72	4.491	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	307.92	76.98	308.20	519.47	28.65	0.00	1447.27	1423.33	0.213	0.34	0.27	3.160	A

2 - Forest Rd	94.11	23.53	94.19	65.58	271.28	0.00	1259.35	668.50	0.075	0.10	0.08	3.089	A
3 - Hepworth Rd W	483.33	120.83	484.08	301.42	64.05	0.00	1388.66	1157.22	0.348	0.72	0.54	3.984	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.96	0.26	3.153	A	A
2 - Forest Rd	1.19	0.08	3.086	A	A
3 - Hepworth Rd W	7.74	0.52	3.958	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	5.03	0.34	3.343	A	A
2 - Forest Rd	1.49	0.10	3.226	A	A
3 - Hepworth Rd W	10.45	0.70	4.469	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	6.68	0.45	3.635	A	A
2 - Forest Rd	1.94	0.13	3.438	A	A
3 - Hepworth Rd W	15.31	1.02	5.397	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	6.80	0.45	3.639	A	A
2 - Forest Rd	1.97	0.13	3.439	A	A
3 - Hepworth Rd W	15.83	1.06	5.418	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	5.23	0.35	3.349	A	A
2 - Forest Rd	1.54	0.10	3.230	A	A
3 - Hepworth Rd W	11.13	0.74	4.491	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.13	0.28	3.160	A	A
2 - Forest Rd	1.23	0.08	3.089	A	A
3 - Hepworth Rd W	8.22	0.55	3.984	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, PM	2021 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	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

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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	2.00					

		✓	✓	Percentages					✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	669.00	100.000
2 - Forest Rd	ONE HOUR	✓	226.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	496.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	99.000	570.000
	2 - Forest Rd	73.000	0.000	153.000
	3 - Hepworth Rd W	431.000	65.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.15	0.85
	2 - Forest Rd	0.32	0.00	0.68
	3 - Hepworth Rd W	0.87	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.52	5.26	1.07	A	613.89	920.83	69.50	4.53	0.77	69.50	4.53
2 - Forest Rd	0.24	4.52	0.31	A	207.38	311.07	21.05	4.06	0.23	21.05	4.06
3 - Hepworth Rd W	0.40	4.32	0.65	A	455.14	682.71	44.50	3.91	0.49	44.51	3.91

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	503.66	125.91	501.51	377.95	48.74	0.00	1435.20	1363.05	0.351	0.00	0.54	3.847	A
2 - Forest Rd	170.14	42.54	169.46	122.96	427.30	0.00	1165.44	723.57	0.146	0.00	0.17	3.613	A
3 - Hepworth Rd W	373.41	93.35	371.96	542.02	54.74	0.00	1394.18	1288.11	0.268	0.00	0.36	3.517	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	601.42	150.35	600.68	452.65	58.38	0.00	1429.41	1363.04	0.421	0.54	0.72	4.340	A
2 - Forest Rd	203.17	50.79	202.96	147.27	511.79	0.00	1114.57	723.57	0.182	0.17	0.22	3.948	A
3 - Hepworth Rd W	445.89	111.47	445.47	649.20	65.56	0.00	1387.76	1288.11	0.321	0.36	0.47	3.818	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	736.58	184.15	735.21	554.17	71.47	0.00	1421.54	1363.04	0.518	0.72	1.06	5.234	A
2 - Forest Rd	248.83	62.21	248.48	180.27	626.41	0.00	1045.57	723.57	0.238	0.22	0.31	4.514	A
3 - Hepworth Rd W	546.11	136.53	545.39	794.63	80.26	0.00	1379.05	1288.11	0.396	0.47	0.65	4.314	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	736.58	184.15	736.56	554.90	71.57	0.00	1421.48	1363.04	0.518	1.06	1.07	5.255	A
2 - Forest Rd	248.83	62.21	248.83	180.56	627.56	0.00	1044.88	723.57	0.238	0.31	0.31	4.521	A
3 - Hepworth Rd W	546.11	136.53	546.10	796.01	80.37	0.00	1378.98	1288.11	0.396	0.65	0.65	4.322	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	601.42	150.35	602.76	453.81	58.53	0.00	1429.32	1363.04	0.421	1.07	0.73	4.362	A
2 - Forest Rd	203.17	50.79	203.52	147.72	513.57	0.00	1113.50	723.57	0.182	0.31	0.22	3.957	A
3 - Hepworth Rd W	445.89	111.47	446.60	651.35	65.74	0.00	1387.66	1288.11	0.321	0.65	0.48	3.827	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	503.66	125.91	504.41	379.88	48.99	0.00	1435.05	1363.05	0.351	0.73	0.54	3.871	A
2 - Forest Rd	170.14	42.54	170.35	123.64	429.77	0.00	1163.95	723.57	0.146	0.22	0.17	3.625	A
3 - Hepworth Rd W	373.41	93.35	373.85	545.10	55.03	0.00	1394.01	1288.11	0.268	0.48	0.37	3.532	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	7.85	0.52	3.847	A	A
2 - Forest Rd	2.50	0.17	3.613	A	A
3 - Hepworth Rd W	5.34	0.36	3.517	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	10.58	0.71	4.340	A	A
2 - Forest Rd	3.28	0.22	3.948	A	A
3 - Hepworth Rd W	6.94	0.46	3.818	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	15.48	1.03	5.234	A	A
2 - Forest Rd	4.57	0.30	4.514	A	A
3 - Hepworth Rd W	9.55	0.64	4.314	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	16.00	1.07	5.255	A	A
2 - Forest Rd	4.67	0.31	4.521	A	A
3 - Hepworth Rd W	9.78	0.65	4.322	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	11.26	0.75	4.362	A	A
2 - Forest Rd	3.43	0.23	3.957	A	A
3 - Hepworth Rd W	7.28	0.49	3.827	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	8.32	0.55	3.871	A	A
2 - Forest Rd	2.62	0.17	3.625	A	A
3 - Hepworth Rd W	5.61	0.37	3.532	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship

2024 Base Reg Link 25%, AM	2024 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.10	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	321.00	100.000
2 - Forest Rd	ONE HOUR	✓	128.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	555.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	51.000	270.000
	2 - Forest Rd	87.000	0.000	41.000
	3 - Hepworth Rd W	516.000	39.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.16	0.84
	2 - Forest Rd	0.68	0.00	0.32
	3 - Hepworth Rd W	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.25	3.32	0.32	A	294.56	441.83	23.16	3.15	0.26	23.16	3.15
2 - Forest Rd	0.11	3.26	0.13	A	117.46	176.18	9.17	3.12	0.10	9.17	3.12
3 - Hepworth Rd W	0.45	4.74	0.80	A	509.28	763.92	53.58	4.21	0.60	53.59	4.21

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand	Junction Arrivals	Entry Flow	Exit Flow (PCU/hr)	Circulating Flow	Pedestrian Demand	Capacity (PCU/hr)	Saturation Capacity	RFC	Start Queue	End Queue	Delay (s)	LOS

	(PCU/hr)	(PCU)	(PCU/hr)		(PCU/hr)	(Ped/hr)		(PCU/hr)		(PCU)	(PCU)		
1 - Hepworth N	241.67	60.42	240.87	452.16	29.24	0.00	1446.92	1416.25	0.167	0.00	0.20	2.983	A
2 - Forest Rd	96.37	24.09	96.05	67.51	202.60	0.00	1300.70	705.57	0.074	0.00	0.08	2.988	A
3 - Hepworth Rd W	417.83	104.46	416.12	233.36	65.28	0.00	1387.93	1142.41	0.301	0.00	0.43	3.698	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	288.57	72.14	288.38	541.53	35.02	0.00	1443.44	1416.25	0.200	0.20	0.25	3.116	A
2 - Forest Rd	115.07	28.77	114.99	80.84	242.56	0.00	1276.64	705.57	0.090	0.08	0.10	3.098	A
3 - Hepworth Rd W	498.93	124.73	498.40	279.39	78.16	0.00	1380.30	1142.41	0.361	0.43	0.56	4.079	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	353.43	88.36	353.13	662.96	42.87	0.00	1438.72	1416.25	0.246	0.25	0.32	3.316	A
2 - Forest Rd	140.93	35.23	140.82	98.98	297.02	0.00	1243.86	705.57	0.113	0.10	0.13	3.263	A
3 - Hepworth Rd W	611.07	152.77	610.12	342.13	95.71	0.00	1369.89	1142.41	0.446	0.56	0.80	4.732	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	353.43	88.36	353.42	663.90	42.94	0.00	1438.69	1416.25	0.246	0.32	0.32	3.316	A
2 - Forest Rd	140.93	35.23	140.93	99.09	297.27	0.00	1243.71	705.57	0.113	0.13	0.13	3.263	A
3 - Hepworth Rd W	611.07	152.77	611.05	342.41	95.79	0.00	1369.85	1142.41	0.446	0.80	0.80	4.744	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	288.57	72.14	288.87	543.02	35.13	0.00	1443.38	1416.25	0.200	0.32	0.25	3.118	A
2 - Forest Rd	115.07	28.77	115.18	81.02	242.97	0.00	1276.39	705.57	0.090	0.13	0.10	3.102	A
3 - Hepworth Rd W	498.93	124.73	499.86	279.87	78.29	0.00	1380.22	1142.41	0.361	0.80	0.57	4.094	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	241.67	60.42	241.86	454.53	29.40	0.00	1446.82	1416.25	0.167	0.25	0.20	2.987	A
2 - Forest Rd	96.37	24.09	96.44	67.83	203.44	0.00	1300.19	705.57	0.074	0.10	0.08	2.990	A
3 - Hepworth Rd W	417.83	104.46	418.38	234.33	65.55	0.00	1387.77	1142.41	0.301	0.57	0.43	3.717	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	2.94	0.20	2.983	A	A

2 - Forest Rd	1.18	0.08	2.988	A	A
3 - Hepworth Rd W	6.27	0.42	3.698	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.69	0.25	3.116	A	A
2 - Forest Rd	1.46	0.10	3.098	A	A
3 - Hepworth Rd W	8.28	0.55	4.079	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.79	0.32	3.316	A	A
2 - Forest Rd	1.89	0.13	3.263	A	A
3 - Hepworth Rd W	11.68	0.78	4.732	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.87	0.32	3.316	A	A
2 - Forest Rd	1.91	0.13	3.263	A	A
3 - Hepworth Rd W	12.00	0.80	4.744	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.82	0.25	3.118	A	A
2 - Forest Rd	1.51	0.10	3.102	A	A
3 - Hepworth Rd W	8.74	0.58	4.094	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.06	0.20	2.987	A	A
2 - Forest Rd	1.22	0.08	2.990	A	A
3 - Hepworth Rd W	6.61	0.44	3.717	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, PM	2024 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.22	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	548.00	100.000
2 - Forest Rd	ONE HOUR	✓	235.00	100.000

3 - Hepworth Rd W	ONE HOUR	✓	436.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	102.000	446.000
	2 - Forest Rd	75.000	0.000	160.000
	3 - Hepworth Rd W	368.000	68.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.19	0.81
	2 - Forest Rd	0.32	0.00	0.68
	3 - Hepworth Rd W	0.84	0.16	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.43	4.41	0.74	A	502.85	754.28	49.69	3.95	0.55	49.70	3.95
2 - Forest Rd	0.23	4.15	0.30	A	215.64	323.46	20.43	3.79	0.23	20.43	3.79
3 - Hepworth Rd W	0.35	4.01	0.53	A	400.08	600.12	36.86	3.69	0.41	36.86	3.69

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	412.56	103.14	410.96	332.26	51.00	0.00	1433.84	1344.32	0.288	0.00	0.40	3.519	A
2 - Forest Rd	176.92	44.23	176.25	127.49	334.46	0.00	1221.32	764.04	0.145	0.00	0.17	3.443	A

3 - Hepworth Rd W	328.24	82.06	327.02	454.46	56.25	0.00	1393.28	1282.11	0.236	0.00	0.31	3.374	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	492.64	123.16	492.15	397.90	61.08	0.00	1427.78	1344.32	0.345	0.40	0.52	3.846	A
2 - Forest Rd	211.26	52.82	211.07	152.68	400.55	0.00	1181.54	764.04	0.179	0.17	0.22	3.709	A
3 - Hepworth Rd W	391.96	97.99	391.61	544.25	67.36	0.00	1386.70	1282.11	0.283	0.31	0.39	3.618	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	603.36	150.84	602.52	487.18	74.78	0.00	1419.55	1344.31	0.425	0.52	0.73	4.401	A
2 - Forest Rd	258.74	64.68	258.42	186.93	490.37	0.00	1127.47	764.04	0.229	0.22	0.30	4.142	A
3 - Hepworth Rd W	480.04	120.01	479.49	666.32	82.48	0.00	1377.74	1282.11	0.348	0.39	0.53	4.005	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	603.36	150.84	603.35	487.74	74.87	0.00	1419.50	1344.31	0.425	0.73	0.74	4.410	A
2 - Forest Rd	258.74	64.68	258.74	187.17	491.05	0.00	1127.06	764.04	0.230	0.30	0.30	4.145	A
3 - Hepworth Rd W	480.04	120.01	480.04	667.21	82.58	0.00	1377.68	1282.11	0.348	0.53	0.53	4.010	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	492.64	123.16	493.46	398.81	61.22	0.00	1427.70	1344.32	0.345	0.74	0.53	3.856	A
2 - Forest Rd	211.26	52.82	211.57	153.07	401.62	0.00	1180.90	764.04	0.179	0.30	0.22	3.717	A
3 - Hepworth Rd W	391.96	97.99	392.50	545.66	67.52	0.00	1386.60	1282.11	0.283	0.53	0.40	3.625	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	412.56	103.14	413.06	333.87	51.25	0.00	1433.69	1344.32	0.288	0.53	0.41	3.528	A
2 - Forest Rd	176.92	44.23	177.11	128.13	336.18	0.00	1220.29	764.04	0.145	0.22	0.17	3.453	A
3 - Hepworth Rd W	328.24	82.06	328.59	456.76	56.53	0.00	1393.12	1282.11	0.236	0.40	0.31	3.382	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	5.89	0.39	3.519	A	A
2 - Forest Rd	2.48	0.17	3.443	A	A
3 - Hepworth Rd W	4.50	0.30	3.374	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	7.72	0.51	3.846	A	A
2 - Forest Rd	3.20	0.21	3.709	A	A
3 - Hepworth Rd W	5.79	0.39	3.618	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	10.75	0.72	4.401	A	A
2 - Forest Rd	4.37	0.29	4.142	A	A
3 - Hepworth Rd W	7.82	0.52	4.005	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	11.02	0.73	4.410	A	A
2 - Forest Rd	4.45	0.30	4.145	A	A
3 - Hepworth Rd W	7.98	0.53	4.010	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	8.11	0.54	3.856	A	A
2 - Forest Rd	3.34	0.22	3.717	A	A
3 - Hepworth Rd W	6.05	0.40	3.625	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	6.20	0.41	3.528	A	A
2 - Forest Rd	2.59	0.17	3.453	A	A
3 - Hepworth Rd W	4.72	0.31	3.382	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, AM	2024 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.26	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	342.00	100.000
2 - Forest Rd	ONE HOUR	✓	128.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	588.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	51.000	291.000
	2 - Forest Rd	87.000	0.000	41.000
	3 - Hepworth Rd W	549.000	39.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.15	0.85
	2 - Forest Rd	0.68	0.00	0.32
	3 - Hepworth Rd W	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.26	3.39	0.35	A	313.83	470.74	25.12	3.20	0.28	25.12	3.20
2 - Forest Rd	0.11	3.30	0.13	A	117.46	176.18	9.26	3.15	0.10	9.26	3.15
3 - Hepworth Rd W	0.47	4.98	0.89	A	539.56	809.34	58.97	4.37	0.66	58.98	4.37

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	257.48	64.37	256.61	476.86	29.24	0.00	1446.92	1418.80	0.178	0.00	0.22	3.023	A
2 - Forest Rd	96.37	24.09	96.04	67.50	218.35	0.00	1291.22	695.94	0.075	0.00	0.08	3.012	A
3 - Hepworth Rd W	442.68	110.67	440.82	249.11	65.28	0.00	1387.93	1146.29	0.319	0.00	0.47	3.795	A

Main results: (07:30-07:45)

Name	Total Demand	Junction Arrivals	Entry Flow	Exit Flow (PCU/hr)	Circulating Flow	Pedestrian Demand	Capacity (PCU/hr)	Saturation Capacity	RFC	Start Queue	End Queue	Delay (s)	LOS

	(PCU/hr)	(PCU)	(PCU/hr)		(PCU/hr)	(Ped/hr)		(PCU/hr)		(PCU)	(PCU)		
1 - Hepworth N	307.45	76.86	307.24	571.14	35.02	0.00	1443.44	1418.80	0.213	0.22	0.27	3.168	A
2 - Forest Rd	115.07	28.77	114.99	80.84	261.42	0.00	1265.29	695.94	0.091	0.08	0.10	3.129	A
3 - Hepworth Rd W	528.60	132.15	528.00	298.25	78.16	0.00	1380.30	1146.29	0.383	0.47	0.62	4.221	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	376.55	94.14	376.22	699.16	42.87	0.00	1438.73	1418.80	0.262	0.27	0.35	3.388	A
2 - Forest Rd	140.93	35.23	140.81	98.97	320.11	0.00	1229.96	695.94	0.115	0.10	0.13	3.304	A
3 - Hepworth Rd W	647.40	161.85	646.32	365.22	95.71	0.00	1369.90	1146.29	0.473	0.62	0.89	4.968	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	376.55	94.14	376.55	700.23	42.94	0.00	1438.69	1418.80	0.262	0.35	0.35	3.388	A
2 - Forest Rd	140.93	35.23	140.93	99.09	320.39	0.00	1229.79	695.94	0.115	0.13	0.13	3.305	A
3 - Hepworth Rd W	647.40	161.85	647.38	365.54	95.79	0.00	1369.85	1146.29	0.473	0.89	0.89	4.982	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	307.45	76.86	307.78	572.82	35.13	0.00	1443.38	1418.80	0.213	0.35	0.27	3.172	A
2 - Forest Rd	115.07	28.77	115.18	81.03	261.88	0.00	1265.01	695.94	0.091	0.13	0.10	3.130	A
3 - Hepworth Rd W	528.60	132.15	529.66	298.78	78.29	0.00	1380.22	1146.29	0.383	0.89	0.63	4.239	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	257.48	64.37	257.69	479.44	29.40	0.00	1446.82	1418.80	0.178	0.27	0.22	3.029	A
2 - Forest Rd	96.37	24.09	96.44	67.83	219.27	0.00	1290.66	695.94	0.075	0.10	0.08	3.016	A
3 - Hepworth Rd W	442.68	110.67	443.29	250.16	65.55	0.00	1387.77	1146.29	0.319	0.63	0.47	3.816	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.18	0.21	3.023	A	A
2 - Forest Rd	1.19	0.08	3.012	A	A
3 - Hepworth Rd W	6.81	0.45	3.795	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.99	0.27	3.168	A	A
2 - Forest Rd	1.48	0.10	3.129	A	A
3 - Hepworth Rd W	9.06	0.60	4.221	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	5.21	0.35	3.388	A	A
2 - Forest Rd	1.91	0.13	3.304	A	A
3 - Hepworth Rd W	12.96	0.86	4.968	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	5.30	0.35	3.388	A	A
2 - Forest Rd	1.94	0.13	3.305	A	A
3 - Hepworth Rd W	13.35	0.89	4.982	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.14	0.28	3.172	A	A
2 - Forest Rd	1.53	0.10	3.130	A	A
3 - Hepworth Rd W	9.60	0.64	4.239	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.30	0.22	3.029	A	A
2 - Forest Rd	1.23	0.08	3.016	A	A
3 - Hepworth Rd W	7.20	0.48	3.816	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, PM	2024 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.39	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	585.00	100.000
2 - Forest Rd	ONE HOUR	✓	235.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	460.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	102.000	483.000

	2 - Forest Rd	75.000	0.000	160.000
	3 - Hepworth Rd W	392.000	68.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.17	0.83
	2 - Forest Rd	0.32	0.00	0.68
	3 - Hepworth Rd W	0.85	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.45	4.64	0.83	A	536.81	805.21	55.22	4.11	0.61	55.22	4.11
2 - Forest Rd	0.23	4.27	0.31	A	215.64	323.46	20.90	3.88	0.23	20.90	3.88
3 - Hepworth Rd W	0.37	4.13	0.58	A	422.10	633.16	39.83	3.77	0.44	39.83	3.77

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	440.42	110.10	438.66	350.24	51.00	0.00	1433.84	1350.38	0.307	0.00	0.44	3.611	A
2 - Forest Rd	176.92	44.23	176.23	127.48	362.17	0.00	1204.64	751.50	0.147	0.00	0.17	3.499	A
3 - Hepworth Rd W	346.31	86.58	345.00	482.16	56.25	0.00	1393.28	1284.48	0.249	0.00	0.33	3.429	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	525.90	131.48	525.35	419.44	61.08	0.00	1427.79	1350.38	0.368	0.44	0.58	3.986	A
2 - Forest	211.26	52.82	211.06	152.67	433.75	0.00	1161.55	751.50	0.182	0.17	0.22	3.787	A

Rd													
3 - Hepworth Rd W	413.53	103.38	413.16	577.45	67.36	0.00	1386.70	1284.48	0.298	0.33	0.42	3.698	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	644.10	161.02	643.12	513.54	74.78	0.00	1419.55	1350.37	0.454	0.58	0.82	4.631	A
2 - Forest Rd	258.74	64.68	258.41	186.91	530.99	0.00	1103.02	751.51	0.235	0.22	0.30	4.259	A
3 - Hepworth Rd W	506.47	126.62	505.85	706.92	82.47	0.00	1377.74	1284.48	0.368	0.42	0.58	4.126	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	644.10	161.02	644.08	514.17	74.87	0.00	1419.50	1350.37	0.454	0.82	0.83	4.642	A
2 - Forest Rd	258.74	64.68	258.74	187.17	531.78	0.00	1102.54	751.51	0.235	0.30	0.31	4.266	A
3 - Hepworth Rd W	506.47	126.62	506.46	707.94	82.58	0.00	1377.68	1284.48	0.368	0.58	0.58	4.131	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	525.90	131.48	526.86	420.45	61.22	0.00	1427.70	1350.38	0.368	0.83	0.59	4.000	A
2 - Forest Rd	211.26	52.82	211.59	153.08	435.00	0.00	1160.80	751.50	0.182	0.31	0.22	3.795	A
3 - Hepworth Rd W	413.53	103.38	414.14	579.06	67.53	0.00	1386.60	1284.48	0.298	0.58	0.43	3.706	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	440.42	110.10	440.98	351.97	51.25	0.00	1433.69	1350.38	0.307	0.59	0.45	3.630	A
2 - Forest Rd	176.92	44.23	177.12	128.14	364.09	0.00	1203.48	751.50	0.147	0.22	0.17	3.510	A
3 - Hepworth Rd W	346.31	86.58	346.69	484.69	56.53	0.00	1393.12	1284.48	0.249	0.43	0.33	3.440	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	6.46	0.43	3.611	A	A
2 - Forest Rd	2.52	0.17	3.499	A	A
3 - Hepworth Rd W	4.83	0.32	3.429	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	8.53	0.57	3.986	A	A
2 - Forest Rd	3.27	0.22	3.787	A	A
3 - Hepworth Rd W	6.24	0.42	3.698	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service

1 - Hepworth N	12.05	0.80	4.631	A	A
2 - Forest Rd	4.49	0.30	4.259	A	A
3 - Hepworth Rd W	8.49	0.57	4.126	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	12.38	0.83	4.642	A	A
2 - Forest Rd	4.58	0.31	4.266	A	A
3 - Hepworth Rd W	8.68	0.58	4.131	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	9.00	0.60	4.000	A	A
2 - Forest Rd	3.41	0.23	3.795	A	A
3 - Hepworth Rd W	6.53	0.44	3.706	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	6.81	0.45	3.630	A	A
2 - Forest Rd	2.63	0.18	3.510	A	A
3 - Hepworth Rd W	5.06	0.34	3.440	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, AM	2024 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.56	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	406.00	100.000
2 - Forest Rd	ONE HOUR	✓	128.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	637.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	51.000	355.000
	2 - Forest Rd	87.000	0.000	41.000
	3 - Hepworth Rd W	598.000	39.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.13	0.87
	2 - Forest Rd	0.68	0.00	0.32
	3 - Hepworth Rd W	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.31	3.63	0.45	A	372.55	558.83	31.52	3.38	0.35	31.53	3.38
2 - Forest Rd	0.12	3.44	0.13	A	117.46	176.18	9.57	3.26	0.11	9.57	3.26
3 - Hepworth Rd W	0.51	5.38	1.04	A	584.52	876.78	67.82	4.64	0.75	67.83	4.64

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	305.66	76.41	304.59	513.51	29.23	0.00	1446.92	1421.99	0.211	0.00	0.27	3.148	A
2 - Forest Rd	96.37	24.09	96.04	67.49	266.33	0.00	1262.33	674.19	0.076	0.00	0.08	3.086	A
3 - Hepworth Rd W	479.57	119.89	477.47	297.09	65.27	0.00	1387.93	1155.05	0.346	0.00	0.52	3.945	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	364.99	91.25	364.71	615.07	35.02	0.00	1443.45	1421.99	0.253	0.27	0.34	3.337	A
2 - Forest Rd	115.07	28.77	114.99	80.83	318.89	0.00	1230.69	674.19	0.094	0.08	0.10	3.226	A
3 - Hepworth Rd W	572.65	143.16	571.93	355.72	78.16	0.00	1380.30	1155.05	0.415	0.52	0.70	4.450	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	447.01	111.75	446.57	752.86	42.86	0.00	1438.73	1421.99	0.311	0.34	0.45	3.626	A
2 - Forest Rd	140.93	35.23	140.81	98.95	390.47	0.00	1187.60	674.19	0.119	0.10	0.13	3.438	A
3 - Hepworth Rd W	701.35	175.34	700.02	435.57	95.70	0.00	1369.90	1155.05	0.512	0.70	1.04	5.363	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	447.01	111.75	447.01	754.18	42.94	0.00	1438.69	1421.99	0.311	0.45	0.45	3.629	A
2 - Forest Rd	140.93	35.23	140.93	99.09	390.86	0.00	1187.37	674.19	0.119	0.13	0.13	3.439	A
3 - Hepworth Rd W	701.35	175.34	701.33	436.00	95.79	0.00	1369.85	1155.05	0.512	1.04	1.04	5.384	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	364.99	91.25	365.42	617.12	35.14	0.00	1443.37	1421.99	0.253	0.45	0.34	3.340	A
2 - Forest Rd	115.07	28.77	115.19	81.04	319.52	0.00	1230.31	674.19	0.094	0.13	0.10	3.227	A
3 - Hepworth Rd W	572.65	143.16	573.96	356.42	78.29	0.00	1380.22	1155.05	0.415	1.04	0.71	4.473	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	305.66	76.41	305.94	516.45	29.41	0.00	1446.82	1421.99	0.211	0.34	0.27	3.158	A
2 - Forest Rd	96.37	24.09	96.45	67.84	267.51	0.00	1261.62	674.19	0.076	0.10	0.08	3.091	A
3 - Hepworth Rd W	479.57	119.89	480.30	298.40	65.55	0.00	1387.77	1155.05	0.346	0.71	0.53	3.971	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	3.92	0.26	3.148	A	A
2 - Forest Rd	1.21	0.08	3.086	A	A
3 - Hepworth Rd W	7.66	0.51	3.945	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.98	0.33	3.337	A	A
2 - Forest Rd	1.52	0.10	3.226	A	A
3 - Hepworth Rd W	10.33	0.69	4.450	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	6.61	0.44	3.626	A	A
2 - Forest Rd	1.98	0.13	3.438	A	A
3 - Hepworth Rd W	15.10	1.01	5.363	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	6.73	0.45	3.629	A	A
2 - Forest Rd	2.01	0.13	3.439	A	A
3 - Hepworth Rd W	15.61	1.04	5.384	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	5.18	0.35	3.340	A	A
2 - Forest Rd	1.57	0.10	3.227	A	A
3 - Hepworth Rd W	11.00	0.73	4.473	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.09	0.27	3.158	A	A
2 - Forest Rd	1.26	0.08	3.091	A	A
3 - Hepworth Rd W	8.13	0.54	3.971	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, PM	2024 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	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

Name	Arm	Name	Description

1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	661.00	100.000
2 - Forest Rd	ONE HOUR	✓	235.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	500.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	102.000	559.000
	2 - Forest Rd	75.000	0.000	160.000
	3 - Hepworth Rd W	425.000	75.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.15	0.85
	2 - Forest Rd	0.32	0.00	0.68
	3 - Hepworth Rd W	0.85	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.51	5.24	1.05	A	606.55	909.82	68.50	4.52	0.76	68.51	4.52
2 - Forest Rd	0.25	4.54	0.32	A	215.64	323.46	21.95	4.07	0.24	21.95	4.07
3 - Hepworth Rd W	0.40	4.35	0.66	A	458.81	688.21	45.11	3.93	0.50	45.11	3.93

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	497.64	124.41	495.52	374.95	56.24	0.00	1430.69	1348.44	0.348	0.00	0.53	3.841	A
2 - Forest Rd	176.92	44.23	176.21	132.71	419.05	0.00	1170.40	736.19	0.151	0.00	0.18	3.619	A
3 - Hepworth Rd W	376.43	94.11	374.95	539.03	56.24	0.00	1393.29	1287.37	0.270	0.00	0.37	3.531	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	594.23	148.56	593.50	449.05	67.36	0.00	1424.01	1348.43	0.417	0.53	0.71	4.331	A
2 - Forest Rd	211.26	52.82	211.04	158.94	501.92	0.00	1120.52	736.20	0.189	0.18	0.23	3.957	A
3 - Hepworth Rd W	449.49	112.37	449.06	645.61	67.35	0.00	1386.70	1287.37	0.324	0.37	0.48	3.837	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	727.77	181.94	726.43	549.77	82.47	0.00	1414.93	1348.43	0.514	0.71	1.05	5.218	A

2 - Forest Rd	258.74	64.68	258.37	194.56	614.33	0.00	1052.85	736.20	0.246	0.23	0.32	4.529	A
3 - Hepworth Rd W	550.51	137.63	549.78	790.24	82.46	0.00	1377.75	1287.37	0.400	0.48	0.66	4.344	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	727.77	181.94	727.75	550.50	82.57	0.00	1414.86	1348.43	0.514	1.05	1.05	5.238	A
2 - Forest Rd	258.74	64.68	258.73	194.88	615.45	0.00	1052.17	736.20	0.246	0.32	0.32	4.536	A
3 - Hepworth Rd W	550.51	137.63	550.50	791.61	82.57	0.00	1377.68	1287.37	0.400	0.66	0.66	4.351	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	594.23	148.56	595.55	450.22	67.53	0.00	1423.91	1348.43	0.417	1.05	0.72	4.352	A
2 - Forest Rd	211.26	52.82	211.62	159.43	503.65	0.00	1119.47	736.20	0.189	0.32	0.23	3.968	A
3 - Hepworth Rd W	449.49	112.37	450.21	647.73	67.54	0.00	1386.59	1287.37	0.324	0.66	0.48	3.847	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	497.64	124.41	498.38	376.87	56.53	0.00	1430.52	1348.44	0.348	0.72	0.54	3.864	A
2 - Forest Rd	176.92	44.23	177.14	133.44	421.47	0.00	1168.94	736.19	0.151	0.23	0.18	3.629	A
3 - Hepworth Rd W	376.43	94.11	376.87	542.08	56.53	0.00	1393.11	1287.37	0.270	0.48	0.37	3.543	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	7.74	0.52	3.841	A	A
2 - Forest Rd	2.60	0.17	3.619	A	A
3 - Hepworth Rd W	5.40	0.36	3.531	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	10.43	0.70	4.331	A	A
2 - Forest Rd	3.41	0.23	3.957	A	A
3 - Hepworth Rd W	7.03	0.47	3.837	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	15.25	1.02	5.218	A	A
2 - Forest Rd	4.76	0.32	4.529	A	A
3 - Hepworth Rd W	9.69	0.65	4.344	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	15.76	1.05	5.238	A	A
2 - Forest Rd	4.87	0.32	4.536	A	A
3 - Hepworth Rd					

W	9.93	0.66	4.351	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	11.10	0.74	4.352	A	A
2 - Forest Rd	3.57	0.24	3.968	A	A
3 - Hepworth Rd W	7.38	0.49	3.847	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	8.21	0.55	3.864	A	A
2 - Forest Rd	2.73	0.18	3.629	A	A
3 - Hepworth Rd W	5.67	0.38	3.543	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, AM	2024 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				4.77	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00
3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	426.00	100.000
2 - Forest Rd	ONE HOUR	✓	128.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	669.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	51.000	375.000
	2 - Forest Rd	87.000	0.000	41.000
	3 - Hepworth Rd W	630.000	39.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.12	0.88
	2 - Forest Rd	0.68	0.00	0.32
	3 - Hepworth Rd W	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	1.000	1.000	1.000
	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.33	3.71	0.48	A	390.91	586.36	33.68	3.45	0.37	33.68	3.45
2 - Forest Rd	0.12	3.48	0.14	A	117.46	176.18	9.67	3.29	0.11	9.67	3.29
3 - Hepworth Rd W	0.54	5.68	1.16	A	613.89	920.83	74.23	4.84	0.82	74.23	4.84

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	320.72	80.18	319.58	537.44	29.23	0.00	1446.93	1423.94	0.222	0.00	0.28	3.190	A
2 - Forest Rd	96.37	24.09	96.03	67.49	281.32	0.00	1253.31	668.11	0.077	0.00	0.08	3.110	A
3 - Hepworth Rd W	503.66	125.91	501.40	312.08	65.27	0.00	1387.93	1157.50	0.363	0.00	0.57	4.051	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	382.97	95.74	382.66	643.76	35.01	0.00	1443.45	1423.94	0.265	0.28	0.36	3.393	A
2 - Forest Rd	115.07	28.77	114.99	80.83	336.85	0.00	1219.88	668.11	0.094	0.08	0.10	3.257	A
3 - Hepworth Rd W	601.42	150.35	600.62	373.68	78.15	0.00	1380.30	1157.50	0.436	0.57	0.77	4.612	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	469.03	117.26	468.55	787.90	42.85	0.00	1438.74	1423.94	0.326	0.36	0.48	3.708	A
2 - Forest Rd	140.93	35.23	140.80	98.94	412.45	0.00	1174.37	668.11	0.120	0.10	0.14	3.482	A
3 - Hepworth Rd W	736.58	184.15	735.05	457.56	95.70	0.00	1369.90	1157.50	0.538	0.77	1.15	5.657	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	469.03	117.26	469.03	789.40	42.94	0.00	1438.69	1423.94	0.326	0.48	0.48	3.711	A
2 - Forest Rd	140.93	35.23	140.93	99.09	412.88	0.00	1174.12	668.11	0.120	0.14	0.14	3.483	A
3 - Hepworth Rd W	736.58	184.15	736.55	458.02	95.79	0.00	1369.85	1157.50	0.538	1.15	1.16	5.684	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	382.97	95.74	383.44	646.07	35.15	0.00	1443.37	1423.94	0.265	0.48	0.36	3.399	A
2 - Forest Rd	115.07	28.77	115.20	81.05	337.54	0.00	1219.47	668.11	0.094	0.14	0.10	3.262	A
3 - Hepworth Rd W	601.42	150.35	602.92	374.44	78.30	0.00	1380.22	1157.50	0.436	1.16	0.78	4.641	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	320.72	80.18	321.02	540.63	29.41	0.00	1446.82	1423.94	0.222	0.36	0.29	3.197	A
2 - Forest Rd	96.37	24.09	96.45	67.84	282.59	0.00	1252.55	668.11	0.077	0.10	0.08	3.115	A
3 - Hepworth Rd W	503.66	125.91	504.48	313.48	65.56	0.00	1387.77	1157.50	0.363	0.78	0.57	4.080	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.17	0.28	3.190	A	A
2 - Forest Rd	1.22	0.08	3.110	A	A
3 - Hepworth Rd W	8.25	0.55	4.051	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	5.31	0.35	3.393	A	A
2 - Forest Rd	1.54	0.10	3.257	A	A
3 - Hepworth Rd W	11.22	0.75	4.612	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	7.09	0.47	3.708	A	A
2 - Forest Rd	2.01	0.13	3.482	A	A
3 - Hepworth Rd W	16.68	1.11	5.657	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	7.23	0.48	3.711	A	A
2 - Forest Rd	2.04	0.14	3.483	A	A
3 - Hepworth Rd W	17.29	1.15	5.684	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service

1 - Hepworth N	5.53	0.37	3.399	A	A
2 - Forest Rd	1.59	0.11	3.262	A	A
3 - Hepworth Rd W	12.00	0.80	4.641	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	4.35	0.29	3.197	A	A
2 - Forest Rd	1.27	0.08	3.115	A	A
3 - Hepworth Rd W	8.78	0.59	4.080	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, PM	2024 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				5.00	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Hepworth N	1	1 - Hepworth N	
2 - Forest Rd	2	2 - Forest Rd	
3 - Hepworth Rd W	3	3 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Hepworth N	0.00	99999.00		0.00
2 - Forest Rd	0.00	99999.00		0.00

3 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Hepworth N	3.60	6.80	5.80	37.70	39.40	32.00	
2 - Forest Rd	2.60	6.30	12.30	42.70	39.40	24.00	
3 - Hepworth Rd W	3.10	6.80	8.50	34.20	39.40	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Hepworth N		(calculated)	(calculated)	0.601	1464.492
2 - Forest Rd		(calculated)	(calculated)	0.602	1422.656
3 - Hepworth Rd W		(calculated)	(calculated)	0.593	1426.616

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Hepworth N	ONE HOUR	✓	697.00	100.000
2 - Forest Rd	ONE HOUR	✓	235.00	100.000
3 - Hepworth Rd W	ONE HOUR	✓	517.00	100.000

Turning Proportions

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

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.000	102.000	595.000
	2 - Forest Rd	75.000	0.000	160.000
	3 - Hepworth Rd W	449.000	68.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.00	0.15	0.85
	2 - Forest Rd	0.32	0.00	0.68
	3 - Hepworth Rd W	0.87	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
	1 - Hepworth N	1.000	1.000	1.000

From	2 - Forest Rd	1.000	1.000	1.000
	3 - Hepworth Rd W	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Hepworth N	2 - Forest Rd	3 - Hepworth Rd W
From	1 - Hepworth N	0.0	0.0	0.0
	2 - Forest Rd	0.0	0.0	0.0
	3 - Hepworth Rd W	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Hepworth N	0.54	5.52	1.17	A	639.58	959.37	75.17	4.70	0.84	75.18	4.70
2 - Forest Rd	0.25	4.68	0.33	A	215.64	323.46	22.48	4.17	0.25	22.48	4.17
3 - Hepworth Rd W	0.41	4.45	0.70	A	474.41	711.61	47.49	4.00	0.53	47.49	4.00

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	524.74	131.18	522.45	392.93	50.99	0.00	1433.85	1362.53	0.366	0.00	0.57	3.941	A
2 - Forest Rd	176.92	44.23	176.20	127.45	445.99	0.00	1154.18	722.49	0.153	0.00	0.18	3.679	A
3 - Hepworth Rd W	389.22	97.31	387.68	565.96	56.23	0.00	1393.29	1289.97	0.279	0.00	0.39	3.576	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	626.59	156.65	625.78	470.59	61.07	0.00	1427.79	1362.52	0.439	0.57	0.78	4.484	A
2 - Forest Rd	211.26	52.82	211.04	152.65	534.20	0.00	1101.08	722.49	0.192	0.18	0.24	4.043	A
3 - Hepworth Rd W	464.77	116.19	464.31	677.89	67.35	0.00	1386.70	1289.97	0.335	0.39	0.50	3.901	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	767.41	191.85	765.87	576.12	74.77	0.00	1419.56	1362.52	0.541	0.78	1.16	5.493	A
2 - Forest Rd	258.74	64.68	258.35	186.84	653.79	0.00	1029.10	722.49	0.251	0.24	0.33	4.669	A
3 - Hepworth Rd W	569.23	142.31	568.44	829.69	82.45	0.00	1377.75	1289.97	0.413	0.50	0.70	4.443	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Hepworth N	767.41	191.85	767.38	576.92	74.87	0.00	1419.50	1362.52	0.541	1.16	1.17	5.520	A
2 - Forest Rd	258.74	64.68	258.73	187.17	655.08	0.00	1028.32	722.49	0.252	0.33	0.33	4.677	A
3 - Hepworth Rd W	569.23	142.31	569.22	831.24	82.57	0.00	1377.68	1289.97	0.413	0.70	0.70	4.452	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	626.59	156.65	628.11	471.86	61.23	0.00	1427.69	1362.52	0.439	1.17	0.79	4.512	A
2 - Forest Rd	211.26	52.82	211.64	153.15	536.19	0.00	1099.89	722.49	0.192	0.33	0.24	4.054	A
3 - Hepworth Rd W	464.77	116.19	465.55	680.29	67.55	0.00	1386.59	1289.97	0.335	0.70	0.51	3.911	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Hepworth N	524.74	131.18	525.57	394.98	51.26	0.00	1433.69	1362.53	0.366	0.79	0.58	3.967	A
2 - Forest Rd	176.92	44.23	177.15	128.17	448.66	0.00	1152.58	722.49	0.154	0.24	0.18	3.690	A
3 - Hepworth Rd W	389.22	97.31	389.70	569.27	56.54	0.00	1393.11	1289.97	0.279	0.51	0.39	3.588	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	8.37	0.56	3.941	A	A
2 - Forest Rd	2.65	0.18	3.679	A	A
3 - Hepworth Rd W	5.65	0.38	3.576	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	11.37	0.76	4.484	A	A
2 - Forest Rd	3.49	0.23	4.043	A	A
3 - Hepworth Rd W	7.38	0.49	3.901	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	16.89	1.13	5.493	A	A
2 - Forest Rd	4.91	0.33	4.669	A	A
3 - Hepworth Rd W	10.24	0.68	4.443	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	17.49	1.17	5.520	A	A
2 - Forest Rd	5.02	0.33	4.677	A	A
3 - Hepworth Rd W	10.50	0.70	4.452	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	12.15	0.81	4.512	A	A
2 - Forest Rd	3.65	0.24	4.054	A	A
3 - Hepworth Rd W	7.76	0.52	3.911	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Hepworth N	8.90	0.59	3.967	A	A
2 - Forest Rd	2.78	0.19	3.690	A	A
3 - Hepworth Rd W	5.95	0.40	3.588	A	A

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.6.541 [19821,26/11/2015]
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Filename: MainSt-OccupationLn-MushroomLn-OccupationRd Crossroads_v01.arc8
Path: \\lefs02\Projects\067895.100 TPLE Woodville\Q3-Design\3A-Calculations\TP\Junction Modelling\Junction Models for 24.07.2019 Submission
Report generation date: 24/07/2019 11:12:48

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2021 Base Reg Link 25%							
Stream B-CD	0.27	15.74	0.21	C	0.75	44.97	0.44	E
Stream B-AD	0.84	22.54	0.46	C	3.06	68.04	0.78	F
Stream A-BCD	1.00	4.89	0.32	A	2.40	7.27	0.52	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.58	12.96	0.37	B	0.68	15.64	0.41	C
Stream D-BC	0.38	14.90	0.28	B	0.26	21.22	0.21	C
Stream C-ABD	0.01	5.89	0.01	A	0.02	4.59	0.02	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2021 Base Reg Link 25% with Dev							
Stream B-CD	0.32	16.65	0.25	C	1.18	62.95	0.57	F
Stream B-AD	0.93	23.97	0.49	C	3.74	82.09	0.82	F
Stream A-BCD	1.00	4.88	0.32	A	2.42	7.28	0.52	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.62	13.52	0.39	B	0.80	17.73	0.45	C
Stream D-BC	0.41	15.29	0.29	C	0.31	22.33	0.24	C
Stream C-ABD	0.01	5.90	0.01	A	0.02	4.60	0.02	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2021 Base Reg Link 50%							
Stream B-CD	0.27	15.74	0.21	C	0.75	44.97	0.44	E
Stream B-AD	0.84	22.54	0.46	C	3.06	68.04	0.78	F
Stream A-BCD	1.00	4.89	0.32	A	2.40	7.27	0.52	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.58	12.96	0.37	B	0.68	15.64	0.41	C
Stream D-BC	0.38	14.90	0.28	B	0.26	21.22	0.21	C
Stream C-ABD	0.01	5.89	0.01	A	0.02	4.59	0.02	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2021 Base Reg Link 50% with Dev							
Stream B-CD	0.32	16.65	0.25	C	1.18	62.95	0.57	F
Stream B-AD	0.93	23.97	0.49	C	3.74	82.09	0.82	F
Stream A-BCD	1.00	4.88	0.32	A	2.42	7.28	0.52	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.62	13.52	0.39	B	0.80	17.73	0.45	C
Stream D-BC	0.41	15.29	0.29	C	0.31	22.33	0.24	C
Stream C-ABD	0.01	5.90	0.01	A	0.02	4.60	0.02	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2024 Base Reg Link 25%							
Stream B-CD	0.31	17.31	0.24	C	2.16	121.04	0.76	F
Stream B-AD	0.98	25.50	0.50	D	4.92	108.43	0.88	F

Stream A-BCD	1.13	4.99	0.34	A	3.03	8.12	0.58	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.66	14.03	0.40	B	0.81	17.86	0.45	C
Stream D-BC	0.43	15.95	0.30	C	0.31	24.11	0.24	C
Stream C-ABD	0.01	5.89	0.01	A	0.03	4.55	0.02	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2024 Base Reg Link 25% with Dev							
Stream B-CD	0.37	18.40	0.28	C	4.08	184.22	0.94	F
Stream B-AD	1.07	27.08	0.52	D	6.55	138.09	0.94	F
Stream A-BCD	1.14	4.99	0.34	A	3.07	8.15	0.58	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.70	14.61	0.42	B	0.97	20.65	0.50	C
Stream D-BC	0.45	16.35	0.31	C	0.37	25.80	0.28	D
Stream C-ABD	0.01	5.89	0.01	A	0.03	4.55	0.02	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2024 Base Reg Link 50%							
Stream B-CD	0.31	17.31	0.24	C	2.16	121.04	0.76	F
Stream B-AD	0.98	25.50	0.50	D	4.92	108.43	0.88	F
Stream A-BCD	1.13	4.99	0.34	A	3.03	8.12	0.58	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.66	14.03	0.40	B	0.81	17.86	0.45	C
Stream D-BC	0.43	15.95	0.30	C	0.31	24.11	0.24	C
Stream C-ABD	0.01	5.89	0.01	A	0.03	4.55	0.02	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2024 Base Reg Link 50% with Dev							
Stream B-CD	0.37	18.40	0.28	C	4.08	184.22	0.94	F
Stream B-AD	1.07	27.08	0.52	D	6.55	138.09	0.94	F
Stream A-BCD	1.14	4.99	0.34	A	3.07	8.15	0.58	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.70	14.61	0.42	B	0.97	20.65	0.50	C
Stream D-BC	0.45	16.35	0.31	C	0.37	25.80	0.28	D
Stream C-ABD	0.01	5.89	0.01	A	0.03	4.55	0.02	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-

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

"D1 - 2021 Base Reg Link 25%, AM " model duration: 07:15 - 08:45
"D2 - 2021 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D3 - 2021 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D4 - 2021 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D5 - 2021 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D6 - 2021 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D7 - 2021 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D8 - 2021 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15
"D9 - 2024 Base Reg Link 25%, AM" model duration: 07:15 - 08:45
"D10 - 2024 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D11 - 2024 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D12 - 2024 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D13 - 2024 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D14 - 2024 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D15 - 2024 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D16 - 2024 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 24/07/2019 11:12:30

File summary

Title	(untitled)
Location	
Site Number	
Date	12/06/2019
Version	
Status	(new file)
Identifier	
Client	

Jobnumber	
Enumerator	RodriguezMartin_d
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) - 2021 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, AM	2021 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		12.07	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)

1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	582.951	0.106	0.268	0.268	-	-	-	0.169	0.383	-	0.268	0.268	0.134
1	B-C	708.542	0.109	0.275	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	565.189	0.103	0.260	0.260	-	-	-	0.164	0.372	0.164	-	-	-
1	B-D, offside lane	582.951	0.106	0.268	0.268	-	-	-	0.169	0.383	0.169	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	713.148	-	-	-	-	-	-	0.276	-	0.109	-	-	-
1	D-B, nearside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-B, offside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-C	573.184	-	0.166	0.377	0.132	0.264	0.264	0.264	0.264	0.104	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	787.00	100.000
2 - Occupation Ln	ONE HOUR	✓	180.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	267.00	100.000
4 - Occupation Rd	ONE HOUR	✓	234.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	254.000	441.000	92.000
	2 - Occupation Ln	101.000	0.000	3.000	76.000
	3 - Mushroom Ln	227.000	3.000	0.000	37.000

	4 - Occupation Rd	93.000	98.000	43.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.32	0.56	0.12
	2 - Occupation Ln	0.56	0.00	0.02	0.42
	3 - Mushroom Ln	0.85	0.01	0.00	0.14
	4 - Occupation Rd	0.40	0.42	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.21	15.74	0.27	C	48.11	72.17	15.43	12.83	0.17	15.43	12.83
B-AD	0.46	22.54	0.84	C	117.06	175.59	48.92	16.71	0.54	48.92	16.72
A-BCD	0.32	4.89	1.00	A	239.02	358.52	59.75	10.00	0.66	59.76	10.00
A-B	-	-	-	-	176.58	264.86	-	-	-	-	-
A-C	-	-	-	-	306.57	459.86	-	-	-	-	-
D-AB	0.37	12.96	0.58	B	135.26	202.89	36.11	10.68	0.40	36.12	10.68
D-BC	0.28	14.90	0.38	B	79.46	119.19	24.65	12.41	0.27	24.66	12.41
C-ABD	0.01	5.89	0.01	A	4.52	6.78	0.71	6.27	0.01	0.71	6.27
C-D	-	-	-	-	33.70	50.56	-	-	-	-	-
C-A	-	-	-	-	206.78	310.17	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	36.56	9.14	36.15	0.00	388.34	0.094	0.00	0.10	10.211	B
B-AD	98.96	24.74	97.62	0.00	390.47	0.253	0.00	0.33	12.240	B
A-BCD	156.21	39.05	154.63	0.00	931.52	0.168	0.00	0.39	4.633	A
A-B	159.45	39.86	159.45	0.00	-	-	-	-	-	-
A-C	276.84	69.21	276.84	0.00	-	-	-	-	-	-
D-AB	109.76	27.44	108.71	0.00	520.81	0.211	0.00	0.26	8.715	A
D-BC	66.40	16.60	65.65	0.00	413.94	0.160	0.00	0.19	10.315	B
C-ABD	3.28	0.82	3.26	0.00	614.77	0.005	0.00	0.01	5.886	A
C-D	27.71	6.93	27.71	0.00	-	-	-	-	-	-
C-A	170.02	42.50	170.02	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	46.01	11.50	45.83	0.00	349.35	0.132	0.10	0.15	11.853	B
B-AD	115.80	28.95	115.21	0.00	351.38	0.330	0.33	0.48	15.201	C
A-BCD	219.00	54.75	218.26	0.00	992.54	0.221	0.39	0.58	4.658	A
A-B	178.53	44.63	178.53	0.00	-	-	-	-	-	-
A-C	309.96	77.49	309.96	0.00	-	-	-	-	-	-
D-AB	132.10	33.02	131.70	0.00	489.20	0.270	0.26	0.36	10.059	B
D-BC	78.26	19.57	78.00	0.00	381.72	0.205	0.19	0.25	11.841	B
C-ABD	4.29	1.07	4.28	0.00	616.65	0.007	0.01	0.01	5.878	A
C-D	33.04	8.26	33.04	0.00	-	-	-	-	-	-
C-A	202.70	50.68	202.70	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	61.49	15.37	61.04	0.00	291.52	0.211	0.15	0.26	15.583	C
B-AD	136.69	34.17	135.34	0.00	296.65	0.461	0.48	0.82	22.126	C
A-BCD	340.25	85.06	338.63	0.00	1081.23	0.315	0.58	0.99	4.864	A
A-B	192.33	48.08	192.33	0.00	-	-	-	-	-	-
A-C	333.92	83.48	333.92	0.00	-	-	-	-	-	-
D-AB	163.83	40.96	162.99	0.00	442.17	0.371	0.36	0.58	12.854	B
D-BC	93.81	23.45	93.30	0.00	335.87	0.279	0.25	0.38	14.810	B
C-ABD	5.97	1.49	5.96	0.00	620.98	0.010	0.01	0.01	5.852	A
C-D	40.36	10.09	40.36	0.00	-	-	-	-	-	-
C-A	247.64	61.91	247.64	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	61.70	15.42	61.68	0.00	290.31	0.213	0.26	0.27	15.744	C
B-AD	136.49	34.12	136.42	0.00	295.94	0.461	0.82	0.84	22.539	C
A-BCD	341.21	85.30	341.16	0.00	1082.11	0.315	0.99	1.00	4.885	A
A-B	191.98	47.99	191.98	0.00	-	-	-	-	-	-
A-C	333.31	83.33	333.31	0.00	-	-	-	-	-	-
D-AB	163.89	40.97	163.86	0.00	441.59	0.371	0.58	0.58	12.961	B
D-BC	93.75	23.44	93.73	0.00	335.30	0.280	0.38	0.38	14.900	B
C-ABD	5.98	1.49	5.98	0.00	620.64	0.010	0.01	0.01	5.856	A
C-D	40.36	10.09	40.36	0.00	-	-	-	-	-	-
C-A	247.63	61.91	247.63	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	46.21	11.55	46.65	0.00	347.91	0.133	0.27	0.16	11.968	B
B-AD	115.61	28.90	116.94	0.00	350.42	0.330	0.84	0.50	15.505	C
A-BCD	219.98	55.00	221.56	0.00	993.80	0.221	1.00	0.60	4.687	A
A-B	178.17	44.54	178.17	0.00	-	-	-	-	-	-
A-C	309.35	77.34	309.35	0.00	-	-	-	-	-	-
D-AB	132.16	33.04	132.98	0.00	488.42	0.271	0.58	0.38	10.151	B
D-BC	78.20	19.55	78.69	0.00	380.98	0.205	0.38	0.26	11.927	B
C-ABD	4.29	1.07	4.31	0.00	616.12	0.007	0.01	0.01	5.883	A
C-D	33.04	8.26	33.04	0.00	-	-	-	-	-	-
C-A	202.70	50.67	202.70	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	36.69	9.17	36.89	0.00	387.04	0.095	0.16	0.11	10.288	B
B-AD	98.82	24.71	99.45	0.00	389.42	0.254	0.50	0.35	12.441	B
A-BCD	157.43	39.36	158.21	0.00	932.51	0.169	0.60	0.41	4.665	A
A-B	159.00	39.75	159.00	0.00	-	-	-	-	-	-
A-C	276.06	69.02	276.06	0.00	-	-	-	-	-	-
D-AB	109.82	27.45	110.24	0.00	519.96	0.211	0.38	0.27	8.795	A
D-BC	66.35	16.59	66.62	0.00	413.12	0.161	0.26	0.19	10.399	B
C-ABD	3.29	0.82	3.30	0.00	614.18	0.005	0.01	0.01	5.892	A
C-D	27.71	6.93	27.71	0.00	-	-	-	-	-	-
C-A	170.01	42.50	170.01	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.47	0.10	10.211	B	B
B-AD	4.73	0.32	12.240	B	B
A-BCD	5.81	0.39	4.633	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	3.79	0.25	8.715	A	A
D-BC	2.70	0.18	10.315	B	B
C-ABD	0.08	0.01	5.886	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.17	0.14	11.853	B	B
B-AD	6.89	0.46	15.201	C	B
A-BCD	8.74	0.58	4.658	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.30	0.35	10.059	B	B
D-BC	3.69	0.25	11.841	B	B
C-ABD	0.11	0.01	5.878	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.74	0.25	15.583	C	B
B-AD	11.44	0.76	22.126	C	C
A-BCD	14.83	0.99	4.864	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	8.26	0.55	12.854	B	B
D-BC	5.45	0.36	14.810	B	B
C-ABD	0.16	0.01	5.852	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.97	0.26	15.744	C	B
B-AD	12.45	0.83	22.539	C	C
A-BCD	15.13	1.01	4.885	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	8.71	0.58	12.961	B	B
D-BC	5.73	0.38	14.900	B	B
C-ABD	0.16	0.01	5.856	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.43	0.16	11.968	B	B
B-AD	8.00	0.53	15.505	C	B
A-BCD	9.10	0.61	4.687	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.87	0.39	10.151	B	B
D-BC	4.09	0.27	11.927	B	B
C-ABD	0.11	0.01	5.883	A	A
C-D	-	-	-	-	-

C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.64	0.11	10.288	B	B
B-AD	5.41	0.36	12.441	B	B
A-BCD	6.14	0.41	4.665	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.19	0.28	8.795	A	A
D-BC	3.00	0.20	10.399	B	B
C-ABD	0.09	0.01	5.892	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2021 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, PM	2021 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		24.07	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	559.225	0.102	0.257	0.257	-	-	-	0.162	0.368	-	0.257	0.257	0.129
1	B-C	682.565	0.105	0.264	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	544.467	0.099	0.251	0.251	-	-	-	0.158	0.358	0.158	-	-	-
1	B-D, offside lane	559.225	0.102	0.257	0.257	-	-	-	0.162	0.368	0.162	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	728.759	-	-	-	-	-	-	0.282	-	0.112	-	-	-
1	D-B, nearside lane	585.732	0.170	0.170	0.385	-	-	-	0.270	0.270	0.107	-	-	-
1	D-B, offside lane	560.636	0.162	0.162	0.369	-	-	-	0.258	0.258	0.102	-	-	-
1	D-C	560.636	-	0.162	0.369	0.129	0.258	0.258	0.258	0.258	0.102	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	841.00	100.000
2 - Occupation Ln	ONE HOUR	✓	216.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	635.00	100.000
4 - Occupation Rd	ONE HOUR	✓	184.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	353.000	368.000	120.000
	2 - Occupation Ln	152.000	0.000	2.000	62.000

	3 - Mushroom Ln	558.000	5.000	0.000	72.000
	4 - Occupation Rd	111.000	62.000	11.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.42	0.44	0.14
	2 - Occupation Ln	0.70	0.00	0.01	0.29
	3 - Mushroom Ln	0.88	0.01	0.00	0.11
	4 - Occupation Rd	0.60	0.34	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.44	44.97	0.75	E	46.38	69.56	29.05	25.05	0.32	29.05	25.05
B-AD	0.78	68.04	3.06	F	151.83	227.74	130.63	34.42	1.45	130.67	34.43
A-BCD	0.52	7.27	2.40	A	368.42	552.63	126.07	13.69	1.40	126.08	13.69
A-B	-	-	-	-	197.45	296.18	-	-	-	-	-
A-C	-	-	-	-	205.84	308.77	-	-	-	-	-
D-AB	0.41	15.64	0.68	C	131.41	197.11	39.48	12.02	0.44	39.49	12.02
D-BC	0.21	21.22	0.26	C	37.44	56.15	15.13	16.16	0.17	15.13	16.16
C-ABD	0.02	4.59	0.02	A	12.46	18.69	1.55	4.97	0.02	1.55	4.97
C-D	-	-	-	-	65.17	97.75	-	-	-	-	-
C-A	-	-	-	-	505.06	757.59	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	32.85	8.21	32.39	0.00	316.45	0.104	0.00	0.11	12.653	B
B-AD	129.77	32.44	127.33	0.00	336.30	0.386	0.00	0.61	17.040	C
A-BCD	225.38	56.35	222.75	0.00	897.23	0.251	0.00	0.66	5.335	A
A-B	199.64	49.91	199.64	0.00	-	-	-	-	-	-
A-C	208.13	52.03	208.13	0.00	-	-	-	-	-	-
D-AB	107.47	26.87	106.40	0.00	502.23	0.214	0.00	0.27	9.070	A
D-BC	31.05	7.76	30.64	0.00	327.87	0.095	0.00	0.10	12.098	B
C-ABD	8.24	2.06	8.20	0.00	792.85	0.010	0.00	0.01	4.587	A
C-D	53.69	13.42	53.69	0.00	-	-	-	-	-	-

C-A	416.13	104.03	416.13	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	43.06	10.76	42.74	0.00	259.46	0.166	0.11	0.19	16.586	C
B-AD	151.12	37.78	149.46	0.00	291.10	0.519	0.61	1.02	25.115	D
A-BCD	331.58	82.90	329.86	0.00	959.75	0.345	0.66	1.09	5.739	A
A-B	207.81	51.95	207.81	0.00	-	-	-	-	-	-
A-C	216.64	54.16	216.64	0.00	-	-	-	-	-	-
D-AB	128.60	32.15	128.13	0.00	458.02	0.281	0.27	0.38	10.897	B
D-BC	36.82	9.20	36.64	0.00	281.24	0.131	0.10	0.15	14.707	B
C-ABD	11.53	2.88	11.51	0.00	827.73	0.014	0.01	0.02	4.410	A
C-D	63.92	15.98	63.92	0.00	-	-	-	-	-	-
C-A	495.40	123.85	495.40	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	61.97	15.49	60.21	0.00	153.41	0.404	0.19	0.63	37.966	E
B-AD	175.85	43.96	168.99	0.00	225.99	0.778	1.02	2.74	57.361	F
A-BCD	543.13	135.78	538.16	0.00	1048.84	0.518	1.09	2.33	7.122	A
A-B	187.43	46.86	187.43	0.00	-	-	-	-	-	-
A-C	195.40	48.85	195.40	0.00	-	-	-	-	-	-
D-AB	158.11	39.53	156.99	0.00	389.35	0.406	0.38	0.67	15.417	C
D-BC	44.47	11.12	44.05	0.00	215.38	0.206	0.15	0.25	20.961	C
C-ABD	17.54	4.38	17.50	0.00	875.48	0.020	0.02	0.02	4.195	A
C-D	77.90	19.47	77.90	0.00	-	-	-	-	-	-
C-A	603.71	150.93	603.71	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	63.13	15.78	62.66	0.00	142.05	0.444	0.63	0.75	44.972	E
B-AD	174.69	43.67	173.41	0.00	223.70	0.781	2.74	3.06	68.044	F
A-BCD	547.31	136.83	547.06	0.00	1051.83	0.520	2.33	2.40	7.273	A
A-B	185.38	46.35	185.38	0.00	-	-	-	-	-	-
A-C	193.26	48.32	193.26	0.00	-	-	-	-	-	-
D-AB	158.15	39.54	158.10	0.00	388.14	0.407	0.67	0.68	15.641	C
D-BC	44.44	11.11	44.42	0.00	214.01	0.208	0.25	0.26	21.218	C
C-ABD	17.59	4.40	17.59	0.00	874.66	0.020	0.02	0.02	4.200	A
C-D	77.89	19.47	77.89	0.00	-	-	-	-	-	-
C-A	603.66	150.92	603.66	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	44.07	11.02	46.20	0.00	250.97	0.176	0.75	0.22	17.752	C
B-AD	150.11	37.53	157.77	0.00	288.87	0.520	3.06	1.14	28.847	D
A-BCD	335.19	83.80	340.16	0.00	963.80	0.348	2.40	1.16	5.862	A
A-B	206.05	51.51	206.05	0.00	-	-	-	-	-	-
A-C	214.80	53.70	214.80	0.00	-	-	-	-	-	-
D-AB	128.62	32.16	129.73	0.00	456.66	0.282	0.68	0.40	11.049	B
D-BC	36.79	9.20	37.21	0.00	279.44	0.132	0.26	0.15	14.885	B
C-ABD	11.57	2.89	11.60	0.00	826.49	0.014	0.02	0.02	4.417	A
C-D	63.92	15.98	63.92	0.00	-	-	-	-	-	-
C-A	495.36	123.84	495.36	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	33.18	8.29	33.57	0.00	313.26	0.106	0.22	0.12	12.888	B
B-AD	129.44	32.36	131.42	0.00	334.81	0.387	1.14	0.65	17.866	C
A-BCD	227.91	56.98	229.76	0.00	899.40	0.253	1.16	0.69	5.414	A
A-B	198.41	49.60	198.41	0.00	-	-	-	-	-	-
A-C	206.84	51.71	206.84	0.00	-	-	-	-	-	-
D-AB	107.49	26.87	107.98	0.00	501.26	0.214	0.40	0.28	9.166	A
D-BC	31.04	7.76	31.23	0.00	326.66	0.095	0.15	0.11	12.192	B
C-ABD	8.28	2.07	8.30	0.00	791.93	0.010	0.02	0.01	4.593	A
C-D	53.69	13.42	53.69	0.00	-	-	-	-	-	-

C-A	416.09	104.02	416.09	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.62	0.11	12.653	B	B
B-AD	8.44	0.56	17.040	C	B
A-BCD	9.68	0.65	5.335	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	3.86	0.26	9.070	A	A
D-BC	1.47	0.10	12.098	B	B
C-ABD	0.17	0.01	4.587	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.79	0.19	16.586	C	B
B-AD	14.19	0.95	25.115	D	C
A-BCD	16.43	1.10	5.739	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.56	0.37	10.897	B	B
D-BC	2.14	0.14	14.707	B	B
C-ABD	0.24	0.02	4.410	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	8.46	0.56	37.966	E	D
B-AD	33.71	2.25	57.361	F	E
A-BCD	34.87	2.32	7.122	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	9.44	0.63	15.417	C	B
D-BC	3.59	0.24	20.961	C	C
C-ABD	0.36	0.02	4.195	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	10.70	0.71	44.972	E	D
B-AD	43.91	2.93	68.044	F	E
A-BCD	36.70	2.45	7.273	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	10.09	0.67	15.641	C	B
D-BC	3.84	0.26	21.218	C	C
C-ABD	0.36	0.02	4.200	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.59	0.24	17.752	C	B
B-AD	19.97	1.33	28.847	D	C
A-BCD	17.92	1.19	5.862	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.25	0.42	11.049	B	B

D-BC	2.43	0.16	14.885	B	B
C-ABD	0.24	0.02	4.417	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.89	0.13	12.888	B	B
B-AD	10.40	0.69	17.866	C	B
A-BCD	10.47	0.70	5.414	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.28	0.29	9.166	A	A
D-BC	1.66	0.11	12.192	B	B
C-ABD	0.17	0.01	4.593	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, AM	2021 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		12.73	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor

3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	579.717	0.106	0.267	0.267	-	-	-	0.168	0.381	-	0.267	0.267	0.133
1	B-C	712.596	0.109	0.276	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	568.423	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
1	B-D, offside lane	579.717	0.106	0.267	0.267	-	-	-	0.168	0.381	0.168	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	713.148	-	-	-	-	-	-	0.276	-	0.109	-	-	-
1	D-B, nearside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-B, offside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-C	573.184	-	0.166	0.377	0.132	0.264	0.264	0.264	0.264	0.104	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	790.00	100.000
2 - Occupation Ln	ONE HOUR	✓	193.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	267.00	100.000
4 - Occupation Rd	ONE HOUR	✓	241.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	257.000	441.000	92.000
	2 - Occupation Ln	104.000	0.000	3.000	86.000
	3 - Mushroom Ln	227.000	3.000	0.000	37.000
	4 - Occupation Rd	93.000	105.000	43.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.33	0.56	0.12
	2 - Occupation Ln	0.54	0.00	0.02	0.45
	3 - Mushroom Ln	0.85	0.01	0.00	0.14
	4 - Occupation Rd	0.39	0.44	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.25	16.65	0.32	C	54.60	81.90	18.19	13.32	0.20	18.19	13.32
B-AD	0.49	23.97	0.93	C	122.50	183.75	53.49	17.47	0.59	53.50	17.47
A-BCD	0.32	4.88	1.00	A	240.03	360.05	60.06	10.01	0.67	60.07	10.01
A-B	-	-	-	-	178.53	267.80	-	-	-	-	-
A-C	-	-	-	-	306.35	459.53	-	-	-	-	-
D-AB	0.39	13.52	0.62	B	138.87	208.31	38.28	11.03	0.43	38.28	11.03
D-BC	0.29	15.29	0.41	C	82.27	123.41	26.00	12.64	0.29	26.01	12.64
C-ABD	0.01	5.90	0.01	A	4.52	6.78	0.71	6.28	0.01	0.71	6.28
C-D	-	-	-	-	33.70	50.56	-	-	-	-	-
C-A	-	-	-	-	206.78	310.17	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	41.33	10.33	40.86	0.00	387.61	0.107	0.00	0.12	10.369	B
B-AD	103.97	25.99	102.53	0.00	387.48	0.268	0.00	0.36	12.573	B
A-BCD	156.71	39.18	155.13	0.00	933.02	0.168	0.00	0.40	4.627	A
A-B	161.28	40.32	161.28	0.00	-	-	-	-	-	-

A-C	276.76	69.19	276.76	0.00	-	-	-	-	-	-
D-AB	112.62	28.16	111.52	0.00	515.49	0.218	0.00	0.28	8.888	A
D-BC	68.82	17.20	68.03	0.00	412.49	0.167	0.00	0.20	10.427	B
C-ABD	3.29	0.82	3.26	0.00	614.28	0.005	0.00	0.01	5.891	A
C-D	27.71	6.93	27.71	0.00	-	-	-	-	-	-
C-A	170.01	42.50	170.01	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	52.15	13.04	51.92	0.00	347.67	0.150	0.12	0.17	12.164	B
B-AD	121.36	30.34	120.71	0.00	348.25	0.348	0.36	0.52	15.774	C
A-BCD	219.85	54.96	219.10	0.00	994.31	0.221	0.40	0.58	4.653	A
A-B	180.54	45.14	180.54	0.00	-	-	-	-	-	-
A-C	309.80	77.45	309.80	0.00	-	-	-	-	-	-
D-AB	135.60	33.90	135.17	0.00	483.20	0.281	0.28	0.38	10.331	B
D-BC	81.06	20.26	80.78	0.00	379.83	0.213	0.20	0.27	12.027	B
C-ABD	4.29	1.07	4.28	0.00	616.09	0.007	0.01	0.01	5.883	A
C-D	33.04	8.26	33.04	0.00	-	-	-	-	-	-
C-A	202.70	50.67	202.70	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	69.98	17.49	69.42	0.00	287.75	0.243	0.17	0.31	16.447	C
B-AD	142.52	35.63	140.99	0.00	292.89	0.487	0.52	0.90	23.457	C
A-BCD	341.94	85.48	340.30	0.00	1083.42	0.316	0.58	0.99	4.862	A
A-B	194.36	48.59	194.36	0.00	-	-	-	-	-	-
A-C	333.51	83.38	333.51	0.00	-	-	-	-	-	-
D-AB	168.30	42.08	167.37	0.00	435.10	0.387	0.38	0.62	13.400	B
D-BC	97.04	24.26	96.50	0.00	333.00	0.291	0.27	0.40	15.187	C
C-ABD	5.98	1.49	5.97	0.00	620.32	0.010	0.01	0.01	5.859	A
C-D	40.36	10.09	40.36	0.00	-	-	-	-	-	-
C-A	247.63	61.91	247.63	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	70.24	17.56	70.21	0.00	286.36	0.245	0.31	0.32	16.654	C
B-AD	142.26	35.56	142.17	0.00	292.11	0.487	0.90	0.93	23.970	C
A-BCD	342.91	85.73	342.86	0.00	1084.31	0.316	0.99	1.00	4.882	A
A-B	194.00	48.50	194.00	0.00	-	-	-	-	-	-
A-C	332.90	83.22	332.90	0.00	-	-	-	-	-	-
D-AB	168.36	42.09	168.33	0.00	434.49	0.388	0.62	0.62	13.521	B
D-BC	96.98	24.25	96.96	0.00	332.37	0.292	0.40	0.41	15.289	C
C-ABD	5.99	1.50	5.98	0.00	619.96	0.010	0.01	0.01	5.862	A
C-D	40.36	10.09	40.36	0.00	-	-	-	-	-	-
C-A	247.63	61.91	247.63	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	52.40	13.10	52.95	0.00	346.08	0.151	0.32	0.18	12.305	B
B-AD	121.11	30.28	122.61	0.00	347.23	0.349	0.93	0.55	16.132	C
A-BCD	220.83	55.21	222.43	0.00	995.58	0.222	1.00	0.61	4.682	A
A-B	180.18	45.05	180.18	0.00	-	-	-	-	-	-
A-C	309.18	77.30	309.18	0.00	-	-	-	-	-	-
D-AB	135.66	33.92	136.57	0.00	482.37	0.281	0.62	0.40	10.439	B
D-BC	80.99	20.25	81.51	0.00	379.03	0.214	0.41	0.28	12.123	B
C-ABD	4.30	1.07	4.31	0.00	615.55	0.007	0.01	0.01	5.891	A
C-D	33.04	8.26	33.04	0.00	-	-	-	-	-	-
C-A	202.69	50.67	202.69	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	41.49	10.37	41.73	0.00	386.23	0.107	0.18	0.12	10.456	B
B-AD	103.81	25.95	104.51	0.00	386.41	0.269	0.55	0.37	12.801	B
A-BCD	157.95	39.49	158.73	0.00	934.02	0.169	0.61	0.41	4.659	A
A-B	160.83	40.21	160.83	0.00	-	-	-	-	-	-

A-C	275.97	68.99	275.97	0.00	-	-	-	-	-	-
D-AB	112.68	28.17	113.13	0.00	514.60	0.219	0.40	0.28	8.976	A
D-BC	68.76	17.19	69.05	0.00	411.63	0.167	0.28	0.20	10.517	B
C-ABD	3.30	0.82	3.30	0.00	613.69	0.005	0.01	0.01	5.897	A
C-D	27.71	6.93	27.71	0.00	-	-	-	-	-	-
C-A	170.01	42.50	170.01	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.69	0.11	10.369	B	B
B-AD	5.09	0.34	12.573	B	B
A-BCD	5.84	0.39	4.627	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	3.97	0.26	8.888	A	A
D-BC	2.83	0.19	10.427	B	B
C-ABD	0.08	0.01	5.891	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.52	0.17	12.164	B	B
B-AD	7.47	0.50	15.774	C	B
A-BCD	8.78	0.59	4.653	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.58	0.37	10.331	B	B
D-BC	3.87	0.26	12.027	B	B
C-ABD	0.11	0.01	5.883	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	4.47	0.30	16.447	C	B
B-AD	12.57	0.84	23.457	C	C
A-BCD	14.92	0.99	4.862	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	8.81	0.59	13.400	B	B
D-BC	5.77	0.38	15.187	C	B
C-ABD	0.16	0.01	5.859	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	4.77	0.32	16.654	C	B
B-AD	13.76	0.92	23.970	C	C
A-BCD	15.22	1.01	4.882	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	9.32	0.62	13.521	B	B
D-BC	6.08	0.41	15.289	C	B
C-ABD	0.16	0.01	5.862	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.84	0.19	12.305	B	B

B-AD	8.74	0.58	16.132	C	B
A-BCD	9.14	0.61	4.682	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.21	0.41	10.439	B	B
D-BC	4.31	0.29	12.123	B	B
C-ABD	0.11	0.01	5.891	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.89	0.13	10.456	B	B
B-AD	5.86	0.39	12.801	B	B
A-BCD	6.16	0.41	4.659	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.39	0.29	8.976	A	A
D-BC	3.15	0.21	10.517	B	B
C-ABD	0.09	0.01	5.897	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, PM	2021 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		28.90	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	558.091	0.102	0.257	0.257	-	-	-	0.162	0.367	-	0.257	0.257	0.128
1	B-C	686.116	0.105	0.266	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	547.300	0.100	0.252	0.252	-	-	-	0.159	0.360	0.159	-	-	-
1	B-D, offside lane	558.091	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	723.175	-	-	-	-	-	-	0.280	-	0.111	-	-	-
1	D-B, nearside lane	581.244	0.168	0.168	0.382	-	-	-	0.268	0.268	0.106	-	-	-
1	D-B, offside lane	565.124	0.164	0.164	0.372	-	-	-	0.260	0.260	0.103	-	-	-
1	D-C	565.124	-	0.164	0.372	0.130	0.260	0.260	0.260	0.260	0.103	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	844.00	100.000
2 - Occupation Ln	ONE HOUR	✓	228.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	635.00	100.000
4 - Occupation Rd	ONE HOUR	✓	196.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	356.000	368.000	120.000
	2 - Occupation Ln	156.000	0.000	2.000	70.000
	3 - Mushroom Ln	558.000	5.000	0.000	72.000
	4 - Occupation Rd	111.000	74.000	11.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.42	0.44	0.14
	2 - Occupation Ln	0.68	0.00	0.01	0.31
	3 - Mushroom Ln	0.88	0.01	0.00	0.11
	4 - Occupation Rd	0.57	0.38	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.57	62.95	1.18	F	53.00	79.50	40.04	30.22	0.44	40.05	30.22
B-AD	0.82	82.09	3.74	F	156.21	234.32	150.12	38.44	1.67	150.17	38.45
A-BCD	0.52	7.28	2.42	A	370.15	555.23	126.92	13.72	1.41	126.94	13.72
A-B	-	-	-	-	198.81	298.21	-	-	-	-	-
A-C	-	-	-	-	205.51	308.26	-	-	-	-	-
D-AB	0.45	17.73	0.80	C	137.13	205.70	45.14	13.17	0.50	45.15	13.17
D-BC	0.24	22.33	0.31	C	42.72	64.08	17.81	16.68	0.20	17.81	16.68
C-ABD	0.02	4.60	0.02	A	12.47	18.71	1.55	4.97	0.02	1.55	4.97
C-D	-	-	-	-	65.17	97.75	-	-	-	-	-
C-A	-	-	-	-	505.05	757.57	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	37.22	9.31	36.70	0.00	314.75	0.118	0.00	0.13	12.923	B
B-AD	134.43	33.61	131.81	0.00	333.47	0.403	0.00	0.65	17.637	C
A-BCD	226.15	56.54	223.50	0.00	898.80	0.252	0.00	0.66	5.329	A
A-B	201.24	50.31	201.24	0.00	-	-	-	-	-	-
A-C	208.02	52.00	208.02	0.00	-	-	-	-	-	-
D-AB	112.10	28.02	110.92	0.00	486.08	0.231	0.00	0.30	9.567	A
D-BC	35.46	8.87	34.98	0.00	329.09	0.108	0.00	0.12	12.221	B
C-ABD	8.25	2.06	8.20	0.00	792.44	0.010	0.00	0.01	4.590	A
C-D	53.69	13.42	53.69	0.00	-	-	-	-	-	-
C-A	416.12	104.03	416.12	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	48.99	12.25	48.59	0.00	255.49	0.192	0.13	0.23	17.366	C
B-AD	155.98	38.99	154.12	0.00	287.56	0.542	0.65	1.12	26.597	D
A-BCD	332.99	83.25	331.26	0.00	961.68	0.346	0.66	1.10	5.737	A
A-B	209.34	52.34	209.34	0.00	-	-	-	-	-	-
A-C	216.40	54.10	216.40	0.00	-	-	-	-	-	-
D-AB	134.17	33.54	133.63	0.00	440.37	0.305	0.30	0.43	11.715	B
D-BC	42.03	10.51	41.82	0.00	281.54	0.149	0.12	0.17	15.003	B
C-ABD	11.54	2.88	11.52	0.00	827.27	0.014	0.01	0.02	4.412	A
C-D	63.92	15.98	63.92	0.00	-	-	-	-	-	-
C-A	495.39	123.85	495.39	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	71.04	17.76	68.35	0.00	142.12	0.500	0.23	0.90	47.275	E
B-AD	179.99	45.00	171.53	0.00	219.84	0.819	1.12	3.23	65.540	F
A-BCD	546.09	136.52	541.06	0.00	1051.25	0.519	1.10	2.35	7.127	A
A-B	188.41	47.10	188.41	0.00	-	-	-	-	-	-
A-C	194.76	48.69	194.76	0.00	-	-	-	-	-	-
D-AB	165.07	41.27	163.67	0.00	369.29	0.447	0.43	0.78	17.388	C
D-BC	50.73	12.68	50.21	0.00	213.38	0.238	0.17	0.30	21.992	C
C-ABD	17.56	4.39	17.53	0.00	874.96	0.020	0.02	0.02	4.198	A
C-D	77.90	19.47	77.90	0.00	-	-	-	-	-	-
C-A	603.69	150.92	603.69	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	72.68	18.17	71.56	0.00	127.30	0.571	0.90	1.18	62.948	F
B-AD	178.35	44.59	176.33	0.00	216.56	0.824	3.23	3.74	82.093	F
A-BCD	550.34	137.58	550.08	0.00	1054.28	0.522	2.35	2.42	7.283	A
A-B	186.32	46.58	186.32	0.00	-	-	-	-	-	-
A-C	192.60	48.15	192.60	0.00	-	-	-	-	-	-
D-AB	165.12	41.28	165.05	0.00	367.94	0.449	0.78	0.80	17.728	C
D-BC	50.68	12.67	50.66	0.00	211.80	0.239	0.30	0.31	22.332	C
C-ABD	17.62	4.40	17.62	0.00	874.13	0.020	0.02	0.02	4.202	A
C-D	77.89	19.47	77.89	0.00	-	-	-	-	-	-
C-A	603.64	150.91	603.64	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	50.44	12.61	54.12	0.00	244.67	0.206	1.18	0.27	19.230	C
B-AD	154.52	38.63	164.43	0.00	284.84	0.542	3.74	1.26	31.963	D
A-BCD	336.65	84.16	341.67	0.00	965.78	0.349	2.42	1.16	5.859	A
A-B	207.55	51.89	207.55	0.00	-	-	-	-	-	-
A-C	214.54	53.64	214.54	0.00	-	-	-	-	-	-
D-AB	134.21	33.55	135.61	0.00	438.86	0.306	0.80	0.45	11.924	B
D-BC	41.99	10.50	42.51	0.00	279.54	0.150	0.31	0.18	15.219	C
C-ABD	11.58	2.90	11.62	0.00	826.02	0.014	0.02	0.02	4.420	A
C-D	63.92	15.98	63.92	0.00	-	-	-	-	-	-
C-A	495.35	123.84	495.35	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	37.63	9.41	38.14	0.00	311.20	0.121	0.27	0.14	13.207	B
B-AD	134.02	33.50	136.27	0.00	331.88	0.404	1.26	0.70	18.607	C
A-BCD	228.69	57.17	230.57	0.00	900.99	0.254	1.16	0.69	5.406	A
A-B	199.99	50.00	199.99	0.00	-	-	-	-	-	-
A-C	206.73	51.68	206.73	0.00	-	-	-	-	-	-
D-AB	112.12	28.03	112.69	0.00	485.03	0.231	0.45	0.30	9.685	A
D-BC	35.44	8.86	35.67	0.00	327.84	0.108	0.18	0.12	12.332	B
C-ABD	8.29	2.07	8.31	0.00	791.51	0.010	0.02	0.01	4.596	A
C-D	53.69	13.42	53.69	0.00	-	-	-	-	-	-
C-A	416.08	104.02	416.08	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.88	0.13	12.923	B	B
B-AD	9.03	0.60	17.637	C	B
A-BCD	9.72	0.65	5.329	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.24	0.28	9.567	A	A
D-BC	1.70	0.11	12.221	B	B
C-ABD	0.17	0.01	4.590	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.31	0.22	17.366	C	B
B-AD	15.41	1.03	26.597	D	C
A-BCD	16.51	1.10	5.737	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.22	0.41	11.715	B	B
D-BC	2.48	0.17	15.003	B	B
C-ABD	0.24	0.02	4.412	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	11.71	0.78	47.275	E	D
B-AD	38.68	2.58	65.540	F	E
A-BCD	35.15	2.34	7.127	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	11.00	0.73	17.388	C	B
D-BC	4.27	0.28	21.992	C	C
C-ABD	0.36	0.02	4.198	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	16.40	1.09	62.948	F	E
B-AD	52.87	3.52	82.093	F	F
A-BCD	37.01	2.47	7.283	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	11.89	0.79	17.728	C	B
D-BC	4.60	0.31	22.332	C	C
C-ABD	0.36	0.02	4.202	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	4.54	0.30	19.230	C	B
B-AD	22.90	1.53	31.963	D	C
A-BCD	18.02	1.20	5.859	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	7.07	0.47	11.924	B	B
D-BC	2.84	0.19	15.219	C	B
C-ABD	0.24	0.02	4.420	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.20	0.15	13.207	B	B
B-AD	11.24	0.75	18.607	C	B
A-BCD	10.51	0.70	5.406	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.73	0.32	9.685	A	A
D-BC	1.92	0.13	12.332	B	B
C-ABD	0.17	0.01	4.596	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2021 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, AM	2021 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		12.07	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	582.951	0.106	0.268	0.268	-	-	-	0.169	0.383	-	0.268	0.268	0.134
1	B-C	708.542	0.109	0.275	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	565.189	0.103	0.260	0.260	-	-	-	0.164	0.372	0.164	-	-	-
1	B-D, offside lane	582.951	0.106	0.268	0.268	-	-	-	0.169	0.383	0.169	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	713.148	-	-	-	-	-	-	0.276	-	0.109	-	-	-
1	D-B, nearside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-B, offside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-C	573.184	-	0.166	0.377	0.132	0.264	0.264	0.264	0.264	0.104	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR		787.00	100.000

		✓		
2 - Occupation Ln	ONE HOUR	✓	180.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	267.00	100.000
4 - Occupation Rd	ONE HOUR	✓	234.00	100.000

Turning Proportions

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

		To			
		1 - Main St	**2 - Occupation Ln**	**3 - Mushroom Ln**	**4 - Occupation Rd**
From	**1 - Main St**	0.000	254.000	441.000	92.000
	2 - Occupation Ln	101.000	0.000	3.000	76.000
	3 - Mushroom Ln	227.000	3.000	0.000	37.000
	4 - Occupation Rd	93.000	98.000	43.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	**2 - Occupation Ln**	**3 - Mushroom Ln**	**4 - Occupation Rd**
From	**1 - Main St**	0.00	0.32	0.56	0.12
	2 - Occupation Ln	0.56	0.00	0.02	0.42
	3 - Mushroom Ln	0.85	0.01	0.00	0.14
	4 - Occupation Rd	0.40	0.42	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	**2 - Occupation Ln**	**3 - Mushroom Ln**	**4 - Occupation Rd**
From	**1 - Main St**	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	**2 - Occupation Ln**	**3 - Mushroom Ln**	**4 - Occupation Rd**
From	**1 - Main St**	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.21	15.74	0.27	C	48.11	72.17	15.43	12.83	0.17	15.43	12.83
B-AD	0.46	22.54	0.84	C	117.06	175.59	48.92	16.71	0.54	48.92	16.72
A-BCD	0.32	4.89	1.00	A	239.02	358.52	59.75	10.00	0.66	59.76	10.00
A-B	-	-	-	-	176.58	264.86	-	-	-	-	-
A-C	-	-	-	-	306.57	459.86	-	-	-	-	-
D-AB	0.37	12.96	0.58	B	135.26	202.89	36.11	10.68	0.40	36.12	10.68
D-BC	0.28	14.90	0.38	B	79.46	119.19	24.65	12.41	0.27	24.66	12.41
C-ABD	0.01	5.89	0.01	A	4.52	6.78	0.71	6.27	0.01	0.71	6.27
C-D	-	-	-	-	33.70	50.56	-	-	-	-	-
C-A	-	-	-	-	206.78	310.17	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	36.56	9.14	36.15	0.00	388.34	0.094	0.00	0.10	10.211	B
B-AD	98.96	24.74	97.62	0.00	390.47	0.253	0.00	0.33	12.240	B
A-BCD	156.21	39.05	154.63	0.00	931.52	0.168	0.00	0.39	4.633	A
A-B	159.45	39.86	159.45	0.00	-	-	-	-	-	-
A-C	276.84	69.21	276.84	0.00	-	-	-	-	-	-
D-AB	109.76	27.44	108.71	0.00	520.81	0.211	0.00	0.26	8.715	A
D-BC	66.40	16.60	65.65	0.00	413.94	0.160	0.00	0.19	10.315	B
C-ABD	3.28	0.82	3.26	0.00	614.77	0.005	0.00	0.01	5.886	A
C-D	27.71	6.93	27.71	0.00	-	-	-	-	-	-
C-A	170.02	42.50	170.02	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	46.01	11.50	45.83	0.00	349.35	0.132	0.10	0.15	11.853	B
B-AD	115.80	28.95	115.21	0.00	351.38	0.330	0.33	0.48	15.201	C
A-BCD	219.00	54.75	218.26	0.00	992.54	0.221	0.39	0.58	4.658	A
A-B	178.53	44.63	178.53	0.00	-	-	-	-	-	-
A-C	309.96	77.49	309.96	0.00	-	-	-	-	-	-
D-AB	132.10	33.02	131.70	0.00	489.20	0.270	0.26	0.36	10.059	B
D-BC	78.26	19.57	78.00	0.00	381.72	0.205	0.19	0.25	11.841	B
C-ABD	4.29	1.07	4.28	0.00	616.65	0.007	0.01	0.01	5.878	A
C-D	33.04	8.26	33.04	0.00	-	-	-	-	-	-
C-A	202.70	50.68	202.70	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	61.49	15.37	61.04	0.00	291.52	0.211	0.15	0.26	15.583	C
B-AD	136.69	34.17	135.34	0.00	296.65	0.461	0.48	0.82	22.126	C
A-BCD	340.25	85.06	338.63	0.00	1081.23	0.315	0.58	0.99	4.864	A
A-B	192.33	48.08	192.33	0.00	-	-	-	-	-	-
A-C	333.92	83.48	333.92	0.00	-	-	-	-	-	-
D-AB	163.83	40.96	162.99	0.00	442.17	0.371	0.36	0.58	12.854	B
D-BC	93.81	23.45	93.30	0.00	335.87	0.279	0.25	0.38	14.810	B
C-ABD	5.97	1.49	5.96	0.00	620.98	0.010	0.01	0.01	5.852	A
C-D	40.36	10.09	40.36	0.00	-	-	-	-	-	-
C-A	247.64	61.91	247.64	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	61.70	15.42	61.68	0.00	290.31	0.213	0.26	0.27	15.744	C
B-AD	136.49	34.12	136.42	0.00	295.94	0.461	0.82	0.84	22.539	C
A-BCD	341.21	85.30	341.16	0.00	1082.11	0.315	0.99	1.00	4.885	A
A-B	191.98	47.99	191.98	0.00	-	-	-	-	-	-
A-C	333.31	83.33	333.31	0.00	-	-	-	-	-	-
D-AB	163.89	40.97	163.86	0.00	441.59	0.371	0.58	0.58	12.961	B
D-BC	93.75	23.44	93.73	0.00	335.30	0.280	0.38	0.38	14.900	B
C-ABD	5.98	1.49	5.98	0.00	620.64	0.010	0.01	0.01	5.856	A
C-D	40.36	10.09	40.36	0.00	-	-	-	-	-	-
C-A	247.63	61.91	247.63	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	46.21	11.55	46.65	0.00	347.91	0.133	0.27	0.16	11.968	B
B-AD	115.61	28.90	116.94	0.00	350.42	0.330	0.84	0.50	15.505	C
A-BCD	219.98	55.00	221.56	0.00	993.80	0.221	1.00	0.60	4.687	A
A-B	178.17	44.54	178.17	0.00	-	-	-	-	-	-
A-C	309.35	77.34	309.35	0.00	-	-	-	-	-	-
D-AB	132.16	33.04	132.98	0.00	488.42	0.271	0.58	0.38	10.151	B
D-BC	78.20	19.55	78.69	0.00	380.98	0.205	0.38	0.26	11.927	B
C-ABD	4.29	1.07	4.31	0.00	616.12	0.007	0.01	0.01	5.883	A

C-D	33.04	8.26	33.04	0.00	-	-	-	-	-	-
C-A	202.70	50.67	202.70	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	36.69	9.17	36.89	0.00	387.04	0.095	0.16	0.11	10.288	B
B-AD	98.82	24.71	99.45	0.00	389.42	0.254	0.50	0.35	12.441	B
A-BCD	157.43	39.36	158.21	0.00	932.51	0.169	0.60	0.41	4.665	A
A-B	159.00	39.75	159.00	0.00	-	-	-	-	-	-
A-C	276.06	69.02	276.06	0.00	-	-	-	-	-	-
D-AB	109.82	27.45	110.24	0.00	519.96	0.211	0.38	0.27	8.795	A
D-BC	66.35	16.59	66.62	0.00	413.12	0.161	0.26	0.19	10.399	B
C-ABD	3.29	0.82	3.30	0.00	614.18	0.005	0.01	0.01	5.892	A
C-D	27.71	6.93	27.71	0.00	-	-	-	-	-	-
C-A	170.01	42.50	170.01	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.47	0.10	10.211	B	B
B-AD	4.73	0.32	12.240	B	B
A-BCD	5.81	0.39	4.633	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	3.79	0.25	8.715	A	A
D-BC	2.70	0.18	10.315	B	B
C-ABD	0.08	0.01	5.886	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.17	0.14	11.853	B	B
B-AD	6.89	0.46	15.201	C	B
A-BCD	8.74	0.58	4.658	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.30	0.35	10.059	B	B
D-BC	3.69	0.25	11.841	B	B
C-ABD	0.11	0.01	5.878	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.74	0.25	15.583	C	B
B-AD	11.44	0.76	22.126	C	C
A-BCD	14.83	0.99	4.864	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	8.26	0.55	12.854	B	B
D-BC	5.45	0.36	14.810	B	B
C-ABD	0.16	0.01	5.852	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.97	0.26	15.744	C	B
B-AD	12.45	0.83	22.539	C	C
A-BCD	15.13	1.01	4.885	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	8.71	0.58	12.961	B	B
D-BC	5.73	0.38	14.900	B	B
C-ABD	0.16	0.01	5.856	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.43	0.16	11.968	B	B
B-AD	8.00	0.53	15.505	C	B
A-BCD	9.10	0.61	4.687	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.87	0.39	10.151	B	B
D-BC	4.09	0.27	11.927	B	B
C-ABD	0.11	0.01	5.883	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.64	0.11	10.288	B	B
B-AD	5.41	0.36	12.441	B	B
A-BCD	6.14	0.41	4.665	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.19	0.28	8.795	A	A
D-BC	3.00	0.20	10.399	B	B
C-ABD	0.09	0.01	5.892	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2021 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, PM	2021 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		24.07	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	559.225	0.102	0.257	0.257	-	-	-	0.162	0.368	-	0.257	0.257	0.129
1	B-C	682.565	0.105	0.264	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	544.467	0.099	0.251	0.251	-	-	-	0.158	0.358	0.158	-	-	-
1	B-D, offside lane	559.225	0.102	0.257	0.257	-	-	-	0.162	0.368	0.162	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	728.759	-	-	-	-	-	-	0.282	-	0.112	-	-	-
1	D-B, nearside lane	585.732	0.170	0.170	0.385	-	-	-	0.270	0.270	0.107	-	-	-
1	D-B, offside lane	560.636	0.162	0.162	0.369	-	-	-	0.258	0.258	0.102	-	-	-
1	D-C	560.636	-	0.162	0.369	0.129	0.258	0.258	0.258	0.258	0.102	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	841.00	100.000
2 - Occupation Ln	ONE HOUR	✓	216.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	635.00	100.000
4 - Occupation Rd	ONE HOUR	✓	184.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	353.000	368.000	120.000
	2 - Occupation Ln	152.000	0.000	2.000	62.000
	3 - Mushroom Ln	558.000	5.000	0.000	72.000
	4 - Occupation Rd	111.000	62.000	11.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.42	0.44	0.14
	2 - Occupation Ln	0.70	0.00	0.01	0.29
	3 - Mushroom Ln	0.88	0.01	0.00	0.11
	4 - Occupation Rd	0.60	0.34	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.44	44.97	0.75	E	46.38	69.56	29.05	25.05	0.32	29.05	25.05
B-AD	0.78	68.04	3.06	F	151.83	227.74	130.63	34.42	1.45	130.67	34.43
A-BCD	0.52	7.27	2.40	A	368.42	552.63	126.07	13.69	1.40	126.08	13.69
A-B	-	-	-	-	197.45	296.18	-	-	-	-	-
A-C	-	-	-	-	205.84	308.77	-	-	-	-	-
D-AB	0.41	15.64	0.68	C	131.41	197.11	39.48	12.02	0.44	39.49	12.02
D-BC	0.21	21.22	0.26	C	37.44	56.15	15.13	16.16	0.17	15.13	16.16
C-ABD	0.02	4.59	0.02	A	12.46	18.69	1.55	4.97	0.02	1.55	4.97
C-D	-	-	-	-	65.17	97.75	-	-	-	-	-
C-A	-	-	-	-	505.06	757.59	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	32.85	8.21	32.39	0.00	316.45	0.104	0.00	0.11	12.653	B
B-AD	129.77	32.44	127.33	0.00	336.30	0.386	0.00	0.61	17.040	C
A-BCD	225.38	56.35	222.75	0.00	897.23	0.251	0.00	0.66	5.335	A
A-B	199.64	49.91	199.64	0.00	-	-	-	-	-	-
A-C	208.13	52.03	208.13	0.00	-	-	-	-	-	-
D-AB	107.47	26.87	106.40	0.00	502.23	0.214	0.00	0.27	9.070	A
D-BC	31.05	7.76	30.64	0.00	327.87	0.095	0.00	0.10	12.098	B
C-ABD	8.24	2.06	8.20	0.00	792.85	0.010	0.00	0.01	4.587	A
C-D	53.69	13.42	53.69	0.00	-	-	-	-	-	-
C-A	416.13	104.03	416.13	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	43.06	10.76	42.74	0.00	259.46	0.166	0.11	0.19	16.586	C
B-AD	151.12	37.78	149.46	0.00	291.10	0.519	0.61	1.02	25.115	D
A-BCD	331.58	82.90	329.86	0.00	959.75	0.345	0.66	1.09	5.739	A
A-B	207.81	51.95	207.81	0.00	-	-	-	-	-	-
A-C	216.64	54.16	216.64	0.00	-	-	-	-	-	-
D-AB	128.60	32.15	128.13	0.00	458.02	0.281	0.27	0.38	10.897	B
D-BC	36.82	9.20	36.64	0.00	281.24	0.131	0.10	0.15	14.707	B
C-ABD	11.53	2.88	11.51	0.00	827.73	0.014	0.01	0.02	4.410	A
C-D	63.92	15.98	63.92	0.00	-	-	-	-	-	-
C-A	495.40	123.85	495.40	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	61.97	15.49	60.21	0.00	153.41	0.404	0.19	0.63	37.966	E
B-AD	175.85	43.96	168.99	0.00	225.99	0.778	1.02	2.74	57.361	F
A-BCD	543.13	135.78	538.16	0.00	1048.84	0.518	1.09	2.33	7.122	A
A-B	187.43	46.86	187.43	0.00	-	-	-	-	-	-
A-C	195.40	48.85	195.40	0.00	-	-	-	-	-	-
D-AB	158.11	39.53	156.99	0.00	389.35	0.406	0.38	0.67	15.417	C
D-BC	44.47	11.12	44.05	0.00	215.38	0.206	0.15	0.25	20.961	C
C-ABD	17.54	4.38	17.50	0.00	875.48	0.020	0.02	0.02	4.195	A
C-D	77.90	19.47	77.90	0.00	-	-	-	-	-	-
C-A	603.71	150.93	603.71	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	63.13	15.78	62.66	0.00	142.05	0.444	0.63	0.75	44.972	E
B-AD	174.69	43.67	173.41	0.00	223.70	0.781	2.74	3.06	68.044	F
A-BCD	547.31	136.83	547.06	0.00	1051.83	0.520	2.33	2.40	7.273	A
A-B	185.38	46.35	185.38	0.00	-	-	-	-	-	-
A-C	193.26	48.32	193.26	0.00	-	-	-	-	-	-
D-AB	158.15	39.54	158.10	0.00	388.14	0.407	0.67	0.68	15.641	C
D-BC	44.44	11.11	44.42	0.00	214.01	0.208	0.25	0.26	21.218	C
C-ABD	17.59	4.40	17.59	0.00	874.66	0.020	0.02	0.02	4.200	A
C-D	77.89	19.47	77.89	0.00	-	-	-	-	-	-
C-A	603.66	150.92	603.66	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	44.07	11.02	46.20	0.00	250.97	0.176	0.75	0.22	17.752	C
B-AD	150.11	37.53	157.77	0.00	288.87	0.520	3.06	1.14	28.847	D
A-BCD	335.19	83.80	340.16	0.00	963.80	0.348	2.40	1.16	5.862	A
A-B	206.05	51.51	206.05	0.00	-	-	-	-	-	-
A-C	214.80	53.70	214.80	0.00	-	-	-	-	-	-
D-AB	128.62	32.16	129.73	0.00	456.66	0.282	0.68	0.40	11.049	B

D-BC	36.79	9.20	37.21	0.00	279.44	0.132	0.26	0.15	14.885	B
C-ABD	11.57	2.89	11.60	0.00	826.49	0.014	0.02	0.02	4.417	A
C-D	63.92	15.98	63.92	0.00	-	-	-	-	-	-
C-A	495.36	123.84	495.36	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	33.18	8.29	33.57	0.00	313.26	0.106	0.22	0.12	12.888	B
B-AD	129.44	32.36	131.42	0.00	334.81	0.387	1.14	0.65	17.866	C
A-BCD	227.91	56.98	229.76	0.00	899.40	0.253	1.16	0.69	5.414	A
A-B	198.41	49.60	198.41	0.00	-	-	-	-	-	-
A-C	206.84	51.71	206.84	0.00	-	-	-	-	-	-
D-AB	107.49	26.87	107.98	0.00	501.26	0.214	0.40	0.28	9.166	A
D-BC	31.04	7.76	31.23	0.00	326.66	0.095	0.15	0.11	12.192	B
C-ABD	8.28	2.07	8.30	0.00	791.93	0.010	0.02	0.01	4.593	A
C-D	53.69	13.42	53.69	0.00	-	-	-	-	-	-
C-A	416.09	104.02	416.09	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.62	0.11	12.653	B	B
B-AD	8.44	0.56	17.040	C	B
A-BCD	9.68	0.65	5.335	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	3.86	0.26	9.070	A	A
D-BC	1.47	0.10	12.098	B	B
C-ABD	0.17	0.01	4.587	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.79	0.19	16.586	C	B
B-AD	14.19	0.95	25.115	D	C
A-BCD	16.43	1.10	5.739	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.56	0.37	10.897	B	B
D-BC	2.14	0.14	14.707	B	B
C-ABD	0.24	0.02	4.410	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	8.46	0.56	37.966	E	D
B-AD	33.71	2.25	57.361	F	E
A-BCD	34.87	2.32	7.122	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	9.44	0.63	15.417	C	B
D-BC	3.59	0.24	20.961	C	C
C-ABD	0.36	0.02	4.195	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	10.70	0.71	44.972	E	D
B-AD	43.91	2.93	68.044	F	E
A-BCD	36.70	2.45	7.273	A	A

A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	10.09	0.67	15.641	C	B
D-BC	3.84	0.26	21.218	C	C
C-ABD	0.36	0.02	4.200	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.59	0.24	17.752	C	B
B-AD	19.97	1.33	28.847	D	C
A-BCD	17.92	1.19	5.862	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.25	0.42	11.049	B	B
D-BC	2.43	0.16	14.885	B	B
C-ABD	0.24	0.02	4.417	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.89	0.13	12.888	B	B
B-AD	10.40	0.69	17.866	C	B
A-BCD	10.47	0.70	5.414	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.28	0.29	9.166	A	A
D-BC	1.66	0.11	12.192	B	B
C-ABD	0.17	0.01	4.593	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, AM	2021 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		12.73	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	579.717	0.106	0.267	0.267	-	-	-	0.168	0.381	-	0.267	0.267	0.133
1	B-C	712.596	0.109	0.276	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	568.423	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
1	B-D, offside lane	579.717	0.106	0.267	0.267	-	-	-	0.168	0.381	0.168	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	713.148	-	-	-	-	-	-	0.276	-	0.109	-	-	-
1	D-B, nearside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-B, offside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-C	573.184	-	0.166	0.377	0.132	0.264	0.264	0.264	0.264	0.104	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	790.00	100.000
2 - Occupation Ln	ONE HOUR	✓	193.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	267.00	100.000
4 - Occupation Rd	ONE HOUR	✓	241.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	257.000	441.000	92.000
	2 - Occupation Ln	104.000	0.000	3.000	86.000
	3 - Mushroom Ln	227.000	3.000	0.000	37.000
	4 - Occupation Rd	93.000	105.000	43.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.33	0.56	0.12
	2 - Occupation Ln	0.54	0.00	0.02	0.45
	3 - Mushroom Ln	0.85	0.01	0.00	0.14
	4 - Occupation Rd	0.39	0.44	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.25	16.65	0.32	C	54.60	81.90	18.19	13.32	0.20	18.19	13.32
B-AD	0.49	23.97	0.93	C	122.50	183.75	53.49	17.47	0.59	53.50	17.47
A-BCD	0.32	4.88	1.00	A	240.03	360.05	60.06	10.01	0.67	60.07	10.01
A-B	-	-	-	-	178.53	267.80	-	-	-	-	-
A-C	-	-	-	-	306.35	459.53	-	-	-	-	-
D-AB	0.39	13.52	0.62	B	138.87	208.31	38.28	11.03	0.43	38.28	11.03

D-BC	0.29	15.29	0.41	C	82.27	123.41	26.00	12.64	0.29	26.01	12.64
C-ABD	0.01	5.90	0.01	A	4.52	6.78	0.71	6.28	0.01	0.71	6.28
C-D	-	-	-	-	33.70	50.56	-	-	-	-	-
C-A	-	-	-	-	206.78	310.17	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	41.33	10.33	40.86	0.00	387.61	0.107	0.00	0.12	10.369	B
B-AD	103.97	25.99	102.53	0.00	387.48	0.268	0.00	0.36	12.573	B
A-BCD	156.71	39.18	155.13	0.00	933.02	0.168	0.00	0.40	4.627	A
A-B	161.28	40.32	161.28	0.00	-	-	-	-	-	-
A-C	276.76	69.19	276.76	0.00	-	-	-	-	-	-
D-AB	112.62	28.16	111.52	0.00	515.49	0.218	0.00	0.28	8.888	A
D-BC	68.82	17.20	68.03	0.00	412.49	0.167	0.00	0.20	10.427	B
C-ABD	3.29	0.82	3.26	0.00	614.28	0.005	0.00	0.01	5.891	A
C-D	27.71	6.93	27.71	0.00	-	-	-	-	-	-
C-A	170.01	42.50	170.01	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	52.15	13.04	51.92	0.00	347.67	0.150	0.12	0.17	12.164	B
B-AD	121.36	30.34	120.71	0.00	348.25	0.348	0.36	0.52	15.774	C
A-BCD	219.85	54.96	219.10	0.00	994.31	0.221	0.40	0.58	4.653	A
A-B	180.54	45.14	180.54	0.00	-	-	-	-	-	-
A-C	309.80	77.45	309.80	0.00	-	-	-	-	-	-
D-AB	135.60	33.90	135.17	0.00	483.20	0.281	0.28	0.38	10.331	B
D-BC	81.06	20.26	80.78	0.00	379.83	0.213	0.20	0.27	12.027	B
C-ABD	4.29	1.07	4.28	0.00	616.09	0.007	0.01	0.01	5.883	A
C-D	33.04	8.26	33.04	0.00	-	-	-	-	-	-
C-A	202.70	50.67	202.70	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	69.98	17.49	69.42	0.00	287.75	0.243	0.17	0.31	16.447	C
B-AD	142.52	35.63	140.99	0.00	292.89	0.487	0.52	0.90	23.457	C
A-BCD	341.94	85.48	340.30	0.00	1083.42	0.316	0.58	0.99	4.862	A
A-B	194.36	48.59	194.36	0.00	-	-	-	-	-	-
A-C	333.51	83.38	333.51	0.00	-	-	-	-	-	-
D-AB	168.30	42.08	167.37	0.00	435.10	0.387	0.38	0.62	13.400	B
D-BC	97.04	24.26	96.50	0.00	333.00	0.291	0.27	0.40	15.187	C
C-ABD	5.98	1.49	5.97	0.00	620.32	0.010	0.01	0.01	5.859	A
C-D	40.36	10.09	40.36	0.00	-	-	-	-	-	-
C-A	247.63	61.91	247.63	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	70.24	17.56	70.21	0.00	286.36	0.245	0.31	0.32	16.654	C
B-AD	142.26	35.56	142.17	0.00	292.11	0.487	0.90	0.93	23.970	C
A-BCD	342.91	85.73	342.86	0.00	1084.31	0.316	0.99	1.00	4.882	A
A-B	194.00	48.50	194.00	0.00	-	-	-	-	-	-
A-C	332.90	83.22	332.90	0.00	-	-	-	-	-	-
D-AB	168.36	42.09	168.33	0.00	434.49	0.388	0.62	0.62	13.521	B
D-BC	96.98	24.25	96.96	0.00	332.37	0.292	0.40	0.41	15.289	C
C-ABD	5.99	1.50	5.98	0.00	619.96	0.010	0.01	0.01	5.862	A
C-D	40.36	10.09	40.36	0.00	-	-	-	-	-	-
C-A	247.63	61.91	247.63	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

B-CD	52.40	13.10	52.95	0.00	346.08	0.151	0.32	0.18	12.305	B
B-AD	121.11	30.28	122.61	0.00	347.23	0.349	0.93	0.55	16.132	C
A-BCD	220.83	55.21	222.43	0.00	995.58	0.222	1.00	0.61	4.682	A
A-B	180.18	45.05	180.18	0.00	-	-	-	-	-	-
A-C	309.18	77.30	309.18	0.00	-	-	-	-	-	-
D-AB	135.66	33.92	136.57	0.00	482.37	0.281	0.62	0.40	10.439	B
D-BC	80.99	20.25	81.51	0.00	379.03	0.214	0.41	0.28	12.123	B
C-ABD	4.30	1.07	4.31	0.00	615.55	0.007	0.01	0.01	5.891	A
C-D	33.04	8.26	33.04	0.00	-	-	-	-	-	-
C-A	202.69	50.67	202.69	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	41.49	10.37	41.73	0.00	386.23	0.107	0.18	0.12	10.456	B
B-AD	103.81	25.95	104.51	0.00	386.41	0.269	0.55	0.37	12.801	B
A-BCD	157.95	39.49	158.73	0.00	934.02	0.169	0.61	0.41	4.659	A
A-B	160.83	40.21	160.83	0.00	-	-	-	-	-	-
A-C	275.97	68.99	275.97	0.00	-	-	-	-	-	-
D-AB	112.68	28.17	113.13	0.00	514.60	0.219	0.40	0.28	8.976	A
D-BC	68.76	17.19	69.05	0.00	411.63	0.167	0.28	0.20	10.517	B
C-ABD	3.30	0.82	3.30	0.00	613.69	0.005	0.01	0.01	5.897	A
C-D	27.71	6.93	27.71	0.00	-	-	-	-	-	-
C-A	170.01	42.50	170.01	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.69	0.11	10.369	B	B
B-AD	5.09	0.34	12.573	B	B
A-BCD	5.84	0.39	4.627	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	3.97	0.26	8.888	A	A
D-BC	2.83	0.19	10.427	B	B
C-ABD	0.08	0.01	5.891	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.52	0.17	12.164	B	B
B-AD	7.47	0.50	15.774	C	B
A-BCD	8.78	0.59	4.653	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.58	0.37	10.331	B	B
D-BC	3.87	0.26	12.027	B	B
C-ABD	0.11	0.01	5.883	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	4.47	0.30	16.447	C	B
B-AD	12.57	0.84	23.457	C	C
A-BCD	14.92	0.99	4.862	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	8.81	0.59	13.400	B	B
D-BC	5.77	0.38	15.187	C	B
C-ABD	0.16	0.01	5.859	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	4.77	0.32	16.654	C	B
B-AD	13.76	0.92	23.970	C	C
A-BCD	15.22	1.01	4.882	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	9.32	0.62	13.521	B	B
D-BC	6.08	0.41	15.289	C	B
C-ABD	0.16	0.01	5.862	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.84	0.19	12.305	B	B
B-AD	8.74	0.58	16.132	C	B
A-BCD	9.14	0.61	4.682	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.21	0.41	10.439	B	B
D-BC	4.31	0.29	12.123	B	B
C-ABD	0.11	0.01	5.891	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.89	0.13	10.456	B	B
B-AD	5.86	0.39	12.801	B	B
A-BCD	6.16	0.41	4.659	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.39	0.29	8.976	A	A
D-BC	3.15	0.21	10.517	B	B
C-ABD	0.09	0.01	5.897	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, PM	2021 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		28.90	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	558.091	0.102	0.257	0.257	-	-	-	0.162	0.367	-	0.257	0.257	0.128
1	B-C	686.116	0.105	0.266	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	547.300	0.100	0.252	0.252	-	-	-	0.159	0.360	0.159	-	-	-
1	B-D, offside lane	558.091	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	723.175	-	-	-	-	-	-	0.280	-	0.111	-	-	-
1	D-B, nearside lane	581.244	0.168	0.168	0.382	-	-	-	0.268	0.268	0.106	-	-	-
1	D-B, offside lane	565.124	0.164	0.164	0.372	-	-	-	0.260	0.260	0.103	-	-	-
1	D-C	565.124	-	0.164	0.372	0.130	0.260	0.260	0.260	0.260	0.103	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	844.00	100.000
2 - Occupation Ln	ONE HOUR	✓	228.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	635.00	100.000
4 - Occupation Rd	ONE HOUR	✓	196.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	356.000	368.000	120.000
	2 - Occupation Ln	156.000	0.000	2.000	70.000
	3 - Mushroom Ln	558.000	5.000	0.000	72.000
	4 - Occupation Rd	111.000	74.000	11.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.42	0.44	0.14
	2 - Occupation Ln	0.68	0.00	0.01	0.31
	3 - Mushroom Ln	0.88	0.01	0.00	0.11
	4 - Occupation Rd	0.57	0.38	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.57	62.95	1.18	F	53.00	79.50	40.04	30.22	0.44	40.05	30.22

B-AD	0.82	82.09	3.74	F	156.21	234.32	150.12	38.44	1.67	150.17	38.45
A-BCD	0.52	7.28	2.42	A	370.15	555.23	126.92	13.72	1.41	126.94	13.72
A-B	-	-	-	-	198.81	298.21	-	-	-	-	-
A-C	-	-	-	-	205.51	308.26	-	-	-	-	-
D-AB	0.45	17.73	0.80	C	137.13	205.70	45.14	13.17	0.50	45.15	13.17
D-BC	0.24	22.33	0.31	C	42.72	64.08	17.81	16.68	0.20	17.81	16.68
C-ABD	0.02	4.60	0.02	A	12.47	18.71	1.55	4.97	0.02	1.55	4.97
C-D	-	-	-	-	65.17	97.75	-	-	-	-	-
C-A	-	-	-	-	505.05	757.57	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	37.22	9.31	36.70	0.00	314.75	0.118	0.00	0.13	12.923	B
B-AD	134.43	33.61	131.81	0.00	333.47	0.403	0.00	0.65	17.637	C
A-BCD	226.15	56.54	223.50	0.00	898.80	0.252	0.00	0.66	5.329	A
A-B	201.24	50.31	201.24	0.00	-	-	-	-	-	-
A-C	208.02	52.00	208.02	0.00	-	-	-	-	-	-
D-AB	112.10	28.02	110.92	0.00	486.08	0.231	0.00	0.30	9.567	A
D-BC	35.46	8.87	34.98	0.00	329.09	0.108	0.00	0.12	12.221	B
C-ABD	8.25	2.06	8.20	0.00	792.44	0.010	0.00	0.01	4.590	A
C-D	53.69	13.42	53.69	0.00	-	-	-	-	-	-
C-A	416.12	104.03	416.12	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	48.99	12.25	48.59	0.00	255.49	0.192	0.13	0.23	17.366	C
B-AD	155.98	38.99	154.12	0.00	287.56	0.542	0.65	1.12	26.597	D
A-BCD	332.99	83.25	331.26	0.00	961.68	0.346	0.66	1.10	5.737	A
A-B	209.34	52.34	209.34	0.00	-	-	-	-	-	-
A-C	216.40	54.10	216.40	0.00	-	-	-	-	-	-
D-AB	134.17	33.54	133.63	0.00	440.37	0.305	0.30	0.43	11.715	B
D-BC	42.03	10.51	41.82	0.00	281.54	0.149	0.12	0.17	15.003	B
C-ABD	11.54	2.88	11.52	0.00	827.27	0.014	0.01	0.02	4.412	A
C-D	63.92	15.98	63.92	0.00	-	-	-	-	-	-
C-A	495.39	123.85	495.39	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	71.04	17.76	68.35	0.00	142.12	0.500	0.23	0.90	47.275	E
B-AD	179.99	45.00	171.53	0.00	219.84	0.819	1.12	3.23	65.540	F
A-BCD	546.09	136.52	541.06	0.00	1051.25	0.519	1.10	2.35	7.127	A
A-B	188.41	47.10	188.41	0.00	-	-	-	-	-	-
A-C	194.76	48.69	194.76	0.00	-	-	-	-	-	-
D-AB	165.07	41.27	163.67	0.00	369.29	0.447	0.43	0.78	17.388	C
D-BC	50.73	12.68	50.21	0.00	213.38	0.238	0.17	0.30	21.992	C
C-ABD	17.56	4.39	17.53	0.00	874.96	0.020	0.02	0.02	4.198	A
C-D	77.90	19.47	77.90	0.00	-	-	-	-	-	-
C-A	603.69	150.92	603.69	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	72.68	18.17	71.56	0.00	127.30	0.571	0.90	1.18	62.948	F
B-AD	178.35	44.59	176.33	0.00	216.56	0.824	3.23	3.74	82.093	F
A-BCD	550.34	137.58	550.08	0.00	1054.28	0.522	2.35	2.42	7.283	A
A-B	186.32	46.58	186.32	0.00	-	-	-	-	-	-
A-C	192.60	48.15	192.60	0.00	-	-	-	-	-	-
D-AB	165.12	41.28	165.05	0.00	367.94	0.449	0.78	0.80	17.728	C
D-BC	50.68	12.67	50.66	0.00	211.80	0.239	0.30	0.31	22.332	C
C-ABD	17.62	4.40	17.62	0.00	874.13	0.020	0.02	0.02	4.202	A
C-D	77.89	19.47	77.89	0.00	-	-	-	-	-	-

C-A	603.64	150.91	603.64	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	50.44	12.61	54.12	0.00	244.67	0.206	1.18	0.27	19.230	C
B-AD	154.52	38.63	164.43	0.00	284.84	0.542	3.74	1.26	31.963	D
A-BCD	336.65	84.16	341.67	0.00	965.78	0.349	2.42	1.16	5.859	A
A-B	207.55	51.89	207.55	0.00	-	-	-	-	-	-
A-C	214.54	53.64	214.54	0.00	-	-	-	-	-	-
D-AB	134.21	33.55	135.61	0.00	438.86	0.306	0.80	0.45	11.924	B
D-BC	41.99	10.50	42.51	0.00	279.54	0.150	0.31	0.18	15.219	C
C-ABD	11.58	2.90	11.62	0.00	826.02	0.014	0.02	0.02	4.420	A
C-D	63.92	15.98	63.92	0.00	-	-	-	-	-	-
C-A	495.35	123.84	495.35	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	37.63	9.41	38.14	0.00	311.20	0.121	0.27	0.14	13.207	B
B-AD	134.02	33.50	136.27	0.00	331.88	0.404	1.26	0.70	18.607	C
A-BCD	228.69	57.17	230.57	0.00	900.99	0.254	1.16	0.69	5.406	A
A-B	199.99	50.00	199.99	0.00	-	-	-	-	-	-
A-C	206.73	51.68	206.73	0.00	-	-	-	-	-	-
D-AB	112.12	28.03	112.69	0.00	485.03	0.231	0.45	0.30	9.685	A
D-BC	35.44	8.86	35.67	0.00	327.84	0.108	0.18	0.12	12.332	B
C-ABD	8.29	2.07	8.31	0.00	791.51	0.010	0.02	0.01	4.596	A
C-D	53.69	13.42	53.69	0.00	-	-	-	-	-	-
C-A	416.08	104.02	416.08	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.88	0.13	12.923	B	B
B-AD	9.03	0.60	17.637	C	B
A-BCD	9.72	0.65	5.329	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.24	0.28	9.567	A	A
D-BC	1.70	0.11	12.221	B	B
C-ABD	0.17	0.01	4.590	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.31	0.22	17.366	C	B
B-AD	15.41	1.03	26.597	D	C
A-BCD	16.51	1.10	5.737	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.22	0.41	11.715	B	B
D-BC	2.48	0.17	15.003	B	B
C-ABD	0.24	0.02	4.412	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	11.71	0.78	47.275	E	D
B-AD	38.68	2.58	65.540	F	E
A-BCD	35.15	2.34	7.127	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	11.00	0.73	17.388	C	B

D-BC	4.27	0.28	21.992	C	C
C-ABD	0.36	0.02	4.198	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	16.40	1.09	62.948	F	E
B-AD	52.87	3.52	82.093	F	F
A-BCD	37.01	2.47	7.283	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	11.89	0.79	17.728	C	B
D-BC	4.60	0.31	22.332	C	C
C-ABD	0.36	0.02	4.202	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	4.54	0.30	19.230	C	B
B-AD	22.90	1.53	31.963	D	C
A-BCD	18.02	1.20	5.859	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	7.07	0.47	11.924	B	B
D-BC	2.84	0.19	15.219	C	B
C-ABD	0.24	0.02	4.420	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.20	0.15	13.207	B	B
B-AD	11.24	0.75	18.607	C	B
A-BCD	10.51	0.70	5.406	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.73	0.32	9.685	A	A
D-BC	1.92	0.13	12.332	B	B
C-ABD	0.17	0.01	4.596	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base	2024													

Reg Link 25%, AM	Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		13.00	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	583.346	0.106	0.269	0.269	-	-	-	0.169	0.384	-	0.269	0.269	0.134
1	B-C	708.047	0.109	0.274	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	564.794	0.103	0.260	0.260	-	-	-	0.164	0.371	0.164	-	-	-
1	B-D, offside lane	583.346	0.106	0.269	0.269	-	-	-	0.169	0.384	0.169	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	713.148	-	-	-	-	-	-	0.276	-	0.109	-	-	-
1	D-B, nearside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-B, offside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-C	573.184	-	0.166	0.377	0.132	0.264	0.264	0.264	0.264	0.104	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	822.00	100.000
2 - Occupation Ln	ONE HOUR	✓	188.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	279.00	100.000
4 - Occupation Rd	ONE HOUR	✓	245.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	265.000	461.000	96.000
	2 - Occupation Ln	106.000	0.000	3.000	79.000
	3 - Mushroom Ln	237.000	3.000	0.000	39.000
	4 - Occupation Rd	97.000	103.000	45.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.32	0.56	0.12
	2 - Occupation Ln	0.56	0.00	0.02	0.42
	3 - Mushroom Ln	0.85	0.01	0.00	0.14
	4 - Occupation Rd	0.40	0.42	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.24	17.31	0.31	C	50.91	76.36	17.46	13.72	0.19	17.46	13.72
B-AD	0.50	25.50	0.98	D	121.61	182.41	55.30	18.19	0.61	55.31	18.19
A-BCD	0.34	4.99	1.13	A	261.50	392.24	66.87	10.23	0.74	66.88	10.23
A-B	-	-	-	-	179.87	269.81	-	-	-	-	-
A-C	-	-	-	-	312.91	469.37	-	-	-	-	-
D-AB	0.40	14.03	0.66	B	141.86	212.79	40.09	11.30	0.45	40.09	11.30
D-BC	0.30	15.95	0.43	C	82.96	124.43	27.03	13.04	0.30	27.04	13.04
C-ABD	0.01	5.89	0.01	A	4.64	6.97	0.73	6.27	0.01	0.73	6.27
C-D	-	-	-	-	35.52	53.28	-	-	-	-	-
C-A	-	-	-	-	215.85	323.78	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	38.35	9.59	37.91	0.00	379.11	0.101	0.00	0.11	10.537	B
B-AD	103.19	25.80	101.73	0.00	381.84	0.270	0.00	0.36	12.790	B
A-BCD	168.92	42.23	167.20	0.00	945.43	0.179	0.00	0.43	4.626	A
A-B	164.23	41.06	164.23	0.00	-	-	-	-	-	-
A-C	285.69	71.42	285.69	0.00	-	-	-	-	-	-
D-AB	115.00	28.75	113.86	0.00	513.32	0.224	0.00	0.29	8.987	A
D-BC	69.45	17.36	68.64	0.00	406.77	0.171	0.00	0.20	10.621	B
C-ABD	3.35	0.84	3.33	0.00	615.36	0.005	0.00	0.01	5.881	A
C-D	29.21	7.30	29.21	0.00	-	-	-	-	-	-
C-A	177.49	44.37	177.49	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	48.52	12.13	48.30	0.00	337.83	0.144	0.11	0.17	12.425	B
B-AD	120.49	30.12	119.81	0.00	340.76	0.354	0.36	0.53	16.240	C
A-BCD	238.46	59.62	237.62	0.00	1009.11	0.236	0.43	0.64	4.678	A
A-B	182.69	45.67	182.69	0.00	-	-	-	-	-	-
A-C	317.81	79.45	317.81	0.00	-	-	-	-	-	-
D-AB	138.50	34.62	138.04	0.00	479.68	0.289	0.29	0.40	10.521	B
D-BC	81.75	20.44	81.46	0.00	372.89	0.219	0.20	0.28	12.340	B
C-ABD	4.40	1.10	4.39	0.00	617.57	0.007	0.01	0.01	5.870	A
C-D	34.82	8.71	34.82	0.00	-	-	-	-	-	-
C-A	211.60	52.90	211.60	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	65.50	16.37	64.94	0.00	275.24	0.238	0.17	0.30	17.072	C
B-AD	141.49	35.37	139.82	0.00	282.90	0.500	0.53	0.95	24.866	C
A-BCD	375.22	93.80	373.31	0.00	1102.05	0.340	0.64	1.12	4.961	A
A-B	193.39	48.35	193.39	0.00	-	-	-	-	-	-
A-C	336.43	84.11	336.43	0.00	-	-	-	-	-	-
D-AB	171.99	43.00	170.98	0.00	429.17	0.401	0.40	0.65	13.888	B
D-BC	97.76	24.44	97.18	0.00	324.08	0.302	0.28	0.42	15.823	C
C-ABD	6.18	1.54	6.16	0.00	622.46	0.010	0.01	0.01	5.840	A
C-D	42.53	10.63	42.53	0.00	-	-	-	-	-	-
C-A	258.47	64.62	258.47	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	65.78	16.44	65.75	0.00	273.63	0.240	0.30	0.31	17.312	C
B-AD	141.21	35.30	141.11	0.00	282.01	0.501	0.95	0.98	25.500	D
A-BCD	376.42	94.10	376.36	0.00	1103.09	0.341	1.12	1.13	4.987	A
A-B	192.95	48.24	192.95	0.00	-	-	-	-	-	-

A-C	335.67	83.92	335.67	0.00	-	-	-	-	-	-
D-AB	172.06	43.02	172.02	0.00	428.46	0.402	0.65	0.66	14.034	B
D-BC	97.69	24.42	97.67	0.00	323.37	0.302	0.42	0.43	15.947	C
C-ABD	6.18	1.55	6.18	0.00	622.05	0.010	0.01	0.01	5.847	A
C-D	42.53	10.63	42.53	0.00	-	-	-	-	-	-
C-A	258.47	64.62	258.47	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	48.78	12.19	49.34	0.00	336.04	0.145	0.31	0.17	12.582	B
B-AD	120.23	30.06	121.88	0.00	339.62	0.354	0.98	0.56	16.656	C
A-BCD	239.64	59.91	241.51	0.00	1010.59	0.237	1.13	0.67	4.708	A
A-B	182.26	45.56	182.26	0.00	-	-	-	-	-	-
A-C	317.06	79.27	317.06	0.00	-	-	-	-	-	-
D-AB	138.57	34.64	139.56	0.00	478.75	0.289	0.66	0.41	10.645	B
D-BC	81.68	20.42	82.25	0.00	372.00	0.220	0.43	0.29	12.447	B
C-ABD	4.40	1.10	4.42	0.00	616.95	0.007	0.01	0.01	5.879	A
C-D	34.82	8.70	34.82	0.00	-	-	-	-	-	-
C-A	211.59	52.90	211.59	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	38.51	9.63	38.74	0.00	377.65	0.102	0.17	0.12	10.631	B
B-AD	103.02	25.76	103.76	0.00	380.68	0.271	0.56	0.38	13.034	B
A-BCD	170.32	42.58	171.20	0.00	946.56	0.180	0.67	0.45	4.660	A
A-B	163.72	40.93	163.72	0.00	-	-	-	-	-	-
A-C	284.81	71.20	284.81	0.00	-	-	-	-	-	-
D-AB	115.06	28.76	115.54	0.00	512.38	0.225	0.41	0.29	9.082	A
D-BC	69.39	17.35	69.70	0.00	405.87	0.171	0.29	0.21	10.718	B
C-ABD	3.36	0.84	3.37	0.00	614.71	0.005	0.01	0.01	5.888	A
C-D	29.21	7.30	29.21	0.00	-	-	-	-	-	-
C-A	177.48	44.37	177.48	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.59	0.11	10.537	B	B
B-AD	5.14	0.34	12.790	B	B
A-BCD	6.35	0.42	4.626	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.09	0.27	8.987	A	A
D-BC	2.90	0.19	10.621	B	B
C-ABD	0.08	0.01	5.881	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.39	0.16	12.425	B	B
B-AD	7.62	0.51	16.240	C	B
A-BCD	9.67	0.64	4.678	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.79	0.39	10.521	B	B
D-BC	4.00	0.27	12.340	B	B
C-ABD	0.11	0.01	5.870	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	4.34	0.29	17.072	C	B

B-AD	13.16	0.88	24.866	C	C
A-BCD	16.83	1.12	4.961	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	9.31	0.62	13.888	B	B
D-BC	6.04	0.40	15.823	C	B
C-ABD	0.16	0.01	5.840	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	4.64	0.31	17.312	C	B
B-AD	14.49	0.97	25.500	D	C
A-BCD	17.21	1.15	4.987	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	9.88	0.66	14.034	B	B
D-BC	6.38	0.43	15.947	C	B
C-ABD	0.16	0.01	5.847	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.71	0.18	12.582	B	B
B-AD	8.98	0.60	16.656	C	B
A-BCD	10.10	0.67	4.708	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.47	0.43	10.645	B	B
D-BC	4.47	0.30	12.447	B	B
C-ABD	0.12	0.01	5.879	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.79	0.12	10.631	B	B
B-AD	5.93	0.40	13.034	B	B
A-BCD	6.72	0.45	4.660	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.54	0.30	9.082	A	A
D-BC	3.24	0.22	10.718	B	B
C-ABD	0.09	0.01	5.888	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, PM	2024 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		36.98	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	559.215	0.102	0.257	0.257	-	-	-	0.162	0.368	-	0.257	0.257	0.129
1	B-C	682.594	0.105	0.264	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	544.491	0.099	0.251	0.251	-	-	-	0.158	0.358	0.158	-	-	-
1	B-D, offside lane	559.215	0.102	0.257	0.257	-	-	-	0.162	0.368	0.162	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	728.423	-	-	-	-	-	-	0.282	-	0.112	-	-	-
1	D-B, nearside lane	585.461	0.170	0.170	0.385	-	-	-	0.270	0.270	0.107	-	-	-
1	D-B, offside lane	560.907	0.162	0.162	0.369	-	-	-	0.258	0.258	0.102	-	-	-
1	D-C	560.907	-	0.162	0.369	0.129	0.258	0.258	0.258	0.258	0.102	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	880.00	100.000
2 - Occupation Ln	ONE HOUR	✓	226.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	664.00	100.000
4 - Occupation Rd	ONE HOUR	✓	193.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	369.000	385.000	126.000
	2 - Occupation Ln	159.000	0.000	2.000	65.000
	3 - Mushroom Ln	584.000	5.000	0.000	75.000
	4 - Occupation Rd	116.000	65.000	12.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.42	0.44	0.14
	2 - Occupation Ln	0.70	0.00	0.01	0.29
	3 - Mushroom Ln	0.88	0.01	0.00	0.11
	4 - Occupation Rd	0.60	0.34	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.76	121.04	2.16	F	50.65	75.97	55.05	43.48	0.61	55.05	43.48
B-AD	0.88	108.43	4.92	F	156.74	235.10	178.64	45.59	1.98	178.69	45.60
A-BCD	0.58	8.12	3.03	A	412.14	618.21	153.13	14.86	1.70	153.15	14.86
A-B	-	-	-	-	193.49	290.23	-	-	-	-	-
A-C	-	-	-	-	201.88	302.81	-	-	-	-	-
D-AB	0.45	17.86	0.81	C	137.61	206.41	45.17	13.13	0.50	45.18	13.13
D-BC	0.24	24.11	0.31	C	39.50	59.24	17.41	17.63	0.19	17.41	17.63
C-ABD	0.02	4.55	0.03	A	13.08	19.61	1.61	4.94	0.02	1.61	4.94
C-D	-	-	-	-	67.86	101.78	-	-	-	-	-
C-A	-	-	-	-	528.37	792.55	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	35.04	8.76	34.53	0.00	303.92	0.115	0.00	0.13	13.338	B
B-AD	135.10	33.78	132.37	0.00	325.77	0.415	0.00	0.68	18.372	C
A-BCD	247.26	61.82	244.29	0.00	910.87	0.271	0.00	0.74	5.401	A
A-B	203.22	50.80	203.22	0.00	-	-	-	-	-	-
A-C	212.03	53.01	212.03	0.00	-	-	-	-	-	-
D-AB	112.47	28.12	111.30	0.00	491.52	0.229	0.00	0.29	9.439	A
D-BC	32.83	8.21	32.38	0.00	317.22	0.104	0.00	0.11	12.600	B
C-ABD	8.55	2.14	8.50	0.00	801.21	0.011	0.00	0.01	4.541	A
C-D	55.92	13.98	55.92	0.00	-	-	-	-	-	-
C-A	435.43	108.86	435.43	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	46.39	11.60	45.98	0.00	241.13	0.192	0.13	0.23	18.410	C
B-AD	156.78	39.19	154.68	0.00	278.12	0.564	0.68	1.21	28.668	D
A-BCD	368.17	92.04	366.08	0.00	977.08	0.377	0.74	1.26	5.921	A
A-B	206.98	51.74	206.98	0.00	-	-	-	-	-	-
A-C	215.95	53.99	215.95	0.00	-	-	-	-	-	-
D-AB	134.62	33.66	134.08	0.00	444.04	0.303	0.29	0.43	11.593	B
D-BC	38.88	9.72	38.67	0.00	268.16	0.145	0.11	0.17	15.672	C
C-ABD	12.05	3.01	12.03	0.00	837.55	0.014	0.01	0.02	4.360	A
C-D	66.56	16.64	66.56	0.00	-	-	-	-	-	-
C-A	518.31	129.58	518.31	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	68.25	17.06	64.26	0.00	115.08	0.593	0.23	1.23	66.652	F
B-AD	180.58	45.15	169.50	0.00	207.39	0.871	1.21	3.98	79.024	F
A-BCD	613.83	153.46	607.18	0.00	1071.37	0.573	1.26	2.93	7.858	A
A-B	173.76	43.44	173.76	0.00	-	-	-	-	-	-
A-C	181.30	45.32	181.30	0.00	-	-	-	-	-	-
D-AB	165.67	41.42	164.22	0.00	368.83	0.449	0.43	0.79	17.457	C
D-BC	46.83	11.71	46.30	0.00	198.02	0.237	0.17	0.30	23.642	C
C-ABD	18.54	4.63	18.50	0.00	887.09	0.021	0.02	0.03	4.144	A
C-D	81.09	20.27	81.09	0.00	-	-	-	-	-	-
C-A	631.44	157.86	631.44	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	70.37	17.59	66.66	0.00	92.94	0.757	1.23	2.16	121.041	F
B-AD	178.46	44.61	174.69	0.00	202.66	0.881	3.98	4.92	108.428	F
A-BCD	620.02	155.00	619.60	0.00	1075.41	0.577	2.93	3.03	8.119	A
A-B	170.74	42.68	170.74	0.00	-	-	-	-	-	-
A-C	178.14	44.54	178.14	0.00	-	-	-	-	-	-
D-AB	165.72	41.43	165.65	0.00	367.06	0.451	0.79	0.81	17.857	C
D-BC	46.77	11.69	46.74	0.00	195.97	0.239	0.30	0.31	24.112	C
C-ABD	18.62	4.65	18.62	0.00	886.02	0.021	0.03	0.03	4.150	A
C-D	81.08	20.27	81.08	0.00	-	-	-	-	-	-
C-A	631.38	157.84	631.38	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	48.34	12.09	55.85	0.00	225.77	0.214	2.16	0.28	22.054	C
B-AD	154.83	38.71	168.93	0.00	274.29	0.564	4.92	1.40	37.837	E
A-BCD	373.26	93.31	379.99	0.00	982.48	0.380	3.03	1.35	6.100	A
A-B	204.49	51.12	204.49	0.00	-	-	-	-	-	-
A-C	213.36	53.34	213.36	0.00	-	-	-	-	-	-
D-AB	134.67	33.67	136.11	0.00	442.15	0.305	0.81	0.45	11.816	B
D-BC	38.84	9.71	39.37	0.00	265.33	0.146	0.31	0.17	15.967	C
C-ABD	12.11	3.03	12.14	0.00	835.93	0.014	0.03	0.02	4.369	A
C-D	66.56	16.64	66.56	0.00	-	-	-	-	-	-
C-A	518.26	129.56	518.26	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	35.48	8.87	36.06	0.00	299.85	0.118	0.28	0.14	13.674	B
B-AD	134.67	33.67	137.31	0.00	324.03	0.416	1.40	0.74	19.536	C
A-BCD	250.30	62.57	252.58	0.00	913.48	0.274	1.35	0.78	5.491	A
A-B	201.73	50.43	201.73	0.00	-	-	-	-	-	-
A-C	210.48	52.62	210.48	0.00	-	-	-	-	-	-
D-AB	112.49	28.12	113.06	0.00	490.38	0.229	0.45	0.30	9.557	A
D-BC	32.81	8.20	33.04	0.00	315.80	0.104	0.17	0.12	12.743	B
C-ABD	8.60	2.15	8.62	0.00	800.15	0.011	0.02	0.01	4.549	A
C-D	55.91	13.98	55.91	0.00	-	-	-	-	-	-
C-A	435.38	108.85	435.38	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.82	0.12	13.338	B	B
B-AD	9.42	0.63	18.372	C	B
A-BCD	10.88	0.73	5.401	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.20	0.28	9.439	A	A
D-BC	1.62	0.11	12.600	B	B
C-ABD	0.18	0.01	4.541	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.31	0.22	18.410	C	B
B-AD	16.55	1.10	28.668	D	C
A-BCD	19.03	1.27	5.921	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.17	0.41	11.593	B	B
D-BC	2.40	0.16	15.672	C	B
C-ABD	0.25	0.02	4.360	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	15.10	1.01	66.652	F	E
B-AD	45.61	3.04	79.024	F	E
A-BCD	43.58	2.91	7.858	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	11.09	0.74	17.457	C	B
D-BC	4.22	0.28	23.642	C	C
C-ABD	0.38	0.03	4.144	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	27.20	1.81	121.041	F	F
B-AD	67.64	4.51	108.428	F	F
A-BCD	46.60	3.11	8.119	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	12.00	0.80	17.857	C	B
D-BC	4.57	0.30	24.112	C	C
C-ABD	0.38	0.03	4.150	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	5.47	0.36	22.054	C	C
B-AD	27.54	1.84	37.837	E	D
A-BCD	21.19	1.41	6.100	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	7.03	0.47	11.816	B	B
D-BC	2.77	0.18	15.967	C	B
C-ABD	0.25	0.02	4.369	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.16	0.14	13.674	B	B
B-AD	11.88	0.79	19.536	C	B
A-BCD	11.85	0.79	5.491	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.69	0.31	9.557	A	A
D-BC	1.84	0.12	12.743	B	B
C-ABD	0.18	0.01	4.549	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default									

Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, AM	2024 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		13.68	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	579.883	0.106	0.267	0.267	-	-	-	0.168	0.381	-	0.267	0.267	0.133
1	B-C	712.389	0.109	0.276	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	568.257	0.103	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
1	B-D, offside lane	579.883	0.106	0.267	0.267	-	-	-	0.168	0.381	0.168	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-

1	D-A	713.148	-	-	-	-	-	-	0.276	-	0.109	-	-	-
1	D-B, nearside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-B, offside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-C	573.184	-	0.166	0.377	0.132	0.264	0.264	0.264	0.264	0.104	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	825.00	100.000
2 - Occupation Ln	ONE HOUR	✓	200.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	279.00	100.000
4 - Occupation Rd	ONE HOUR	✓	251.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	268.000	461.000	96.000
	2 - Occupation Ln	108.000	0.000	3.000	89.000
	3 - Mushroom Ln	237.000	3.000	0.000	39.000
	4 - Occupation Rd	97.000	109.000	45.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.32	0.56	0.12
	2 - Occupation Ln	0.54	0.00	0.02	0.45
	3 - Mushroom Ln	0.85	0.01	0.00	0.14
	4 - Occupation Rd	0.39	0.43	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
	1 - Main St	0.0	0.0	0.0	0.0

From	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.28	18.40	0.37	C	57.44	86.16	20.50	14.27	0.23	20.50	14.28
B-AD	0.52	27.08	1.07	D	126.09	189.13	59.79	18.97	0.66	59.80	18.97
A-BCD	0.34	4.99	1.14	A	262.61	393.91	67.23	10.24	0.75	67.23	10.24
A-B	-	-	-	-	181.76	272.65	-	-	-	-	-
A-C	-	-	-	-	312.66	468.99	-	-	-	-	-
D-AB	0.42	14.61	0.70	B	144.99	217.49	42.19	11.64	0.47	42.20	11.64
D-BC	0.31	16.35	0.45	C	85.33	128.00	28.31	13.27	0.31	28.31	13.27
C-ABD	0.01	5.89	0.01	A	4.65	6.97	0.73	6.28	0.01	0.73	6.28
C-D	-	-	-	-	35.52	53.28	-	-	-	-	-
C-A	-	-	-	-	215.85	323.77	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	43.13	10.78	42.62	0.00	378.76	0.114	0.00	0.13	10.694	B
B-AD	107.45	26.86	105.89	0.00	378.96	0.284	0.00	0.39	13.113	B
A-BCD	169.47	42.37	167.74	0.00	946.93	0.179	0.00	0.43	4.621	A
A-B	166.03	41.51	166.03	0.00	-	-	-	-	-	-
A-C	285.60	71.40	285.60	0.00	-	-	-	-	-	-
D-AB	117.46	29.36	116.27	0.00	508.80	0.231	0.00	0.30	9.144	A
D-BC	71.51	17.88	70.66	0.00	405.37	0.176	0.00	0.21	10.729	B
C-ABD	3.35	0.84	3.33	0.00	614.88	0.005	0.00	0.01	5.886	A
C-D	29.21	7.30	29.21	0.00	-	-	-	-	-	-
C-A	177.49	44.37	177.49	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	54.68	13.67	54.42	0.00	336.53	0.162	0.13	0.19	12.749	B
B-AD	125.12	31.28	124.38	0.00	337.79	0.370	0.39	0.57	16.808	C
A-BCD	239.37	59.84	238.53	0.00	1010.88	0.237	0.43	0.64	4.673	A
A-B	184.65	46.16	184.65	0.00	-	-	-	-	-	-
A-C	317.63	79.41	317.63	0.00	-	-	-	-	-	-
D-AB	141.52	35.38	141.03	0.00	474.53	0.298	0.30	0.42	10.778	B
D-BC	84.12	21.03	83.81	0.00	371.05	0.227	0.21	0.29	12.518	B
C-ABD	4.40	1.10	4.39	0.00	617.01	0.007	0.01	0.01	5.875	A
C-D	34.82	8.70	34.82	0.00	-	-	-	-	-	-
C-A	211.60	52.90	211.60	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	74.08	18.52	73.38	0.00	271.82	0.273	0.19	0.36	18.078	C
B-AD	146.13	36.53	144.27	0.00	279.26	0.523	0.57	1.04	26.300	D
A-BCD	377.08	94.27	375.15	0.00	1104.23	0.341	0.64	1.13	4.958	A
A-B	195.31	48.83	195.31	0.00	-	-	-	-	-	-
A-C	335.96	83.99	335.96	0.00	-	-	-	-	-	-
D-AB	175.88	43.97	174.78	0.00	423.03	0.416	0.42	0.69	14.437	B
D-BC	100.48	25.12	99.86	0.00	321.21	0.313	0.29	0.44	16.216	C
C-ABD	6.18	1.55	6.17	0.00	621.79	0.010	0.01	0.01	5.847	A
C-D	42.53	10.63	42.53	0.00	-	-	-	-	-	-

C-A	258.47	64.62	258.47	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	74.43	18.61	74.39	0.00	270.00	0.276	0.36	0.37	18.396	C
B-AD	145.78	36.44	145.66	0.00	278.29	0.524	1.04	1.07	27.076	D
A-BCD	378.29	94.57	378.23	0.00	1105.28	0.342	1.13	1.14	4.986	A
A-B	194.86	48.72	194.86	0.00	-	-	-	-	-	-
A-C	335.19	83.80	335.19	0.00	-	-	-	-	-	-
D-AB	175.96	43.99	175.91	0.00	422.27	0.417	0.69	0.70	14.605	B
D-BC	100.40	25.10	100.37	0.00	320.42	0.313	0.44	0.45	16.355	C
C-ABD	6.19	1.55	6.19	0.00	621.38	0.010	0.01	0.01	5.853	A
C-D	42.53	10.63	42.53	0.00	-	-	-	-	-	-
C-A	258.46	64.62	258.46	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	55.00	13.75	55.70	0.00	334.57	0.164	0.37	0.20	12.939	B
B-AD	124.80	31.20	126.64	0.00	336.58	0.371	1.07	0.61	17.293	C
A-BCD	240.56	60.14	242.45	0.00	1012.37	0.238	1.14	0.67	4.703	A
A-B	184.22	46.05	184.22	0.00	-	-	-	-	-	-
A-C	316.88	79.22	316.88	0.00	-	-	-	-	-	-
D-AB	141.60	35.40	142.68	0.00	473.56	0.299	0.70	0.43	10.916	B
D-BC	84.04	21.01	84.65	0.00	370.10	0.227	0.45	0.30	12.637	B
C-ABD	4.41	1.10	4.42	0.00	616.38	0.007	0.01	0.01	5.882	A
C-D	34.82	8.70	34.82	0.00	-	-	-	-	-	-
C-A	211.59	52.90	211.59	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	43.32	10.83	43.60	0.00	377.20	0.115	0.20	0.13	10.799	B
B-AD	107.25	26.81	108.06	0.00	377.78	0.284	0.61	0.40	13.385	B
A-BCD	170.88	42.72	171.76	0.00	948.06	0.180	0.67	0.45	4.653	A
A-B	165.51	41.38	165.51	0.00	-	-	-	-	-	-
A-C	284.71	71.18	284.71	0.00	-	-	-	-	-	-
D-AB	117.53	29.38	118.04	0.00	507.81	0.231	0.43	0.31	9.248	A
D-BC	71.44	17.86	71.76	0.00	404.43	0.177	0.30	0.22	10.831	B
C-ABD	3.36	0.84	3.37	0.00	614.23	0.005	0.01	0.01	5.895	A
C-D	29.21	7.30	29.21	0.00	-	-	-	-	-	-
C-A	177.48	44.37	177.48	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.82	0.12	10.694	B	B
B-AD	5.48	0.37	13.113	B	B
A-BCD	6.38	0.43	4.621	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.25	0.28	9.144	A	A
D-BC	3.02	0.20	10.729	B	B
C-ABD	0.09	0.01	5.886	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.76	0.18	12.749	B	B
B-AD	8.17	0.54	16.808	C	B
A-BCD	9.71	0.65	4.673	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.06	0.40	10.778	B	B

D-BC	4.18	0.28	12.518	B	B
C-ABD	0.11	0.01	5.875	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	5.17	0.34	18.078	C	B
B-AD	14.28	0.95	26.300	D	C
A-BCD	16.93	1.13	4.958	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	9.87	0.66	14.437	B	B
D-BC	6.34	0.42	16.216	C	B
C-ABD	0.16	0.01	5.847	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	5.56	0.37	18.396	C	B
B-AD	15.83	1.06	27.076	D	C
A-BCD	17.32	1.15	4.986	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	10.50	0.70	14.605	B	B
D-BC	6.72	0.45	16.355	C	B
C-ABD	0.16	0.01	5.853	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.15	0.21	12.939	B	B
B-AD	9.69	0.65	17.293	C	B
A-BCD	10.15	0.68	4.703	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.79	0.45	10.916	B	B
D-BC	4.68	0.31	12.637	B	B
C-ABD	0.12	0.01	5.882	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.04	0.14	10.799	B	B
B-AD	6.34	0.42	13.385	B	B
A-BCD	6.74	0.45	4.653	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.73	0.32	9.248	A	A
D-BC	3.37	0.22	10.831	B	B
C-ABD	0.09	0.01	5.895	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, PM	2024 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		48.40	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	558.130	0.102	0.257	0.257	-	-	-	0.162	0.367	-	0.257	0.257	0.128

1	B-C	685.995	0.105	0.266	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	547.204	0.100	0.252	0.252	-	-	-	0.158	0.360	0.158	-	-	-
1	B-D, offside lane	558.130	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	723.104	-	-	-	-	-	-	0.280	-	0.111	-	-	-
1	D-B, nearside lane	581.186	0.168	0.168	0.382	-	-	-	0.268	0.268	0.106	-	-	-
1	D-B, offside lane	565.182	0.164	0.164	0.372	-	-	-	0.260	0.260	0.103	-	-	-
1	D-C	565.182	-	0.164	0.372	0.130	0.260	0.260	0.260	0.260	0.103	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	884.00	100.000
2 - Occupation Ln	ONE HOUR	✓	238.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	664.00	100.000
4 - Occupation Rd	ONE HOUR	✓	205.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	373.000	385.000	126.000
	2 - Occupation Ln	163.000	0.000	2.000	73.000
	3 - Mushroom Ln	584.000	5.000	0.000	75.000
	4 - Occupation Rd	116.000	77.000	12.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.42	0.44	0.14
	2 - Occupation Ln	0.68	0.00	0.01	0.31
	3 - Mushroom Ln	0.88	0.01	0.00	0.11
	4 - Occupation Rd	0.57	0.38	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.94	184.22	4.08	F	57.83	86.75	91.57	63.34	1.02	91.57	63.34
B-AD	0.94	138.09	6.55	F	160.56	240.84	217.04	54.07	2.41	217.10	54.08
A-BCD	0.58	8.15	3.07	A	414.75	622.13	154.66	14.92	1.72	154.68	14.92
A-B	-	-	-	-	195.07	292.61	-	-	-	-	-
A-C	-	-	-	-	201.35	302.02	-	-	-	-	-
D-AB	0.50	20.65	0.97	C	143.37	215.05	52.13	14.54	0.58	52.14	14.55
D-BC	0.28	25.80	0.37	D	44.74	67.11	20.53	18.36	0.23	20.53	18.36
C-ABD	0.02	4.55	0.03	A	13.10	19.65	1.62	4.94	0.02	1.62	4.94
C-D	-	-	-	-	67.85	101.78	-	-	-	-	-
C-A	-	-	-	-	528.35	792.52	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	39.53	9.88	38.94	0.00	301.88	0.131	0.00	0.15	13.662	B
B-AD	139.65	34.91	136.71	0.00	322.86	0.433	0.00	0.73	19.059	C
A-BCD	248.38	62.10	245.40	0.00	912.97	0.272	0.00	0.75	5.393	A
A-B	205.27	51.32	205.27	0.00	-	-	-	-	-	-
A-C	211.87	52.97	211.87	0.00	-	-	-	-	-	-
D-AB	117.11	29.28	115.82	0.00	475.68	0.246	0.00	0.32	9.973	A
D-BC	37.23	9.31	36.71	0.00	318.08	0.117	0.00	0.13	12.772	B
C-ABD	8.56	2.14	8.51	0.00	800.67	0.011	0.00	0.01	4.544	A
C-D	55.92	13.98	55.92	0.00	-	-	-	-	-	-
C-A	435.42	108.85	435.42	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	52.57	13.14	52.05	0.00	236.35	0.222	0.15	0.28	19.480	C
B-AD	161.39	40.35	159.02	0.00	274.37	0.588	0.73	1.33	30.575	D
A-BCD	370.27	92.57	368.16	0.00	979.66	0.378	0.75	1.27	5.917	A
A-B	208.86	52.21	208.86	0.00	-	-	-	-	-	-
A-C	215.58	53.89	215.58	0.00	-	-	-	-	-	-
D-AB	140.22	35.06	139.59	0.00	426.62	0.329	0.32	0.48	12.515	B
D-BC	44.07	11.02	43.82	0.00	267.97	0.164	0.13	0.19	16.041	C
C-ABD	12.06	3.02	12.05	0.00	836.94	0.014	0.01	0.02	4.363	A
C-D	66.56	16.64	66.56	0.00	-	-	-	-	-	-
C-A	518.30	129.57	518.30	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	78.02	19.50	70.27	0.00	100.61	0.775	0.28	2.22	102.205	F
B-AD	184.03	46.01	169.73	0.00	199.64	0.922	1.33	4.90	93.519	F
A-BCD	618.33	154.58	611.56	0.00	1074.59	0.575	1.27	2.96	7.879	A
A-B	174.68	43.67	174.68	0.00	-	-	-	-	-	-
A-C	180.30	45.07	180.30	0.00	-	-	-	-	-	-

D-AB	172.69	43.17	170.84	0.00	348.75	0.495	0.48	0.94	20.029	C
D-BC	53.02	13.26	52.35	0.00	194.87	0.272	0.19	0.36	25.102	D
C-ABD	18.58	4.64	18.54	0.00	886.41	0.021	0.02	0.03	4.147	A
C-D	81.09	20.27	81.09	0.00	-	-	-	-	-	-
C-A	631.41	157.85	631.41	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	81.15	20.29	73.69	0.00	86.66	0.936	2.22	4.08	184.217	F
B-AD	180.89	45.22	174.28	0.00	193.02	0.937	4.90	6.55	138.090	F
A-BCD	624.65	156.16	624.22	0.00	1078.69	0.579	2.96	3.07	8.148	A
A-B	171.57	42.89	171.57	0.00	-	-	-	-	-	-
A-C	177.09	44.27	177.09	0.00	-	-	-	-	-	-
D-AB	172.78	43.19	172.66	0.00	346.72	0.498	0.94	0.97	20.651	C
D-BC	52.93	13.23	52.89	0.00	192.31	0.275	0.36	0.37	25.802	D
C-ABD	18.66	4.66	18.66	0.00	885.32	0.021	0.03	0.03	4.153	A
C-D	81.08	20.27	81.08	0.00	-	-	-	-	-	-
C-A	631.34	157.84	631.34	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	55.63	13.91	70.50	0.00	214.71	0.259	4.08	0.36	27.377	D
B-AD	158.33	39.58	178.25	0.00	268.48	0.590	6.55	1.57	46.481	E
A-BCD	375.45	93.86	382.28	0.00	985.14	0.381	3.07	1.36	6.095	A
A-B	206.31	51.58	206.31	0.00	-	-	-	-	-	-
A-C	212.94	53.24	212.94	0.00	-	-	-	-	-	-
D-AB	140.29	35.07	142.15	0.00	424.48	0.331	0.97	0.50	12.834	B
D-BC	44.00	11.00	44.67	0.00	264.49	0.166	0.37	0.20	16.426	C
C-ABD	12.13	3.03	12.16	0.00	835.31	0.015	0.03	0.02	4.373	A
C-D	66.55	16.64	66.55	0.00	-	-	-	-	-	-
C-A	518.24	129.56	518.24	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	40.09	10.02	40.91	0.00	297.28	0.135	0.36	0.16	14.086	B
B-AD	139.09	34.77	142.21	0.00	321.00	0.433	1.57	0.79	20.465	C
A-BCD	251.45	62.86	253.75	0.00	915.60	0.275	1.36	0.79	5.483	A
A-B	203.76	50.94	203.76	0.00	-	-	-	-	-	-
A-C	210.31	52.58	210.31	0.00	-	-	-	-	-	-
D-AB	117.13	29.28	117.82	0.00	474.44	0.247	0.50	0.33	10.115	B
D-BC	37.20	9.30	37.48	0.00	316.60	0.118	0.20	0.14	12.909	B
C-ABD	8.61	2.15	8.62	0.00	799.61	0.011	0.02	0.01	4.552	A
C-D	55.91	13.98	55.91	0.00	-	-	-	-	-	-
C-A	435.38	108.84	435.38	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.10	0.14	13.662	B	B
B-AD	10.07	0.67	19.059	C	B
A-BCD	10.94	0.73	5.393	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.60	0.31	9.973	A	A
D-BC	1.86	0.12	12.772	B	B
C-ABD	0.18	0.01	4.544	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.94	0.26	19.480	C	B
B-AD	18.03	1.20	30.575	D	C

A-BCD	19.17	1.28	5.917	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.91	0.46	12.515	B	B
D-BC	2.77	0.18	16.041	C	B
C-ABD	0.25	0.02	4.363	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	24.66	1.64	102.205	F	F
B-AD	53.81	3.59	93.519	F	F
A-BCD	44.08	2.94	7.879	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	13.08	0.87	20.029	C	C
D-BC	5.05	0.34	25.102	D	C
C-ABD	0.38	0.03	4.147	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	48.99	3.27	184.217	F	F
B-AD	87.05	5.80	138.090	F	F
A-BCD	47.18	3.15	8.148	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	14.37	0.96	20.651	C	C
D-BC	5.51	0.37	25.802	D	C
C-ABD	0.38	0.03	4.153	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	9.35	0.62	27.377	D	C
B-AD	35.20	2.35	46.481	E	D
A-BCD	21.36	1.42	6.095	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	7.98	0.53	12.834	B	B
D-BC	3.23	0.22	16.426	C	B
C-ABD	0.25	0.02	4.373	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.52	0.17	14.086	B	B
B-AD	12.88	0.86	20.465	C	C
A-BCD	11.92	0.79	5.483	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.18	0.35	10.115	B	B
D-BC	2.11	0.14	12.909	B	B
C-ABD	0.18	0.01	4.552	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, AM	2024 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		13.00	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C

1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	583.346	0.106	0.269	0.269	-	-	-	0.169	0.384	-	0.269	0.269	0.134
1	B-C	708.047	0.109	0.274	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	564.794	0.103	0.260	0.260	-	-	-	0.164	0.371	0.164	-	-	-
1	B-D, offside lane	583.346	0.106	0.269	0.269	-	-	-	0.169	0.384	0.169	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	713.148	-	-	-	-	-	-	0.276	-	0.109	-	-	-
1	D-B, nearside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-B, offside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-C	573.184	-	0.166	0.377	0.132	0.264	0.264	0.264	0.264	0.104	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	822.00	100.000
2 - Occupation Ln	ONE HOUR	✓	188.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	279.00	100.000
4 - Occupation Rd	ONE HOUR	✓	245.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	265.000	461.000	96.000
	2 - Occupation Ln	106.000	0.000	3.000	79.000
	3 - Mushroom Ln	237.000	3.000	0.000	39.000
	4 - Occupation Rd	97.000	103.000	45.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.32	0.56	0.12
	2 - Occupation Ln	0.56	0.00	0.02	0.42
	3 - Mushroom Ln	0.85	0.01	0.00	0.14
	4 - Occupation Rd	0.40	0.42	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.24	17.31	0.31	C	50.91	76.36	17.46	13.72	0.19	17.46	13.72
B-AD	0.50	25.50	0.98	D	121.61	182.41	55.30	18.19	0.61	55.31	18.19
A-BCD	0.34	4.99	1.13	A	261.50	392.24	66.87	10.23	0.74	66.88	10.23
A-B	-	-	-	-	179.87	269.81	-	-	-	-	-
A-C	-	-	-	-	312.91	469.37	-	-	-	-	-
D-AB	0.40	14.03	0.66	B	141.86	212.79	40.09	11.30	0.45	40.09	11.30
D-BC	0.30	15.95	0.43	C	82.96	124.43	27.03	13.04	0.30	27.04	13.04
C-ABD	0.01	5.89	0.01	A	4.64	6.97	0.73	6.27	0.01	0.73	6.27
C-D	-	-	-	-	35.52	53.28	-	-	-	-	-
C-A	-	-	-	-	215.85	323.78	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	38.35	9.59	37.91	0.00	379.11	0.101	0.00	0.11	10.537	B
B-AD	103.19	25.80	101.73	0.00	381.84	0.270	0.00	0.36	12.790	B
A-BCD	168.92	42.23	167.20	0.00	945.43	0.179	0.00	0.43	4.626	A
A-B	164.23	41.06	164.23	0.00	-	-	-	-	-	-
A-C	285.69	71.42	285.69	0.00	-	-	-	-	-	-
D-AB	115.00	28.75	113.86	0.00	513.32	0.224	0.00	0.29	8.987	A
D-BC	69.45	17.36	68.64	0.00	406.77	0.171	0.00	0.20	10.621	B
C-ABD	3.35	0.84	3.33	0.00	615.36	0.005	0.00	0.01	5.881	A
C-D	29.21	7.30	29.21	0.00	-	-	-	-	-	-
C-A	177.49	44.37	177.49	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	48.52	12.13	48.30	0.00	337.83	0.144	0.11	0.17	12.425	B
B-AD	120.49	30.12	119.81	0.00	340.76	0.354	0.36	0.53	16.240	C
A-BCD	238.46	59.62	237.62	0.00	1009.11	0.236	0.43	0.64	4.678	A
A-B	182.69	45.67	182.69	0.00	-	-	-	-	-	-
A-C	317.81	79.45	317.81	0.00	-	-	-	-	-	-
D-AB	138.50	34.62	138.04	0.00	479.68	0.289	0.29	0.40	10.521	B
D-BC	81.75	20.44	81.46	0.00	372.89	0.219	0.20	0.28	12.340	B
C-ABD	4.40	1.10	4.39	0.00	617.57	0.007	0.01	0.01	5.870	A
C-D	34.82	8.71	34.82	0.00	-	-	-	-	-	-
C-A	211.60	52.90	211.60	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	65.50	16.37	64.94	0.00	275.24	0.238	0.17	0.30	17.072	C
B-AD	141.49	35.37	139.82	0.00	282.90	0.500	0.53	0.95	24.866	C
A-BCD	375.22	93.80	373.31	0.00	1102.05	0.340	0.64	1.12	4.961	A
A-B	193.39	48.35	193.39	0.00	-	-	-	-	-	-
A-C	336.43	84.11	336.43	0.00	-	-	-	-	-	-

D-AB	171.99	43.00	170.98	0.00	429.17	0.401	0.40	0.65	13.888	B
D-BC	97.76	24.44	97.18	0.00	324.08	0.302	0.28	0.42	15.823	C
C-ABD	6.18	1.54	6.16	0.00	622.46	0.010	0.01	0.01	5.840	A
C-D	42.53	10.63	42.53	0.00	-	-	-	-	-	-
C-A	258.47	64.62	258.47	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	65.78	16.44	65.75	0.00	273.63	0.240	0.30	0.31	17.312	C
B-AD	141.21	35.30	141.11	0.00	282.01	0.501	0.95	0.98	25.500	D
A-BCD	376.42	94.10	376.36	0.00	1103.09	0.341	1.12	1.13	4.987	A
A-B	192.95	48.24	192.95	0.00	-	-	-	-	-	-
A-C	335.67	83.92	335.67	0.00	-	-	-	-	-	-
D-AB	172.06	43.02	172.02	0.00	428.46	0.402	0.65	0.66	14.034	B
D-BC	97.69	24.42	97.67	0.00	323.37	0.302	0.42	0.43	15.947	C
C-ABD	6.18	1.55	6.18	0.00	622.05	0.010	0.01	0.01	5.847	A
C-D	42.53	10.63	42.53	0.00	-	-	-	-	-	-
C-A	258.47	64.62	258.47	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	48.78	12.19	49.34	0.00	336.04	0.145	0.31	0.17	12.582	B
B-AD	120.23	30.06	121.88	0.00	339.62	0.354	0.98	0.56	16.656	C
A-BCD	239.64	59.91	241.51	0.00	1010.59	0.237	1.13	0.67	4.708	A
A-B	182.26	45.56	182.26	0.00	-	-	-	-	-	-
A-C	317.06	79.27	317.06	0.00	-	-	-	-	-	-
D-AB	138.57	34.64	139.56	0.00	478.75	0.289	0.66	0.41	10.645	B
D-BC	81.68	20.42	82.25	0.00	372.00	0.220	0.43	0.29	12.447	B
C-ABD	4.40	1.10	4.42	0.00	616.95	0.007	0.01	0.01	5.879	A
C-D	34.82	8.70	34.82	0.00	-	-	-	-	-	-
C-A	211.59	52.90	211.59	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	38.51	9.63	38.74	0.00	377.65	0.102	0.17	0.12	10.631	B
B-AD	103.02	25.76	103.76	0.00	380.68	0.271	0.56	0.38	13.034	B
A-BCD	170.32	42.58	171.20	0.00	946.56	0.180	0.67	0.45	4.660	A
A-B	163.72	40.93	163.72	0.00	-	-	-	-	-	-
A-C	284.81	71.20	284.81	0.00	-	-	-	-	-	-
D-AB	115.06	28.76	115.54	0.00	512.38	0.225	0.41	0.29	9.082	A
D-BC	69.39	17.35	69.70	0.00	405.87	0.171	0.29	0.21	10.718	B
C-ABD	3.36	0.84	3.37	0.00	614.71	0.005	0.01	0.01	5.888	A
C-D	29.21	7.30	29.21	0.00	-	-	-	-	-	-
C-A	177.48	44.37	177.48	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.59	0.11	10.537	B	B
B-AD	5.14	0.34	12.790	B	B
A-BCD	6.35	0.42	4.626	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.09	0.27	8.987	A	A
D-BC	2.90	0.19	10.621	B	B
C-ABD	0.08	0.01	5.881	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.39	0.16	12.425	B	B
B-AD	7.62	0.51	16.240	C	B

A-BCD	9.67	0.64	4.678	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.79	0.39	10.521	B	B
D-BC	4.00	0.27	12.340	B	B
C-ABD	0.11	0.01	5.870	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	4.34	0.29	17.072	C	B
B-AD	13.16	0.88	24.866	C	C
A-BCD	16.83	1.12	4.961	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	9.31	0.62	13.888	B	B
D-BC	6.04	0.40	15.823	C	B
C-ABD	0.16	0.01	5.840	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	4.64	0.31	17.312	C	B
B-AD	14.49	0.97	25.500	D	C
A-BCD	17.21	1.15	4.987	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	9.88	0.66	14.034	B	B
D-BC	6.38	0.43	15.947	C	B
C-ABD	0.16	0.01	5.847	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.71	0.18	12.582	B	B
B-AD	8.98	0.60	16.656	C	B
A-BCD	10.10	0.67	4.708	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.47	0.43	10.645	B	B
D-BC	4.47	0.30	12.447	B	B
C-ABD	0.12	0.01	5.879	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.79	0.12	10.631	B	B
B-AD	5.93	0.40	13.034	B	B
A-BCD	6.72	0.45	4.660	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.54	0.30	9.082	A	A
D-BC	3.24	0.22	10.718	B	B
C-ABD	0.09	0.01	5.888	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, PM	2024 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		36.98	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C

1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	559.215	0.102	0.257	0.257	-	-	-	0.162	0.368	-	0.257	0.257	0.129
1	B-C	682.594	0.105	0.264	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	544.491	0.099	0.251	0.251	-	-	-	0.158	0.358	0.158	-	-	-
1	B-D, offside lane	559.215	0.102	0.257	0.257	-	-	-	0.162	0.368	0.162	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	728.423	-	-	-	-	-	-	0.282	-	0.112	-	-	-
1	D-B, nearside lane	585.461	0.170	0.170	0.385	-	-	-	0.270	0.270	0.107	-	-	-
1	D-B, offside lane	560.907	0.162	0.162	0.369	-	-	-	0.258	0.258	0.102	-	-	-
1	D-C	560.907	-	0.162	0.369	0.129	0.258	0.258	0.258	0.258	0.102	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	880.00	100.000
2 - Occupation Ln	ONE HOUR	✓	226.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	664.00	100.000
4 - Occupation Rd	ONE HOUR	✓	193.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	369.000	385.000	126.000
	2 - Occupation Ln	159.000	0.000	2.000	65.000
	3 - Mushroom Ln	584.000	5.000	0.000	75.000
	4 - Occupation Rd	116.000	65.000	12.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.42	0.44	0.14
	2 - Occupation Ln	0.70	0.00	0.01	0.29
	3 - Mushroom Ln	0.88	0.01	0.00	0.11
	4 - Occupation Rd	0.60	0.34	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.76	121.04	2.16	F	50.65	75.97	55.05	43.48	0.61	55.05	43.48
B-AD	0.88	108.43	4.92	F	156.74	235.10	178.64	45.59	1.98	178.69	45.60
A-BCD	0.58	8.12	3.03	A	412.14	618.21	153.13	14.86	1.70	153.15	14.86
A-B	-	-	-	-	193.49	290.23	-	-	-	-	-
A-C	-	-	-	-	201.88	302.81	-	-	-	-	-
D-AB	0.45	17.86	0.81	C	137.61	206.41	45.17	13.13	0.50	45.18	13.13
D-BC	0.24	24.11	0.31	C	39.50	59.24	17.41	17.63	0.19	17.41	17.63
C-ABD	0.02	4.55	0.03	A	13.08	19.61	1.61	4.94	0.02	1.61	4.94
C-D	-	-	-	-	67.86	101.78	-	-	-	-	-
C-A	-	-	-	-	528.37	792.55	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	35.04	8.76	34.53	0.00	303.92	0.115	0.00	0.13	13.338	B
B-AD	135.10	33.78	132.37	0.00	325.77	0.415	0.00	0.68	18.372	C
A-BCD	247.26	61.82	244.29	0.00	910.87	0.271	0.00	0.74	5.401	A
A-B	203.22	50.80	203.22	0.00	-	-	-	-	-	-
A-C	212.03	53.01	212.03	0.00	-	-	-	-	-	-
D-AB	112.47	28.12	111.30	0.00	491.52	0.229	0.00	0.29	9.439	A
D-BC	32.83	8.21	32.38	0.00	317.22	0.104	0.00	0.11	12.600	B
C-ABD	8.55	2.14	8.50	0.00	801.21	0.011	0.00	0.01	4.541	A
C-D	55.92	13.98	55.92	0.00	-	-	-	-	-	-
C-A	435.43	108.86	435.43	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	46.39	11.60	45.98	0.00	241.13	0.192	0.13	0.23	18.410	C
B-AD	156.78	39.19	154.68	0.00	278.12	0.564	0.68	1.21	28.668	D
A-BCD	368.17	92.04	366.08	0.00	977.08	0.377	0.74	1.26	5.921	A
A-B	206.98	51.74	206.98	0.00	-	-	-	-	-	-
A-C	215.95	53.99	215.95	0.00	-	-	-	-	-	-
D-AB	134.62	33.66	134.08	0.00	444.04	0.303	0.29	0.43	11.593	B
D-BC	38.88	9.72	38.67	0.00	268.16	0.145	0.11	0.17	15.672	C
C-ABD	12.05	3.01	12.03	0.00	837.55	0.014	0.01	0.02	4.360	A
C-D	66.56	16.64	66.56	0.00	-	-	-	-	-	-
C-A	518.31	129.58	518.31	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	68.25	17.06	64.26	0.00	115.08	0.593	0.23	1.23	66.652	F
B-AD	180.58	45.15	169.50	0.00	207.39	0.871	1.21	3.98	79.024	F
A-BCD	613.83	153.46	607.18	0.00	1071.37	0.573	1.26	2.93	7.858	A
A-B	173.76	43.44	173.76	0.00	-	-	-	-	-	-
A-C	181.30	45.32	181.30	0.00	-	-	-	-	-	-

D-AB	165.67	41.42	164.22	0.00	368.83	0.449	0.43	0.79	17.457	C
D-BC	46.83	11.71	46.30	0.00	198.02	0.237	0.17	0.30	23.642	C
C-ABD	18.54	4.63	18.50	0.00	887.09	0.021	0.02	0.03	4.144	A
C-D	81.09	20.27	81.09	0.00	-	-	-	-	-	-
C-A	631.44	157.86	631.44	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	70.37	17.59	66.66	0.00	92.94	0.757	1.23	2.16	121.041	F
B-AD	178.46	44.61	174.69	0.00	202.66	0.881	3.98	4.92	108.428	F
A-BCD	620.02	155.00	619.60	0.00	1075.41	0.577	2.93	3.03	8.119	A
A-B	170.74	42.68	170.74	0.00	-	-	-	-	-	-
A-C	178.14	44.54	178.14	0.00	-	-	-	-	-	-
D-AB	165.72	41.43	165.65	0.00	367.06	0.451	0.79	0.81	17.857	C
D-BC	46.77	11.69	46.74	0.00	195.97	0.239	0.30	0.31	24.112	C
C-ABD	18.62	4.65	18.62	0.00	886.02	0.021	0.03	0.03	4.150	A
C-D	81.08	20.27	81.08	0.00	-	-	-	-	-	-
C-A	631.38	157.84	631.38	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	48.34	12.09	55.85	0.00	225.77	0.214	2.16	0.28	22.054	C
B-AD	154.83	38.71	168.93	0.00	274.29	0.564	4.92	1.40	37.837	E
A-BCD	373.26	93.31	379.99	0.00	982.48	0.380	3.03	1.35	6.100	A
A-B	204.49	51.12	204.49	0.00	-	-	-	-	-	-
A-C	213.36	53.34	213.36	0.00	-	-	-	-	-	-
D-AB	134.67	33.67	136.11	0.00	442.15	0.305	0.81	0.45	11.816	B
D-BC	38.84	9.71	39.37	0.00	265.33	0.146	0.31	0.17	15.967	C
C-ABD	12.11	3.03	12.14	0.00	835.93	0.014	0.03	0.02	4.369	A
C-D	66.56	16.64	66.56	0.00	-	-	-	-	-	-
C-A	518.26	129.56	518.26	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	35.48	8.87	36.06	0.00	299.85	0.118	0.28	0.14	13.674	B
B-AD	134.67	33.67	137.31	0.00	324.03	0.416	1.40	0.74	19.536	C
A-BCD	250.30	62.57	252.58	0.00	913.48	0.274	1.35	0.78	5.491	A
A-B	201.73	50.43	201.73	0.00	-	-	-	-	-	-
A-C	210.48	52.62	210.48	0.00	-	-	-	-	-	-
D-AB	112.49	28.12	113.06	0.00	490.38	0.229	0.45	0.30	9.557	A
D-BC	32.81	8.20	33.04	0.00	315.80	0.104	0.17	0.12	12.743	B
C-ABD	8.60	2.15	8.62	0.00	800.15	0.011	0.02	0.01	4.549	A
C-D	55.91	13.98	55.91	0.00	-	-	-	-	-	-
C-A	435.38	108.85	435.38	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.82	0.12	13.338	B	B
B-AD	9.42	0.63	18.372	C	B
A-BCD	10.88	0.73	5.401	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.20	0.28	9.439	A	A
D-BC	1.62	0.11	12.600	B	B
C-ABD	0.18	0.01	4.541	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.31	0.22	18.410	C	B
B-AD	16.55	1.10	28.668	D	C

A-BCD	19.03	1.27	5.921	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.17	0.41	11.593	B	B
D-BC	2.40	0.16	15.672	C	B
C-ABD	0.25	0.02	4.360	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	15.10	1.01	66.652	F	E
B-AD	45.61	3.04	79.024	F	E
A-BCD	43.58	2.91	7.858	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	11.09	0.74	17.457	C	B
D-BC	4.22	0.28	23.642	C	C
C-ABD	0.38	0.03	4.144	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	27.20	1.81	121.041	F	F
B-AD	67.64	4.51	108.428	F	F
A-BCD	46.60	3.11	8.119	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	12.00	0.80	17.857	C	B
D-BC	4.57	0.30	24.112	C	C
C-ABD	0.38	0.03	4.150	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	5.47	0.36	22.054	C	C
B-AD	27.54	1.84	37.837	E	D
A-BCD	21.19	1.41	6.100	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	7.03	0.47	11.816	B	B
D-BC	2.77	0.18	15.967	C	B
C-ABD	0.25	0.02	4.369	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.16	0.14	13.674	B	B
B-AD	11.88	0.79	19.536	C	B
A-BCD	11.85	0.79	5.491	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.69	0.31	9.557	A	A
D-BC	1.84	0.12	12.743	B	B
C-ABD	0.18	0.01	4.549	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, AM	2024 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		13.68	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 - Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

			Slope	Slope	Slope	Slope	Slope	Slope	Slope	Slope	Slope	Slope	Slope	Slope

Junction	Stream	Intercept (PCU/hr)	for A-B	for A-C	for A-D	for B-A	for B-C	for B-D	for C-A	for C-B	for C-D	for D-A	for D-B	for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	579.883	0.106	0.267	0.267	-	-	-	0.168	0.381	-	0.267	0.267	0.133
1	B-C	712.389	0.109	0.276	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	568.257	0.103	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
1	B-D, offside lane	579.883	0.106	0.267	0.267	-	-	-	0.168	0.381	0.168	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	713.148	-	-	-	-	-	-	0.276	-	0.109	-	-	-
1	D-B, nearside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-B, offside lane	573.184	0.166	0.166	0.377	-	-	-	0.264	0.264	0.104	-	-	-
1	D-C	573.184	-	0.166	0.377	0.132	0.264	0.264	0.264	0.264	0.104	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	825.00	100.000
2 - Occupation Ln	ONE HOUR	✓	200.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	279.00	100.000
4 - Occupation Rd	ONE HOUR	✓	251.00	100.000

Turning Proportions

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

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.000	268.000	461.000	96.000
	2 - Occupation Ln	108.000	0.000	3.000	89.000
	3 - Mushroom Ln	237.000	3.000	0.000	39.000
	4 - Occupation Rd	97.000	109.000	45.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.00	0.32	0.56	0.12
	2 - Occupation Ln	0.54	0.00	0.02	0.45
	3 - Mushroom Ln	0.85	0.01	0.00	0.14
	4 - Occupation Rd	0.39	0.43	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000

	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.28	18.40	0.37	C	57.44	86.16	20.50	14.27	0.23	20.50	14.28
B-AD	0.52	27.08	1.07	D	126.09	189.13	59.79	18.97	0.66	59.80	18.97
A-BCD	0.34	4.99	1.14	A	262.61	393.91	67.23	10.24	0.75	67.23	10.24
A-B	-	-	-	-	181.76	272.65	-	-	-	-	-
A-C	-	-	-	-	312.66	468.99	-	-	-	-	-
D-AB	0.42	14.61	0.70	B	144.99	217.49	42.19	11.64	0.47	42.20	11.64
D-BC	0.31	16.35	0.45	C	85.33	128.00	28.31	13.27	0.31	28.31	13.27
C-ABD	0.01	5.89	0.01	A	4.65	6.97	0.73	6.28	0.01	0.73	6.28
C-D	-	-	-	-	35.52	53.28	-	-	-	-	-
C-A	-	-	-	-	215.85	323.77	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	43.13	10.78	42.62	0.00	378.76	0.114	0.00	0.13	10.694	B
B-AD	107.45	26.86	105.89	0.00	378.96	0.284	0.00	0.39	13.113	B
A-BCD	169.47	42.37	167.74	0.00	946.93	0.179	0.00	0.43	4.621	A
A-B	166.03	41.51	166.03	0.00	-	-	-	-	-	-
A-C	285.60	71.40	285.60	0.00	-	-	-	-	-	-
D-AB	117.46	29.36	116.27	0.00	508.80	0.231	0.00	0.30	9.144	A
D-BC	71.51	17.88	70.66	0.00	405.37	0.176	0.00	0.21	10.729	B
C-ABD	3.35	0.84	3.33	0.00	614.88	0.005	0.00	0.01	5.886	A
C-D	29.21	7.30	29.21	0.00	-	-	-	-	-	-
C-A	177.49	44.37	177.49	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	54.68	13.67	54.42	0.00	336.53	0.162	0.13	0.19	12.749	B
B-AD	125.12	31.28	124.38	0.00	337.79	0.370	0.39	0.57	16.808	C
A-BCD	239.37	59.84	238.53	0.00	1010.88	0.237	0.43	0.64	4.673	A
A-B	184.65	46.16	184.65	0.00	-	-	-	-	-	-
A-C	317.63	79.41	317.63	0.00	-	-	-	-	-	-
D-AB	141.52	35.38	141.03	0.00	474.53	0.298	0.30	0.42	10.778	B
D-BC	84.12	21.03	83.81	0.00	371.05	0.227	0.21	0.29	12.518	B
C-ABD	4.40	1.10	4.39	0.00	617.01	0.007	0.01	0.01	5.875	A
C-D	34.82	8.70	34.82	0.00	-	-	-	-	-	-
C-A	211.60	52.90	211.60	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	74.08	18.52	73.38	0.00	271.82	0.273	0.19	0.36	18.078	C
B-AD	146.13	36.53	144.27	0.00	279.26	0.523	0.57	1.04	26.300	D

A-BCD	377.08	94.27	375.15	0.00	1104.23	0.341	0.64	1.13	4.958	A
A-B	195.31	48.83	195.31	0.00	-	-	-	-	-	-
A-C	335.96	83.99	335.96	0.00	-	-	-	-	-	-
D-AB	175.88	43.97	174.78	0.00	423.03	0.416	0.42	0.69	14.437	B
D-BC	100.48	25.12	99.86	0.00	321.21	0.313	0.29	0.44	16.216	C
C-ABD	6.18	1.55	6.17	0.00	621.79	0.010	0.01	0.01	5.847	A
C-D	42.53	10.63	42.53	0.00	-	-	-	-	-	-
C-A	258.47	64.62	258.47	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	74.43	18.61	74.39	0.00	270.00	0.276	0.36	0.37	18.396	C
B-AD	145.78	36.44	145.66	0.00	278.29	0.524	1.04	1.07	27.076	D
A-BCD	378.29	94.57	378.23	0.00	1105.28	0.342	1.13	1.14	4.986	A
A-B	194.86	48.72	194.86	0.00	-	-	-	-	-	-
A-C	335.19	83.80	335.19	0.00	-	-	-	-	-	-
D-AB	175.96	43.99	175.91	0.00	422.27	0.417	0.69	0.70	14.605	B
D-BC	100.40	25.10	100.37	0.00	320.42	0.313	0.44	0.45	16.355	C
C-ABD	6.19	1.55	6.19	0.00	621.38	0.010	0.01	0.01	5.853	A
C-D	42.53	10.63	42.53	0.00	-	-	-	-	-	-
C-A	258.46	64.62	258.46	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	55.00	13.75	55.70	0.00	334.57	0.164	0.37	0.20	12.939	B
B-AD	124.80	31.20	126.64	0.00	336.58	0.371	1.07	0.61	17.293	C
A-BCD	240.56	60.14	242.45	0.00	1012.37	0.238	1.14	0.67	4.703	A
A-B	184.22	46.05	184.22	0.00	-	-	-	-	-	-
A-C	316.88	79.22	316.88	0.00	-	-	-	-	-	-
D-AB	141.60	35.40	142.68	0.00	473.56	0.299	0.70	0.43	10.916	B
D-BC	84.04	21.01	84.65	0.00	370.10	0.227	0.45	0.30	12.637	B
C-ABD	4.41	1.10	4.42	0.00	616.38	0.007	0.01	0.01	5.882	A
C-D	34.82	8.70	34.82	0.00	-	-	-	-	-	-
C-A	211.59	52.90	211.59	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	43.32	10.83	43.60	0.00	377.20	0.115	0.20	0.13	10.799	B
B-AD	107.25	26.81	108.06	0.00	377.78	0.284	0.61	0.40	13.385	B
A-BCD	170.88	42.72	171.76	0.00	948.06	0.180	0.67	0.45	4.653	A
A-B	165.51	41.38	165.51	0.00	-	-	-	-	-	-
A-C	284.71	71.18	284.71	0.00	-	-	-	-	-	-
D-AB	117.53	29.38	118.04	0.00	507.81	0.231	0.43	0.31	9.248	A
D-BC	71.44	17.86	71.76	0.00	404.43	0.177	0.30	0.22	10.831	B
C-ABD	3.36	0.84	3.37	0.00	614.23	0.005	0.01	0.01	5.895	A
C-D	29.21	7.30	29.21	0.00	-	-	-	-	-	-
C-A	177.48	44.37	177.48	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	1.82	0.12	10.694	B	B
B-AD	5.48	0.37	13.113	B	B
A-BCD	6.38	0.43	4.621	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.25	0.28	9.144	A	A
D-BC	3.02	0.20	10.729	B	B
C-ABD	0.09	0.01	5.886	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-	Queueing Rate Of Delay (PCU-	Average Delay Per Arriving	Unsignalised Level Of	Signalised Level Of

	min)	min/min)	Vehicle (s)	Service	Service
B-CD	2.76	0.18	12.749	B	B
B-AD	8.17	0.54	16.808	C	B
A-BCD	9.71	0.65	4.673	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.06	0.40	10.778	B	B
D-BC	4.18	0.28	12.518	B	B
C-ABD	0.11	0.01	5.875	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	5.17	0.34	18.078	C	B
B-AD	14.28	0.95	26.300	D	C
A-BCD	16.93	1.13	4.958	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	9.87	0.66	14.437	B	B
D-BC	6.34	0.42	16.216	C	B
C-ABD	0.16	0.01	5.847	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	5.56	0.37	18.396	C	B
B-AD	15.83	1.06	27.076	D	C
A-BCD	17.32	1.15	4.986	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	10.50	0.70	14.605	B	B
D-BC	6.72	0.45	16.355	C	B
C-ABD	0.16	0.01	5.853	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.15	0.21	12.939	B	B
B-AD	9.69	0.65	17.293	C	B
A-BCD	10.15	0.68	4.703	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.79	0.45	10.916	B	B
D-BC	4.68	0.31	12.637	B	B
C-ABD	0.12	0.01	5.882	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.04	0.14	10.799	B	B
B-AD	6.34	0.42	13.385	B	B
A-BCD	6.74	0.45	4.653	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.73	0.32	9.248	A	A
D-BC	3.37	0.22	10.831	B	B
C-ABD	0.09	0.01	5.895	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, PM	2024 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D		48.40	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Main St	A	1 - Main St		Major
2 - Occupation Ln	B	2 - Occupation Ln		Minor
3 - Mushroom Ln	C	3 - Mushroom Ln		Major
4 - Occupation Rd	D	4 - Occupation Rd		Minor

Major Arm Geometry

Name	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)
1 - Main St	6.00		0.00		2.20	92.00	✓	0.00
3 - Mushroom Ln	6.00		0.00		2.20	77.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Occupation Ln	One lane plus flare				10.00	5.50	3.50	2.80	2.80		2.00	63	60
4 -													

Occupation Rd	One lane plus flare				10.00	4.50	3.40	3.40	3.40		2.00	75	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	627.241	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
1	B-A	558.130	0.102	0.257	0.257	-	-	-	0.162	0.367	-	0.257	0.257	0.128
1	B-C	685.995	0.105	0.266	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	547.204	0.100	0.252	0.252	-	-	-	0.158	0.360	0.158	-	-	-
1	B-D, offside lane	558.130	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	C-B	618.555	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
1	D-A	723.104	-	-	-	-	-	-	0.280	-	0.111	-	-	-
1	D-B, nearside lane	581.186	0.168	0.168	0.382	-	-	-	0.268	0.268	0.106	-	-	-
1	D-B, offside lane	565.182	0.164	0.164	0.372	-	-	-	0.260	0.260	0.103	-	-	-
1	D-C	565.182	-	0.164	0.372	0.130	0.260	0.260	0.260	0.260	0.103	-	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Main St	ONE HOUR	✓	884.00	100.000
2 - Occupation Ln	ONE HOUR	✓	238.00	100.000
3 - Mushroom Ln	ONE HOUR	✓	664.00	100.000
4 - Occupation Rd	ONE HOUR	✓	205.00	100.000

Turning Proportions

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

		To			
		1 - Main St	**2 - Occupation Ln**	**3 - Mushroom Ln**	**4 - Occupation Rd**
From	**1 - Main St**	0.000	373.000	385.000	126.000
	2 - Occupation Ln	163.000	0.000	2.000	73.000
	3 - Mushroom Ln	584.000	5.000	0.000	75.000
	4 - Occupation Rd	116.000	77.000	12.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Main St	**2 - Occupation Ln**	**3 - Mushroom Ln**	**4 - Occupation Rd**
From	**1 - Main St**	0.00	0.42	0.44	0.14
	2 - Occupation Ln	0.68	0.00	0.01	0.31
	3 - Mushroom Ln	0.88	0.01	0.00	0.11
	4 - Occupation Rd	0.57	0.38	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	1.000	1.000	1.000	1.000
	2 - Occupation Ln	1.000	1.000	1.000	1.000
	3 - Mushroom Ln	1.000	1.000	1.000	1.000
	4 - Occupation Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Main St	2 - Occupation Ln	3 - Mushroom Ln	4 - Occupation Rd
From	1 - Main St	0.0	0.0	0.0	0.0
	2 - Occupation Ln	0.0	0.0	0.0	0.0
	3 - Mushroom Ln	0.0	0.0	0.0	0.0
	4 - Occupation Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-CD	0.94	184.22	4.08	F	57.83	86.75	91.57	63.34	1.02	91.57	63.34
B-AD	0.94	138.09	6.55	F	160.56	240.84	217.04	54.07	2.41	217.10	54.08
A-BCD	0.58	8.15	3.07	A	414.75	622.13	154.66	14.92	1.72	154.68	14.92
A-B	-	-	-	-	195.07	292.61	-	-	-	-	-
A-C	-	-	-	-	201.35	302.02	-	-	-	-	-
D-AB	0.50	20.65	0.97	C	143.37	215.05	52.13	14.54	0.58	52.14	14.55
D-BC	0.28	25.80	0.37	D	44.74	67.11	20.53	18.36	0.23	20.53	18.36
C-ABD	0.02	4.55	0.03	A	13.10	19.65	1.62	4.94	0.02	1.62	4.94
C-D	-	-	-	-	67.85	101.78	-	-	-	-	-
C-A	-	-	-	-	528.35	792.52	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	39.53	9.88	38.94	0.00	301.88	0.131	0.00	0.15	13.662	B
B-AD	139.65	34.91	136.71	0.00	322.86	0.433	0.00	0.73	19.059	C
A-BCD	248.38	62.10	245.40	0.00	912.97	0.272	0.00	0.75	5.393	A
A-B	205.27	51.32	205.27	0.00	-	-	-	-	-	-
A-C	211.87	52.97	211.87	0.00	-	-	-	-	-	-
D-AB	117.11	29.28	115.82	0.00	475.68	0.246	0.00	0.32	9.973	A
D-BC	37.23	9.31	36.71	0.00	318.08	0.117	0.00	0.13	12.772	B
C-ABD	8.56	2.14	8.51	0.00	800.67	0.011	0.00	0.01	4.544	A
C-D	55.92	13.98	55.92	0.00	-	-	-	-	-	-
C-A	435.42	108.85	435.42	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	52.57	13.14	52.05	0.00	236.35	0.222	0.15	0.28	19.480	C
B-AD	161.39	40.35	159.02	0.00	274.37	0.588	0.73	1.33	30.575	D
A-BCD	370.27	92.57	368.16	0.00	979.66	0.378	0.75	1.27	5.917	A
A-B	208.86	52.21	208.86	0.00	-	-	-	-	-	-
A-C	215.58	53.89	215.58	0.00	-	-	-	-	-	-
D-AB	140.22	35.06	139.59	0.00	426.62	0.329	0.32	0.48	12.515	B

D-BC	44.07	11.02	43.82	0.00	267.97	0.164	0.13	0.19	16.041	C
C-ABD	12.06	3.02	12.05	0.00	836.94	0.014	0.01	0.02	4.363	A
C-D	66.56	16.64	66.56	0.00	-	-	-	-	-	-
C-A	518.30	129.57	518.30	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	78.02	19.50	70.27	0.00	100.61	0.775	0.28	2.22	102.205	F
B-AD	184.03	46.01	169.73	0.00	199.64	0.922	1.33	4.90	93.519	F
A-BCD	618.33	154.58	611.56	0.00	1074.59	0.575	1.27	2.96	7.879	A
A-B	174.68	43.67	174.68	0.00	-	-	-	-	-	-
A-C	180.30	45.07	180.30	0.00	-	-	-	-	-	-
D-AB	172.69	43.17	170.84	0.00	348.75	0.495	0.48	0.94	20.029	C
D-BC	53.02	13.26	52.35	0.00	194.87	0.272	0.19	0.36	25.102	D
C-ABD	18.58	4.64	18.54	0.00	886.41	0.021	0.02	0.03	4.147	A
C-D	81.09	20.27	81.09	0.00	-	-	-	-	-	-
C-A	631.41	157.85	631.41	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	81.15	20.29	73.69	0.00	86.66	0.936	2.22	4.08	184.217	F
B-AD	180.89	45.22	174.28	0.00	193.02	0.937	4.90	6.55	138.090	F
A-BCD	624.65	156.16	624.22	0.00	1078.69	0.579	2.96	3.07	8.148	A
A-B	171.57	42.89	171.57	0.00	-	-	-	-	-	-
A-C	177.09	44.27	177.09	0.00	-	-	-	-	-	-
D-AB	172.78	43.19	172.66	0.00	346.72	0.498	0.94	0.97	20.651	C
D-BC	52.93	13.23	52.89	0.00	192.31	0.275	0.36	0.37	25.802	D
C-ABD	18.66	4.66	18.66	0.00	885.32	0.021	0.03	0.03	4.153	A
C-D	81.08	20.27	81.08	0.00	-	-	-	-	-	-
C-A	631.34	157.84	631.34	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	55.63	13.91	70.50	0.00	214.71	0.259	4.08	0.36	27.377	D
B-AD	158.33	39.58	178.25	0.00	268.48	0.590	6.55	1.57	46.481	E
A-BCD	375.45	93.86	382.28	0.00	985.14	0.381	3.07	1.36	6.095	A
A-B	206.31	51.58	206.31	0.00	-	-	-	-	-	-
A-C	212.94	53.24	212.94	0.00	-	-	-	-	-	-
D-AB	140.29	35.07	142.15	0.00	424.48	0.331	0.97	0.50	12.834	B
D-BC	44.00	11.00	44.67	0.00	264.49	0.166	0.37	0.20	16.426	C
C-ABD	12.13	3.03	12.16	0.00	835.31	0.015	0.03	0.02	4.373	A
C-D	66.55	16.64	66.55	0.00	-	-	-	-	-	-
C-A	518.24	129.56	518.24	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-CD	40.09	10.02	40.91	0.00	297.28	0.135	0.36	0.16	14.086	B
B-AD	139.09	34.77	142.21	0.00	321.00	0.433	1.57	0.79	20.465	C
A-BCD	251.45	62.86	253.75	0.00	915.60	0.275	1.36	0.79	5.483	A
A-B	203.76	50.94	203.76	0.00	-	-	-	-	-	-
A-C	210.31	52.58	210.31	0.00	-	-	-	-	-	-
D-AB	117.13	29.28	117.82	0.00	474.44	0.247	0.50	0.33	10.115	B
D-BC	37.20	9.30	37.48	0.00	316.60	0.118	0.20	0.14	12.909	B
C-ABD	8.61	2.15	8.62	0.00	799.61	0.011	0.02	0.01	4.552	A
C-D	55.91	13.98	55.91	0.00	-	-	-	-	-	-
C-A	435.38	108.84	435.38	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.10	0.14	13.662	B	B
B-AD	10.07	0.67	19.059	C	B
A-BCD	10.94	0.73	5.393	A	A

A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	4.60	0.31	9.973	A	A
D-BC	1.86	0.12	12.772	B	B
C-ABD	0.18	0.01	4.544	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	3.94	0.26	19.480	C	B
B-AD	18.03	1.20	30.575	D	C
A-BCD	19.17	1.28	5.917	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.91	0.46	12.515	B	B
D-BC	2.77	0.18	16.041	C	B
C-ABD	0.25	0.02	4.363	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	24.66	1.64	102.205	F	F
B-AD	53.81	3.59	93.519	F	F
A-BCD	44.08	2.94	7.879	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	13.08	0.87	20.029	C	C
D-BC	5.05	0.34	25.102	D	C
C-ABD	0.38	0.03	4.147	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	48.99	3.27	184.217	F	F
B-AD	87.05	5.80	138.090	F	F
A-BCD	47.18	3.15	8.148	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	14.37	0.96	20.651	C	C
D-BC	5.51	0.37	25.802	D	C
C-ABD	0.38	0.03	4.153	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	9.35	0.62	27.377	D	C
B-AD	35.20	2.35	46.481	E	D
A-BCD	21.36	1.42	6.095	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	7.98	0.53	12.834	B	B
D-BC	3.23	0.22	16.426	C	B
C-ABD	0.25	0.02	4.373	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-CD	2.52	0.17	14.086	B	B
B-AD	12.88	0.86	20.465	C	C
A-BCD	11.92	0.79	5.483	A	A

A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	5.18	0.35	10.115	B	B
D-BC	2.11	0.14	12.909	B	B
C-ABD	0.18	0.01	4.552	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]
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Filename: MoiraRd-HepworthRd Roundabout_v01.arc8
Path: \\lefs02\Projects\067895.100 TPLE Woodville\Q3-Design\3A-Calculations\TP\Junction Modelling\Junction Models for 24.07.2019 Submission
Report generation date: 24/07/2019 11:20:57

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2021 Base Reg Link 25%							
1 - Moira Rd N	0.20	3.61	0.16	A	0.24	3.73	0.19	A
2 - Hepworth Rd E	0.40	2.91	0.29	A	0.53	3.10	0.35	A
3 - Moira Rd S	0.20	3.29	0.17	A	0.39	3.96	0.28	A
4 - Hepworth Rd W	0.45	2.67	0.31	A	0.42	2.72	0.30	A
	A1 - 2021 Base Reg Link 25% with Dev							
1 - Moira Rd N	0.24	3.82	0.19	A	0.27	3.90	0.21	A
2 - Hepworth Rd E	0.44	3.03	0.30	A	0.59	3.27	0.37	A
3 - Moira Rd S	0.23	3.42	0.19	A	0.45	4.23	0.31	A
4 - Hepworth Rd W	0.51	2.79	0.34	A	0.49	2.86	0.33	A
	A1 - 2021 Base Reg Link 50%							
1 - Moira Rd N	0.21	3.79	0.17	A	0.25	3.89	0.20	A
2 - Hepworth Rd E	0.51	3.13	0.34	A	0.70	3.45	0.41	A
3 - Moira Rd S	0.21	3.46	0.18	A	0.42	4.29	0.30	A
4 - Hepworth Rd W	0.54	2.83	0.35	A	0.49	2.85	0.33	A
	A1 - 2021 Base Reg Link 50% with Dev							
1 - Moira Rd N	0.25	4.02	0.20	A	0.28	4.06	0.22	A
2 - Hepworth Rd E	0.55	3.27	0.36	A	0.79	3.67	0.44	A
3 - Moira Rd S	0.24	3.60	0.19	A	0.49	4.62	0.33	A
4 - Hepworth Rd W	0.61	2.97	0.38	A	0.57	3.01	0.36	A
	A1 - 2024 Base Reg Link 25%							
1 - Moira Rd N	0.21	3.70	0.17	A	0.26	3.84	0.20	A
2 - Hepworth Rd E	0.43	2.99	0.30	A	0.57	3.19	0.36	A
3 - Moira Rd S	0.22	3.35	0.18	A	0.42	4.08	0.30	A
4 - Hepworth Rd W	0.48	2.74	0.33	A	0.45	2.80	0.31	A
	A1 - 2024 Base Reg Link 25% with Dev							
1 - Moira Rd N	0.25	3.93	0.20	A	0.28	4.02	0.22	A
2 - Hepworth Rd E	0.47	3.12	0.32	A	0.64	3.38	0.39	A
3 - Moira Rd S	0.24	3.48	0.20	A	0.49	4.38	0.33	A
4 - Hepworth Rd W	0.55	2.87	0.36	A	0.53	2.95	0.35	A
	A1 - 2024 Base Reg Link 50%							
1 - Moira Rd N	0.22	3.90	0.18	A	0.27	4.01	0.21	A
2 - Hepworth Rd E	0.55	3.22	0.35	A	0.76	3.59	0.43	A
3 - Moira Rd S	0.23	3.53	0.19	A	0.46	4.46	0.31	A
4 - Hepworth Rd W	0.58	2.93	0.37	A	0.53	2.95	0.35	A
	A1 - 2024 Base Reg Link 50% with Dev							
1 - Moira Rd N	0.27	4.16	0.21	A	0.30	4.20	0.23	A
2 - Hepworth Rd E	0.59	3.37	0.37	A	0.86	3.83	0.46	A
3 - Moira Rd S	0.26	3.68	0.21	A	0.53	4.81	0.35	A
4 - Hepworth Rd W	0.66	3.08	0.40	A	0.61	3.12	0.38	A

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

"D1 - 2021 Base Reg Link 25%, AM " model duration: 07:15 - 08:45
"D2 - 2021 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D3 - 2021 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D4 - 2021 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D5 - 2021 Base Reg Link 50%, AM" model duration: 07:15 - 08:45

"D6 - 2021 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D7 - 2021 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D8 - 2021 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15
"D9 - 2024 Base Reg Link 25%, AM" model duration: 07:15 - 08:45
"D10 - 2024 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D11 - 2024 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D12 - 2024 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D13 - 2024 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D14 - 2024 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D15 - 2024 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D16 - 2024 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 24/07/2019 11:20:44

File summary

Title	(untitled)
Location	
Site Number	
Date	12/06/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	RodriguezMartin_d
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) - 2021 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, AM	2021 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.96	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	178.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	453.00	100.000
3 - Moira Rd S	ONE HOUR	✓	202.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	553.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	23.000	139.000	16.000
	2 - Hepworth Rd E	74.000	0.000	153.000	226.000
	3 - Moira Rd S	138.000	57.000	0.000	7.000
	4 - Hepworth Rd W	52.000	391.000	110.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.13	0.78	0.09
	2 - Hepworth Rd E	0.16	0.00	0.34	0.50
	3 - Moira Rd S	0.68	0.28	0.00	0.03
	4 - Hepworth Rd W	0.09	0.71	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.16	3.61	0.20	A	163.34	245.00	13.60	3.33	0.15	13.60	3.33
2 - Hepworth Rd E	0.29	2.91	0.40	A	415.68	623.52	27.97	2.69	0.31	27.97	2.69
3 - Moira Rd S	0.17	3.29	0.20	A	185.36	278.04	14.38	3.10	0.16	14.38	3.10
4 - Hepworth Rd W	0.31	2.67	0.45	A	507.44	761.16	31.05	2.45	0.35	31.05	2.45

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Moira Rd N	134.01	33.50	133.55	198.17	419.02	0.00	1311.06	678.55	0.102	0.00	0.11	3.057	A
2 - Hepworth Rd E	341.04	85.26	340.11	353.67	198.91	0.00	1797.76	1342.69	0.190	0.00	0.23	2.468	A
3 - Moira Rd S	152.08	38.02	151.58	301.77	237.24	0.00	1383.42	953.15	0.110	0.00	0.12	2.920	A
4 - Hepworth Rd W	416.33	104.08	415.30	186.94	201.89	0.00	2029.42	1330.01	0.205	0.00	0.26	2.229	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	160.02	40.00	159.89	237.18	501.33	0.00	1261.70	678.55	0.127	0.11	0.14	3.266	A
2 - Hepworth Rd E	407.24	101.81	406.98	423.16	238.06	0.00	1770.62	1342.69	0.230	0.23	0.30	2.639	A
3 - Moira Rd S	181.59	45.40	181.47	361.15	283.90	0.00	1355.27	953.15	0.134	0.12	0.15	3.066	A
4 - Hepworth Rd W	497.14	124.28	496.85	223.70	241.66	0.00	1999.75	1330.01	0.249	0.26	0.33	2.395	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	195.98	49.00	195.78	290.42	613.88	0.00	1194.22	678.55	0.164	0.14	0.20	3.605	A
2 - Hepworth Rd E	498.76	124.69	498.34	518.16	291.50	0.00	1733.58	1342.69	0.288	0.30	0.40	2.914	A
3 - Moira Rd S	222.41	55.60	222.21	442.22	347.63	0.00	1316.81	953.15	0.169	0.15	0.20	3.288	A
4 - Hepworth Rd W	608.86	152.22	608.39	273.92	295.92	0.00	1959.27	1330.01	0.311	0.33	0.45	2.665	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	195.98	49.00	195.98	290.67	614.37	0.00	1193.93	678.55	0.164	0.20	0.20	3.606	A
2 - Hepworth Rd E	498.76	124.69	498.76	518.58	291.77	0.00	1733.40	1342.69	0.288	0.40	0.40	2.915	A
3 - Moira Rd S	222.41	55.60	222.40	442.61	347.92	0.00	1316.63	953.15	0.169	0.20	0.20	3.289	A
4 - Hepworth Rd W	608.86	152.22	608.86	274.15	296.17	0.00	1959.09	1330.01	0.311	0.45	0.45	2.665	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	160.02	40.00	160.22	237.57	502.11	0.00	1261.24	678.55	0.127	0.20	0.15	3.272	A
2 - Hepworth Rd E	407.24	101.81	407.65	423.83	238.50	0.00	1770.32	1342.69	0.230	0.40	0.30	2.642	A
3 - Moira Rd S	181.59	45.40	181.78	361.78	284.37	0.00	1354.98	953.15	0.134	0.20	0.16	3.070	A
4 - Hepworth Rd W	497.14	124.28	497.61	224.08	242.08	0.00	1999.44	1330.01	0.249	0.45	0.33	2.397	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	134.01	33.50	134.13	198.91	420.39	0.00	1310.24	678.55	0.102	0.15	0.11	3.060	A
2 - Hepworth Rd E	341.04	85.26	341.30	354.85	199.67	0.00	1797.23	1342.69	0.190	0.30	0.23	2.472	A
3 - Moira Rd S	152.08	38.02	152.20	302.89	238.08	0.00	1382.92	953.15	0.110	0.16	0.12	2.927	A
4 -													

Hepworth Rd W	416.33	104.08	416.62	187.61	202.68	0.00	2028.83	1330.01	0.205	0.33	0.26	2.233	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	1.67	0.11	3.057	A	A
2 - Hepworth Rd E	3.45	0.23	2.468	A	A
3 - Moira Rd S	1.81	0.12	2.920	A	A
4 - Hepworth Rd W	3.80	0.25	2.229	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.14	0.14	3.266	A	A
2 - Hepworth Rd E	4.41	0.29	2.639	A	A
3 - Moira Rd S	2.28	0.15	3.066	A	A
4 - Hepworth Rd W	4.89	0.33	2.395	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.89	0.19	3.605	A	A
2 - Hepworth Rd E	5.95	0.40	2.914	A	A
3 - Moira Rd S	2.99	0.20	3.288	A	A
4 - Hepworth Rd W	6.64	0.44	2.665	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.94	0.20	3.606	A	A
2 - Hepworth Rd E	6.04	0.40	2.915	A	A
3 - Moira Rd S	3.04	0.20	3.289	A	A
4 - Hepworth Rd W	6.74	0.45	2.665	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.22	0.15	3.272	A	A
2 - Hepworth Rd E	4.56	0.30	2.642	A	A
3 - Moira Rd S	2.36	0.16	3.070	A	A
4 - Hepworth Rd W	5.04	0.34	2.397	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	1.74	0.12	3.060	A	A
2 - Hepworth Rd E	3.57	0.24	2.472	A	A
3 - Moira Rd S	1.88	0.13	2.927	A	A
4 - Hepworth Rd W	3.93	0.26	2.233	A	A

(Default Analysis Set) - 2021 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, PM	2021 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.23	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	210.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	560.00	100.000
3 - Moira Rd S	ONE HOUR	✓	323.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	507.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	55.000	132.000	23.000
	2 - Hepworth Rd E	56.000	0.000	189.000	315.000
	3 - Moira Rd S	184.000	121.000	0.000	18.000
	4 - Hepworth Rd W	72.000	384.000	51.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.26	0.63	0.11
	2 - Hepworth Rd E	0.10	0.00	0.34	0.56
	3 - Moira Rd S	0.57	0.37	0.00	0.06
	4 - Hepworth Rd W	0.14	0.76	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.19	3.73	0.24	A	192.70	289.05	16.49	3.42	0.18	16.49	3.42
2 - Hepworth Rd E	0.35	3.10	0.53	A	513.87	770.80	36.29	2.83	0.40	36.29	2.83
3 - Moira Rd S	0.28	3.96	0.39	A	296.39	444.59	26.69	3.60	0.30	26.69	3.60
4 - Hepworth Rd W	0.30	2.72	0.42	A	465.23	697.85	28.90	2.48	0.32	28.90	2.48

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	158.10	39.52	157.55	234.14	417.44	0.00	1312.01	620.11	0.121	0.00	0.14	3.116	A
2 - Hepworth Rd E	421.60	105.40	420.40	420.40	154.59	0.00	1828.48	1517.44	0.231	0.00	0.30	2.554	A
3 - Moira Rd S	243.17	60.79	242.29	279.22	295.77	0.00	1348.10	878.90	0.180	0.00	0.22	3.250	A
4 - Hepworth Rd W	381.70	95.42	380.74	267.24	270.83	0.00	1977.99	1447.72	0.193	0.00	0.24	2.253	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	188.79	47.20	188.63	280.26	499.50	0.00	1262.80	620.11	0.150	0.14	0.18	3.351	A
2 - Hepworth Rd E	503.43	125.86	503.08	503.09	185.05	0.00	1807.37	1517.44	0.279	0.30	0.38	2.760	A
3 - Moira Rd S	290.37	72.59	290.12	334.18	353.95	0.00	1312.99	878.90	0.221	0.22	0.28	3.519	A
4 - Hepworth Rd W	455.78	113.95	455.51	319.81	324.26	0.00	1938.13	1447.72	0.235	0.24	0.31	2.428	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	231.21	57.80	230.96	343.16	611.62	0.00	1195.57	620.11	0.193	0.18	0.24	3.732	A
2 - Hepworth Rd E	616.57	154.14	616.00	616.00	226.58	0.00	1778.58	1517.44	0.347	0.38	0.53	3.094	A
3 - Moira Rd S	355.63	88.91	355.20	409.18	433.39	0.00	1265.04	878.90	0.281	0.28	0.39	3.955	A
4 - Hepworth Rd W	558.22	139.55	557.77	391.59	397.01	0.00	1883.86	1447.72	0.296	0.31	0.42	2.715	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	231.21	57.80	231.21	343.51	612.16	0.00	1195.25	620.11	0.193	0.24	0.24	3.733	A
2 - Hepworth Rd E	616.57	154.14	616.57	616.57	226.81	0.00	1778.42	1517.44	0.347	0.53	0.53	3.097	A
3 - Moira Rd S	355.63	88.91	355.62	409.58	433.80	0.00	1264.80	878.90	0.281	0.39	0.39	3.959	A
4 - Hepworth Rd W	558.22	139.55	558.21	391.96	397.46	0.00	1883.52	1447.72	0.296	0.42	0.42	2.715	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	188.79	47.20	189.04	280.84	500.37	0.00	1262.28	620.11	0.150	0.24	0.18	3.356	A
2 - Hepworth Rd E	503.43	125.86	503.99	503.99	185.42	0.00	1807.11	1517.44	0.279	0.53	0.39	2.765	A
3 - Moira Rd S	290.37	72.59	290.79	334.81	354.60	0.00	1312.60	878.90	0.221	0.39	0.29	3.526	A
4 - Hepworth Rd W	455.78	113.95	456.23	320.41	324.98	0.00	1937.59	1447.72	0.235	0.42	0.31	2.430	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	158.10	39.52	158.25	235.11	418.92	0.00	1311.12	620.11	0.121	0.18	0.14	3.124	A
2 - Hepworth Rd E	421.60	105.40	421.95	421.94	155.23	0.00	1828.04	1517.44	0.231	0.39	0.30	2.560	A
3 - Moira Rd S	243.17	60.79	243.43	280.30	296.87	0.00	1347.44	878.90	0.180	0.29	0.22	3.260	A
4 - Hepworth Rd W	381.70	95.42	381.97	268.24	272.06	0.00	1977.08	1447.72	0.193	0.31	0.24	2.256	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.01	0.13	3.116	A	A
2 - Hepworth Rd E	4.40	0.29	2.554	A	A
3 - Moira Rd S	3.22	0.21	3.250	A	A
4 - Hepworth Rd W	3.52	0.23	2.253	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.59	0.17	3.351	A	A
2 - Hepworth Rd E	5.69	0.38	2.760	A	A
3 - Moira Rd S	4.18	0.28	3.519	A	A
4 - Hepworth Rd W	4.54	0.30	2.428	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.52	0.23	3.732	A	A
2 - Hepworth Rd E	7.79	0.52	3.094	A	A
3 - Moira Rd S	5.73	0.38	3.955	A	A
4 - Hepworth Rd W	6.20	0.41	2.715	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.58	0.24	3.733	A	A
2 - Hepworth Rd E	7.93	0.53	3.097	A	A
3 - Moira Rd S	5.84	0.39	3.959	A	A
4 - Hepworth Rd W	6.30	0.42	2.715	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.69	0.18	3.356	A	A
2 - Hepworth Rd					

E	5.90	0.39	2.765	A	A
3 - Moira Rd S	4.35	0.29	3.526	A	A
4 - Hepworth Rd W	4.69	0.31	2.430	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.09	0.14	3.124	A	A
2 - Hepworth Rd E	4.57	0.30	2.560	A	A
3 - Moira Rd S	3.36	0.22	3.260	A	A
4 - Hepworth Rd W	3.64	0.24	2.256	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, AM	2021 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.10	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)

1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	203.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	472.00	100.000
3 - Moira Rd S	ONE HOUR	✓	219.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	604.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	30.000	143.000	30.000
	2 - Hepworth Rd E	76.000	0.000	153.000	243.000
	3 - Moira Rd S	139.000	57.000	0.000	23.000
	4 - Hepworth Rd W	60.000	417.000	127.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.15	0.70	0.15
	2 - Hepworth Rd E	0.16	0.00	0.32	0.51
	3 - Moira Rd S	0.63	0.26	0.00	0.11
	4 - Hepworth Rd W	0.10	0.69	0.21	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.19	3.82	0.24	A	186.28	279.41	16.24	3.49	0.18	16.24	3.49
2 - Hepworth Rd E	0.30	3.03	0.44	A	433.12	649.67	30.08	2.78	0.33	30.08	2.78
3 - Moira Rd S	0.19	3.42	0.23	A	200.96	301.44	16.07	3.20	0.18	16.08	3.20
4 - Hepworth Rd W	0.34	2.79	0.51	A	554.24	831.36	35.14	2.54	0.39	35.14	2.54

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	152.83	38.21	152.29	206.41	451.28	0.00	1291.71	660.28	0.118	0.00	0.13	3.157	A
2 - Hepworth Rd E	355.35	88.84	354.35	378.42	225.16	0.00	1779.57	1340.94	0.200	0.00	0.25	2.525	A
3 - Moira Rd S	164.87	41.22	164.33	317.52	261.99	0.00	1368.49	920.76	0.120	0.00	0.14	2.987	A
4 - Hepworth Rd W	454.72	113.68	453.57	222.20	204.13	0.00	2027.75	1404.22	0.224	0.00	0.29	2.286	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	182.49	45.62	182.34	247.05	539.95	0.00	1238.55	660.28	0.147	0.13	0.17	3.408	A
2 - Hepworth Rd E	424.32	106.08	424.04	452.79	269.49	0.00	1748.84	1340.94	0.243	0.25	0.32	2.717	A
3 - Moira Rd S	196.88	49.22	196.73	380.00	313.53	0.00	1337.38	920.76	0.147	0.14	0.17	3.155	A
4 - Hepworth Rd W	542.98	135.75	542.65	265.92	244.35	0.00	1997.74	1404.22	0.272	0.29	0.37	2.474	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	223.51	55.88	223.25	302.51	661.15	0.00	1165.88	660.28	0.192	0.17	0.24	3.819	A
2 - Hepworth Rd E	519.68	129.92	519.22	554.43	329.97	0.00	1706.92	1340.94	0.304	0.32	0.44	3.029	A
3 - Moira Rd S	241.12	60.28	240.90	465.28	383.90	0.00	1294.91	920.76	0.186	0.17	0.23	3.415	A
4 - Hepworth Rd W	665.02	166.25	664.45	325.60	299.20	0.00	1956.83	1404.22	0.340	0.37	0.51	2.784	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	223.51	55.88	223.50	302.78	661.71	0.00	1165.54	660.28	0.192	0.24	0.24	3.820	A
2 - Hepworth Rd E	519.68	129.92	519.68	554.91	330.30	0.00	1706.69	1340.94	0.305	0.44	0.44	3.032	A
3 - Moira Rd S	241.12	60.28	241.12	465.73	384.25	0.00	1294.70	920.76	0.186	0.23	0.23	3.416	A
4 - Hepworth Rd W	665.02	166.25	665.01	325.90	299.47	0.00	1956.62	1404.22	0.340	0.51	0.51	2.786	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	182.49	45.62	182.74	247.49	540.84	0.00	1238.01	660.28	0.147	0.24	0.17	3.411	A
2 - Hepworth Rd E	424.32	106.08	424.78	453.56	270.03	0.00	1748.47	1340.94	0.243	0.44	0.32	2.722	A
3 - Moira Rd S	196.88	49.22	197.10	380.71	314.09	0.00	1337.04	920.76	0.147	0.23	0.17	3.160	A
4 - Hepworth Rd W	542.98	135.75	543.54	266.40	244.79	0.00	1997.41	1404.22	0.272	0.51	0.37	2.478	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	152.83	38.21	152.98	207.20	452.81	0.00	1290.80	660.28	0.118	0.17	0.13	3.163	A
2 - Hepworth Rd E	355.35	88.84	355.63	379.73	226.06	0.00	1778.94	1340.94	0.200	0.32	0.25	2.529	A
3 - Moira Rd S	164.87	41.22	165.02	318.73	262.96	0.00	1367.90	920.76	0.121	0.17	0.14	2.992	A
4 - Hepworth Rd W	454.72	113.68	455.06	223.03	204.95	0.00	2027.14	1404.22	0.224	0.37	0.29	2.290	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	1.97	0.13	3.157	A	A
2 - Hepworth Rd E	3.67	0.24	2.525	A	A
3 - Moira Rd S	2.01	0.13	2.987	A	A
4 - Hepworth Rd W	4.26	0.28	2.286	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.55	0.17	3.408	A	A
2 - Hepworth Rd E	4.73	0.32	2.717	A	A
3 - Moira Rd S	2.55	0.17	3.155	A	A
4 - Hepworth Rd	5.51	0.37	2.474	A	A

W					

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.48	0.23	3.819	A	A
2 - Hepworth Rd E	6.44	0.43	3.029	A	A
3 - Moira Rd S	3.37	0.22	3.415	A	A
4 - Hepworth Rd W	7.57	0.50	2.784	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.55	0.24	3.820	A	A
2 - Hepworth Rd E	6.54	0.44	3.032	A	A
3 - Moira Rd S	3.42	0.23	3.416	A	A
4 - Hepworth Rd W	7.70	0.51	2.786	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.64	0.18	3.411	A	A
2 - Hepworth Rd E	4.89	0.33	2.722	A	A
3 - Moira Rd S	2.64	0.18	3.160	A	A
4 - Hepworth Rd W	5.70	0.38	2.478	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.05	0.14	3.163	A	A
2 - Hepworth Rd E	3.80	0.25	2.529	A	A
3 - Moira Rd S	2.09	0.14	2.992	A	A
4 - Hepworth Rd W	4.40	0.29	2.290	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, PM	2021 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.41	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	223.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	595.00	100.000
3 - Moira Rd S	ONE HOUR	✓	349.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	561.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	58.000	133.000	32.000
	2 - Hepworth Rd E	62.000	0.000	189.000	344.000
	3 - Moira Rd S	188.000	121.000	0.000	40.000
	4 - Hepworth Rd W	86.000	406.000	69.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.26	0.60	0.14
	2 - Hepworth Rd E	0.10	0.00	0.32	0.58
	3 - Moira Rd S	0.54	0.35	0.00	0.11
	4 - Hepworth Rd W	0.15	0.72	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.21	3.90	0.27	A	204.63	306.94	18.12	3.54	0.20	18.13	3.54
2 - Hepworth Rd E	0.37	3.27	0.59	A	545.98	818.97	40.22	2.95	0.45	40.22	2.95
3 - Moira Rd S	0.31	4.23	0.45	A	320.25	480.37	30.38	3.79	0.34	30.38	3.79
4 - Hepworth Rd W	0.33	2.86	0.49	A	514.78	772.18	33.34	2.59	0.37	33.34	2.59

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	167.89	41.97	167.29	252.13	447.44	0.00	1294.02	623.83	0.130	0.00	0.15	3.193	A
2 - Hepworth Rd E	447.95	111.99	446.64	439.14	175.59	0.00	1813.92	1488.11	0.247	0.00	0.33	2.630	A
3 - Moira Rd S	262.75	65.69	261.76	293.46	328.77	0.00	1328.18	859.76	0.198	0.00	0.25	3.372	A
4 - Hepworth Rd W	422.35	105.59	421.26	312.23	278.30	0.00	1972.42	1496.49	0.214	0.00	0.27	2.320	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	200.47	50.12	200.30	301.81	535.42	0.00	1241.27	623.83	0.162	0.15	0.19	3.458	A
2 - Hepworth Rd E	534.89	133.72	534.50	525.52	210.19	0.00	1789.94	1488.11	0.299	0.33	0.42	2.867	A
3 - Moira Rd S	313.74	78.44	313.45	351.23	393.46	0.00	1289.14	859.76	0.243	0.25	0.32	3.689	A
4 - Hepworth Rd W	504.33	126.08	504.01	373.69	333.22	0.00	1931.45	1496.49	0.261	0.27	0.35	2.522	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	245.53	61.38	245.24	369.51	655.57	0.00	1169.22	623.83	0.210	0.19	0.26	3.895	A
2 - Hepworth Rd E	655.11	163.78	654.44	643.45	257.36	0.00	1757.25	1488.11	0.373	0.42	0.59	3.263	A
3 - Moira Rd S	384.26	96.06	383.74	430.05	481.75	0.00	1235.86	859.76	0.311	0.32	0.45	4.222	A
4 - Hepworth Rd W	617.67	154.42	617.13	457.54	407.95	0.00	1875.70	1496.49	0.329	0.35	0.49	2.858	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	245.53	61.38	245.52	369.94	656.20	0.00	1168.84	623.83	0.210	0.26	0.27	3.898	A
2 - Hepworth Rd E	655.11	163.78	655.10	644.09	257.64	0.00	1757.06	1488.11	0.373	0.59	0.59	3.266	A
3 - Moira Rd S	384.26	96.06	384.25	430.49	482.24	0.00	1235.56	859.76	0.311	0.45	0.45	4.228	A
4 - Hepworth Rd W	617.67	154.42	617.67	458.02	408.47	0.00	1875.31	1496.49	0.329	0.49	0.49	2.861	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	200.47	50.12	200.76	302.48	536.42	0.00	1240.66	623.83	0.162	0.27	0.19	3.464	A
2 - Hepworth Rd E	534.89	133.72	535.55	526.54	210.64	0.00	1789.63	1488.11	0.299	0.59	0.43	2.871	A
3 - Moira Rd S	313.74	78.44	314.25	351.95	394.24	0.00	1288.67	859.76	0.243	0.45	0.32	3.695	A
4 - Hepworth Rd W	504.33	126.08	504.87	374.45	334.04	0.00	1930.84	1496.49	0.261	0.49	0.35	2.527	A

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

Name	Total Demand	Junction Arrivals	Entry Flow	Exit Flow (PCU/hr)	Circulating Flow	Pedestrian Demand	Capacity (PCU/hr)	Saturation Capacity	RFC	Start Queue	End Queue	Delay (s)	LOS

	(PCU/hr)	(PCU)	(PCU/hr)		(PCU/hr)	(Ped/hr)		(PCU/hr)		(PCU)	(PCU)		
1 - Moira Rd N	167.89	41.97	168.06	253.21	449.08	0.00	1293.03	623.83	0.130	0.19	0.15	3.202	A
2 - Hepworth Rd E	447.95	111.99	448.34	440.80	176.34	0.00	1813.41	1488.11	0.247	0.43	0.33	2.637	A
3 - Moira Rd S	262.75	65.69	263.05	294.64	330.04	0.00	1327.42	859.76	0.198	0.32	0.25	3.382	A
4 - Hepworth Rd W	422.35	105.59	422.68	313.48	279.62	0.00	1971.44	1496.49	0.214	0.35	0.27	2.326	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.19	0.15	3.193	A	A
2 - Hepworth Rd E	4.82	0.32	2.630	A	A
3 - Moira Rd S	3.61	0.24	3.372	A	A
4 - Hepworth Rd W	4.01	0.27	2.320	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.84	0.19	3.458	A	A
2 - Hepworth Rd E	6.28	0.42	2.867	A	A
3 - Moira Rd S	4.73	0.32	3.689	A	A
4 - Hepworth Rd W	5.22	0.35	2.522	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.90	0.26	3.895	A	A
2 - Hepworth Rd E	8.71	0.58	3.263	A	A
3 - Moira Rd S	6.59	0.44	4.222	A	A
4 - Hepworth Rd W	7.22	0.48	2.858	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.97	0.26	3.898	A	A
2 - Hepworth Rd E	8.88	0.59	3.266	A	A
3 - Moira Rd S	6.74	0.45	4.228	A	A
4 - Hepworth Rd W	7.34	0.49	2.861	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.95	0.20	3.464	A	A
2 - Hepworth Rd E	6.52	0.43	2.871	A	A
3 - Moira Rd S	4.94	0.33	3.695	A	A
4 - Hepworth Rd W	5.40	0.36	2.527	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.28	0.15	3.202	A	A
2 - Hepworth Rd E	5.00	0.33	2.637	A	A
3 - Moira Rd S	3.77	0.25	3.382	A	A
4 - Hepworth Rd W	4.15	0.28	2.326	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, AM	2021 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.13	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	178.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	533.00	100.000
3 - Moira Rd S	ONE HOUR	✓	202.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	626.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	23.000	139.000	16.000
	2 - Hepworth Rd E	74.000	0.000	153.000	306.000
	3 - Moira Rd S	138.000	57.000	0.000	7.000
	4 - Hepworth Rd W	52.000	469.000	105.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.13	0.78	0.09
	2 - Hepworth Rd E	0.14	0.00	0.29	0.57
	3 - Moira Rd S	0.68	0.28	0.00	0.03
	4 - Hepworth Rd W	0.08	0.75	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To

		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.17	3.79	0.21	A	163.34	245.00	14.15	3.46	0.16	14.15	3.46
2 - Hepworth Rd E	0.34	3.13	0.51	A	489.09	733.64	34.82	2.85	0.39	34.82	2.85
3 - Moira Rd S	0.18	3.46	0.21	A	185.36	278.04	14.97	3.23	0.17	14.97	3.23
4 - Hepworth Rd W	0.35	2.83	0.54	A	574.43	861.64	36.91	2.57	0.41	36.92	2.57

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	134.01	33.50	133.54	198.15	473.80	0.00	1278.21	645.71	0.105	0.00	0.12	3.143	A
2 - Hepworth Rd E	401.27	100.32	400.13	412.21	195.13	0.00	1800.38	1384.12	0.223	0.00	0.29	2.568	A
3 - Moira Rd S	152.08	38.02	151.57	297.99	297.27	0.00	1347.20	896.02	0.113	0.00	0.13	3.009	A
4 - Hepworth Rd W	471.29	117.82	470.08	246.97	201.87	0.00	2029.44	1391.41	0.232	0.00	0.30	2.308	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	160.02	40.00	159.89	237.16	566.89	0.00	1222.39	645.71	0.131	0.12	0.15	3.387	A
2 - Hepworth Rd E	479.16	119.79	478.82	493.22	233.56	0.00	1773.74	1384.12	0.270	0.29	0.37	2.780	A
3 - Moira Rd S	181.59	45.40	181.46	356.64	355.75	0.00	1311.90	896.02	0.138	0.13	0.16	3.184	A
4 - Hepworth Rd W	562.76	140.69	562.41	295.56	241.65	0.00	1999.76	1391.41	0.281	0.30	0.39	2.504	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	195.98	49.00	195.76	290.40	694.13	0.00	1146.10	645.71	0.171	0.15	0.21	3.788	A
2 - Hepworth Rd E	586.84	146.71	586.29	603.92	285.97	0.00	1737.41	1384.12	0.338	0.37	0.51	3.125	A
3 - Moira Rd S	222.41	55.60	222.20	436.67	435.59	0.00	1263.72	896.02	0.176	0.16	0.21	3.456	A
4 - Hepworth Rd W	689.24	172.31	688.64	361.89	295.89	0.00	1959.29	1391.41	0.352	0.39	0.54	2.831	A

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

	Total	Junction	Entry		Circulating	Pedestrian		Saturation		Start	End		

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	Exit Flow (PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	Capacity (PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	195.98	49.00	195.98	290.67	694.74	0.00	1145.74	645.71	0.171	0.21	0.21	3.789	A
2 - Hepworth Rd E	586.84	146.71	586.84	604.46	286.26	0.00	1737.21	1384.12	0.338	0.51	0.51	3.128	A
3 - Moira Rd S	222.41	55.60	222.40	437.10	436.00	0.00	1263.47	896.02	0.176	0.21	0.21	3.457	A
4 - Hepworth Rd W	689.24	172.31	689.23	362.23	296.17	0.00	1959.09	1391.41	0.352	0.54	0.54	2.834	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	160.02	40.00	160.24	237.60	567.86	0.00	1221.81	645.71	0.131	0.21	0.15	3.391	A
2 - Hepworth Rd E	479.16	119.79	479.70	494.07	234.02	0.00	1773.42	1384.12	0.270	0.51	0.37	2.785	A
3 - Moira Rd S	181.59	45.40	181.80	357.32	356.41	0.00	1311.51	896.02	0.138	0.21	0.16	3.186	A
4 - Hepworth Rd W	562.76	140.69	563.35	296.11	242.10	0.00	1999.42	1391.41	0.281	0.54	0.39	2.509	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	134.01	33.50	134.14	198.92	475.42	0.00	1277.24	645.71	0.105	0.15	0.12	3.151	A
2 - Hepworth Rd E	401.27	100.32	401.61	413.64	195.92	0.00	1799.84	1384.12	0.223	0.37	0.29	2.574	A
3 - Moira Rd S	152.08	38.02	152.21	299.14	298.38	0.00	1346.53	896.02	0.113	0.16	0.13	3.013	A
4 - Hepworth Rd W	471.29	117.82	471.64	247.90	202.69	0.00	2028.82	1391.41	0.232	0.39	0.30	2.312	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	1.72	0.11	3.143	A	A
2 - Hepworth Rd E	4.22	0.28	2.568	A	A
3 - Moira Rd S	1.87	0.12	3.009	A	A
4 - Hepworth Rd W	4.45	0.30	2.308	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.22	0.15	3.387	A	A
2 - Hepworth Rd E	5.46	0.36	2.780	A	A
3 - Moira Rd S	2.37	0.16	3.184	A	A
4 - Hepworth Rd W	5.78	0.39	2.504	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.03	0.20	3.788	A	A
2 - Hepworth Rd E	7.49	0.50	3.125	A	A
3 - Moira Rd S	3.14	0.21	3.456	A	A
4 - Hepworth Rd W	7.98	0.53	2.831	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service

1 - Moira Rd N	3.08	0.21	3.789	A	A
2 - Hepworth Rd E	7.62	0.51	3.128	A	A
3 - Moira Rd S	3.19	0.21	3.457	A	A
4 - Hepworth Rd W	8.11	0.54	2.834	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.30	0.15	3.391	A	A
2 - Hepworth Rd E	5.66	0.38	2.785	A	A
3 - Moira Rd S	2.45	0.16	3.186	A	A
4 - Hepworth Rd W	5.98	0.40	2.509	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	1.79	0.12	3.151	A	A
2 - Hepworth Rd E	4.37	0.29	2.574	A	A
3 - Moira Rd S	1.94	0.13	3.013	A	A
4 - Hepworth Rd W	4.61	0.31	2.312	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, PM	2021 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.47	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	210.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	667.00	100.000
3 - Moira Rd S	ONE HOUR	✓	323.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	564.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	55.000	132.000	23.000
	2 - Hepworth Rd E	56.000	0.000	189.000	422.000
	3 - Moira Rd S	184.000	121.000	0.000	18.000

	4 - Hepworth Rd W	72.000	439.000	53.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.26	0.63	0.11
	2 - Hepworth Rd E	0.08	0.00	0.28	0.63
	3 - Moira Rd S	0.57	0.37	0.00	0.06
	4 - Hepworth Rd W	0.13	0.78	0.09	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.20	3.89	0.25	A	192.70	289.05	17.02	3.53	0.19	17.02	3.53
2 - Hepworth Rd E	0.41	3.45	0.70	A	612.05	918.08	47.09	3.08	0.52	47.10	3.08
3 - Moira Rd S	0.30	4.29	0.42	A	296.39	444.59	28.47	3.84	0.32	28.47	3.84
4 - Hepworth Rd W	0.33	2.85	0.49	A	517.54	776.30	33.41	2.58	0.37	33.42	2.58

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	158.10	39.52	157.54	234.10	460.20	0.00	1286.36	590.77	0.123	0.00	0.14	3.187	A
2 - Hepworth Rd E	502.15	125.54	500.64	461.67	156.08	0.00	1827.45	1535.44	0.275	0.00	0.38	2.711	A
3 - Moira Rd S	243.17	60.79	242.25	280.69	376.04	0.00	1299.66	823.47	0.187	0.00	0.23	3.401	A
4 - Hepworth Rd W	424.61	106.15	423.52	347.50	270.79	0.00	1978.02	1503.80	0.215	0.00	0.27	2.315	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	188.79	47.20	188.62	280.24	550.69	0.00	1232.11	590.77	0.153	0.14	0.18	3.449	A
2 - Hepworth Rd E	599.62	149.90	599.15	552.47	186.84	0.00	1806.13	1535.44	0.332	0.38	0.49	2.980	A
3 - Moira Rd S	290.37	72.59	290.09	335.95	450.03	0.00	1255.00	823.47	0.231	0.23	0.30	3.731	A
4 - Hepworth Rd W	507.02	126.76	506.70	415.90	324.23	0.00	1938.16	1503.80	0.262	0.27	0.35	2.515	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	231.21	57.80	230.94	343.10	674.27	0.00	1158.01	590.77	0.200	0.18	0.25	3.882	A
2 - Hepworth Rd E	734.38	183.60	733.56	676.45	228.76	0.00	1777.07	1535.44	0.413	0.49	0.70	3.446	A
3 - Moira Rd S	355.63	88.91	355.14	411.33	550.99	0.00	1194.07	823.47	0.298	0.30	0.42	4.288	A
4 - Hepworth Rd W	620.98	155.24	620.43	509.20	396.94	0.00	1883.91	1503.80	0.330	0.35	0.49	2.847	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	231.21	57.80	231.21	343.51	674.92	0.00	1157.62	590.77	0.200	0.25	0.25	3.885	A
2 - Hepworth Rd E	734.38	183.60	734.37	677.12	229.01	0.00	1776.90	1535.44	0.413	0.70	0.70	3.452	A
3 - Moira Rd S	355.63	88.91	355.62	411.78	551.60	0.00	1193.70	823.47	0.298	0.42	0.42	4.295	A
4 - Hepworth Rd W	620.98	155.24	620.97	509.77	397.46	0.00	1883.52	1503.80	0.330	0.49	0.49	2.850	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	188.79	47.20	189.05	280.89	551.73	0.00	1231.49	590.77	0.153	0.25	0.18	3.456	A
2 - Hepworth Rd E	599.62	149.90	600.43	553.54	187.24	0.00	1805.85	1535.44	0.332	0.70	0.50	2.987	A
3 - Moira Rd S	290.37	72.59	290.85	336.67	451.00	0.00	1254.42	823.47	0.231	0.42	0.30	3.739	A
4 - Hepworth Rd W	507.02	126.76	507.56	416.80	325.05	0.00	1937.54	1503.80	0.262	0.49	0.36	2.517	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	158.10	39.52	158.26	235.13	461.89	0.00	1285.35	590.77	0.123	0.18	0.14	3.196	A
2 - Hepworth Rd E	502.15	125.54	502.63	463.41	156.75	0.00	1826.99	1535.44	0.275	0.50	0.38	2.718	A
3 - Moira Rd S	243.17	60.79	243.46	281.84	377.54	0.00	1298.75	823.47	0.187	0.30	0.23	3.411	A
4 - Hepworth Rd W	424.61	106.15	424.93	348.91	272.09	0.00	1977.05	1503.80	0.215	0.36	0.27	2.319	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.06	0.14	3.187	A	A
2 - Hepworth Rd E	5.56	0.37	2.711	A	A

3 - Moira Rd S	3.37	0.22	3.401	A	A
4 - Hepworth Rd W	4.02	0.27	2.315	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.67	0.18	3.449	A	A
2 - Hepworth Rd E	7.31	0.49	2.980	A	A
3 - Moira Rd S	4.42	0.29	3.731	A	A
4 - Hepworth Rd W	5.23	0.35	2.515	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.66	0.24	3.882	A	A
2 - Hepworth Rd E	10.30	0.69	3.446	A	A
3 - Moira Rd S	6.20	0.41	4.288	A	A
4 - Hepworth Rd W	7.23	0.48	2.847	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.73	0.25	3.885	A	A
2 - Hepworth Rd E	10.52	0.70	3.452	A	A
3 - Moira Rd S	6.33	0.42	4.295	A	A
4 - Hepworth Rd W	7.35	0.49	2.850	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.77	0.18	3.456	A	A
2 - Hepworth Rd E	7.62	0.51	2.987	A	A
3 - Moira Rd S	4.62	0.31	3.739	A	A
4 - Hepworth Rd W	5.41	0.36	2.517	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.14	0.14	3.196	A	A
2 - Hepworth Rd E	5.79	0.39	2.718	A	A
3 - Moira Rd S	3.52	0.23	3.411	A	A
4 - Hepworth Rd W	4.16	0.28	2.319	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

					Model	Model	Model	Time	Results	Single				

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Segment Length (min)	For Central Hour Only	Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, AM	2021 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.28	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Traffic Flows

Demand Set Data Options

Default	Vehicle	Vehicle	Vehicle Mix		PCU	Default	Estimate	Turning	Turning	Turning

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	203.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	553.00	100.000
3 - Moira Rd S	ONE HOUR	✓	219.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	676.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	30.000	143.000	30.000
	2 - Hepworth Rd E	76.000	0.000	153.000	324.000
	3 - Moira Rd S	139.000	57.000	0.000	23.000
	4 - Hepworth Rd W	60.000	494.000	122.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.15	0.70	0.15
	2 - Hepworth Rd E	0.14	0.00	0.28	0.59
	3 - Moira Rd S	0.63	0.26	0.00	0.11
	4 - Hepworth Rd W	0.09	0.73	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.20	4.02	0.25	A	186.28	279.41	16.92	3.63	0.19	16.92	3.63

2 - Hepworth Rd E	0.36	3.27	0.55	A	507.44	761.16	37.39	2.95	0.42	37.39	2.95
3 - Moira Rd S	0.19	3.60	0.24	A	200.96	301.44	16.77	3.34	0.19	16.77	3.34
4 - Hepworth Rd W	0.38	2.97	0.61	A	620.31	930.46	41.35	2.67	0.46	41.35	2.67

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	152.83	38.21	152.28	206.39	505.31	0.00	1259.32	629.62	0.121	0.00	0.14	3.250	A
2 - Hepworth Rd E	416.33	104.08	415.11	436.20	221.38	0.00	1782.19	1381.16	0.234	0.00	0.30	2.631	A
3 - Moira Rd S	164.87	41.22	164.31	313.73	322.77	0.00	1331.81	867.51	0.124	0.00	0.14	3.081	A
4 - Hepworth Rd W	508.93	127.23	507.59	282.97	204.11	0.00	2027.77	1459.24	0.251	0.00	0.33	2.366	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	182.49	45.62	182.33	247.04	604.60	0.00	1199.78	629.62	0.152	0.14	0.18	3.537	A
2 - Hepworth Rd E	497.14	124.28	496.77	521.95	264.99	0.00	1751.96	1381.16	0.284	0.30	0.39	2.868	A
3 - Moira Rd S	196.88	49.22	196.72	375.48	386.27	0.00	1293.48	867.51	0.152	0.14	0.18	3.282	A
4 - Hepworth Rd W	607.71	151.93	607.30	338.66	244.34	0.00	1997.75	1459.24	0.304	0.33	0.44	2.589	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	223.51	55.88	223.23	302.48	740.28	0.00	1118.43	629.62	0.200	0.18	0.25	4.020	A
2 - Hepworth Rd E	608.86	152.22	608.24	639.08	324.44	0.00	1710.75	1381.16	0.356	0.39	0.55	3.263	A
3 - Moira Rd S	241.12	60.28	240.88	459.73	472.95	0.00	1241.17	867.51	0.194	0.18	0.24	3.598	A
4 - Hepworth Rd W	744.29	186.07	743.59	414.65	299.17	0.00	1956.85	1459.24	0.380	0.44	0.61	2.965	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	223.51	55.88	223.50	302.78	740.98	0.00	1118.01	629.62	0.200	0.25	0.25	4.024	A
2 - Hepworth Rd E	608.86	152.22	608.86	639.69	324.80	0.00	1710.50	1381.16	0.356	0.55	0.55	3.267	A
3 - Moira Rd S	241.12	60.28	241.12	460.22	473.43	0.00	1240.88	867.51	0.194	0.24	0.24	3.599	A
4 - Hepworth Rd W	744.29	186.07	744.28	415.08	299.47	0.00	1956.62	1459.24	0.380	0.61	0.61	2.968	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	182.49	45.62	182.77	247.52	605.71	0.00	1199.12	629.62	0.152	0.25	0.18	3.542	A

2 - Hepworth Rd E	497.14	124.28	497.75	522.92	265.56	0.00	1751.56	1381.16	0.284	0.55	0.40	2.872	A
3 - Moira Rd S	196.88	49.22	197.12	376.26	387.04	0.00	1293.02	867.51	0.152	0.24	0.18	3.284	A
4 - Hepworth Rd W	607.71	151.93	608.40	339.34	244.82	0.00	1997.39	1459.24	0.304	0.61	0.44	2.594	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	152.83	38.21	153.00	207.22	507.08	0.00	1258.25	629.62	0.121	0.18	0.14	3.259	A
2 - Hepworth Rd E	416.33	104.08	416.70	437.77	222.31	0.00	1781.54	1381.16	0.234	0.40	0.31	2.639	A
3 - Moira Rd S	164.87	41.22	165.03	314.99	324.02	0.00	1331.05	867.51	0.124	0.18	0.14	3.089	A
4 - Hepworth Rd W	508.93	127.23	509.34	284.08	204.96	0.00	2027.13	1459.24	0.251	0.44	0.34	2.372	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.03	0.14	3.250	A	A
2 - Hepworth Rd E	4.48	0.30	2.631	A	A
3 - Moira Rd S	2.07	0.14	3.081	A	A
4 - Hepworth Rd W	4.93	0.33	2.366	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.64	0.18	3.537	A	A
2 - Hepworth Rd E	5.84	0.39	2.868	A	A
3 - Moira Rd S	2.65	0.18	3.282	A	A
4 - Hepworth Rd W	6.45	0.43	2.589	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.66	0.24	4.020	A	A
2 - Hepworth Rd E	8.10	0.54	3.263	A	A
3 - Moira Rd S	3.55	0.24	3.598	A	A
4 - Hepworth Rd W	9.01	0.60	2.965	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.73	0.25	4.024	A	A
2 - Hepworth Rd E	8.26	0.55	3.267	A	A
3 - Moira Rd S	3.60	0.24	3.599	A	A
4 - Hepworth Rd W	9.17	0.61	2.968	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.75	0.18	3.542	A	A
2 - Hepworth Rd E	6.06	0.40	2.872	A	A
3 - Moira Rd S	2.74	0.18	3.284	A	A
4 - Hepworth Rd W	6.68	0.45	2.594	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.11	0.14	3.259	A	A
2 - Hepworth Rd E	4.65	0.31	2.639	A	A
3 - Moira Rd S	2.16	0.14	3.089	A	A
4 - Hepworth Rd W	5.11	0.34	2.372	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, PM	2021 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.67	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	223.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	703.00	100.000
3 - Moira Rd S	ONE HOUR	✓	349.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	617.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	58.000	133.000	32.000
	2 - Hepworth Rd E	62.000	0.000	189.000	452.000
	3 - Moira Rd S	188.000	121.000	0.000	40.000
	4 - Hepworth Rd W	86.000	460.000	71.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.26	0.60	0.14
	2 - Hepworth Rd E	0.09	0.00	0.27	0.64
	3 - Moira Rd S	0.54	0.35	0.00	0.11
	4 - Hepworth Rd W	0.14	0.75	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.22	4.06	0.28	A	204.63	306.94	18.72	3.66	0.21	18.72	3.66
2 - Hepworth Rd E	0.44	3.67	0.79	A	645.09	967.63	52.03	3.23	0.58	52.04	3.23
3 - Moira Rd S	0.33	4.62	0.49	A	320.25	480.37	32.56	4.07	0.36	32.56	4.07
4 - Hepworth Rd W	0.36	3.01	0.57	A	566.17	849.26	38.15	2.70	0.42	38.16	2.70

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	167.89	41.97	167.28	252.09	489.45	0.00	1268.83	596.21	0.132	0.00	0.15	3.266	A
2 - Hepworth Rd E	529.26	132.31	527.61	479.64	177.08	0.00	1812.89	1506.56	0.292	0.00	0.41	2.797	A
3 - Moira Rd S	262.75	65.69	261.72	294.93	409.77	0.00	1279.30	810.18	0.205	0.00	0.26	3.534	A
4 - Hepworth Rd W	464.51	116.13	463.28	393.23	278.25	0.00	1972.45	1545.79	0.236	0.00	0.31	2.383	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	200.47	50.12	200.29	301.78	585.69	0.00	1211.12	596.21	0.166	0.15	0.20	3.561	A
2 - Hepworth Rd E	631.98	158.00	631.45	574.00	211.98	0.00	1788.70	1506.56	0.353	0.41	0.54	3.109	A
3 - Moira Rd S	313.74	78.44	313.41	353.00	490.43	0.00	1230.62	810.18	0.255	0.26	0.34	3.924	A
4 - Hepworth Rd W	554.67	138.67	554.29	470.66	333.18	0.00	1931.48	1545.79	0.287	0.31	0.40	2.614	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	245.53	61.38	245.22	369.45	717.10	0.00	1132.33	596.21	0.217	0.20	0.28	4.057	A

2 - Hepworth Rd E	774.02	193.50	773.06	702.78	259.54	0.00	1755.74	1506.56	0.441	0.54	0.78	3.660	A
3 - Moira Rd S	384.26	96.06	383.66	432.18	600.41	0.00	1164.24	810.18	0.330	0.34	0.49	4.609	A
4 - Hepworth Rd W	679.33	169.83	678.68	576.21	407.87	0.00	1875.76	1545.79	0.362	0.40	0.56	3.005	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	245.53	61.38	245.52	369.94	717.86	0.00	1131.88	596.21	0.217	0.28	0.28	4.061	A
2 - Hepworth Rd E	774.02	193.50	774.01	703.54	259.84	0.00	1755.53	1506.56	0.441	0.78	0.79	3.666	A
3 - Moira Rd S	384.26	96.06	384.25	432.70	601.15	0.00	1163.80	810.18	0.330	0.49	0.49	4.617	A
4 - Hepworth Rd W	679.33	169.83	679.32	576.93	408.47	0.00	1875.31	1545.79	0.362	0.56	0.57	3.009	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	200.47	50.12	200.78	302.55	586.89	0.00	1210.40	596.21	0.166	0.28	0.20	3.565	A
2 - Hepworth Rd E	631.98	158.00	632.93	575.21	212.46	0.00	1788.37	1506.56	0.353	0.79	0.55	3.117	A
3 - Moira Rd S	313.74	78.44	314.33	353.81	491.58	0.00	1229.93	810.18	0.255	0.49	0.34	3.935	A
4 - Hepworth Rd W	554.67	138.67	555.32	471.78	334.12	0.00	1930.77	1545.79	0.287	0.57	0.40	2.620	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	167.89	41.97	168.07	253.24	491.31	0.00	1267.72	596.21	0.132	0.20	0.15	3.276	A
2 - Hepworth Rd E	529.26	132.31	529.80	481.52	177.85	0.00	1812.36	1506.56	0.292	0.55	0.41	2.809	A
3 - Moira Rd S	262.75	65.69	263.08	296.17	411.48	0.00	1278.27	810.18	0.206	0.34	0.26	3.549	A
4 - Hepworth Rd W	464.51	116.13	464.89	394.91	279.65	0.00	1971.41	1545.79	0.236	0.40	0.31	2.389	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.24	0.15	3.266	A	A
2 - Hepworth Rd E	6.04	0.40	2.797	A	A
3 - Moira Rd S	3.78	0.25	3.534	A	A
4 - Hepworth Rd W	4.53	0.30	2.383	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.92	0.19	3.561	A	A
2 - Hepworth Rd E	8.03	0.54	3.109	A	A
3 - Moira Rd S	5.02	0.33	3.924	A	A
4 - Hepworth Rd W	5.94	0.40	2.614	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service

1 - Moira Rd N	4.06	0.27	4.057	A	A
2 - Hepworth Rd E	11.50	0.77	3.660	A	A
3 - Moira Rd S	7.18	0.48	4.609	A	A
4 - Hepworth Rd W	8.34	0.56	3.005	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	4.14	0.28	4.061	A	A
2 - Hepworth Rd E	11.77	0.78	3.666	A	A
3 - Moira Rd S	7.35	0.49	4.617	A	A
4 - Hepworth Rd W	8.49	0.57	3.009	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.04	0.20	3.565	A	A
2 - Hepworth Rd E	8.39	0.56	3.117	A	A
3 - Moira Rd S	5.27	0.35	3.935	A	A
4 - Hepworth Rd W	6.16	0.41	2.620	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.33	0.16	3.276	A	A
2 - Hepworth Rd E	6.30	0.42	2.809	A	A
3 - Moira Rd S	3.96	0.26	3.549	A	A
4 - Hepworth Rd W	4.70	0.31	2.389	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, AM	2024 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.03	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	185.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	472.00	100.000
3 - Moira Rd S	ONE HOUR	✓	212.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	578.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	24.000	145.000	16.000
	2 - Hepworth Rd E	77.000	0.000	159.000	236.000
	3 - Moira Rd S	144.000	60.000	0.000	8.000
	4 - Hepworth Rd W	54.000	409.000	115.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.13	0.78	0.09
	2 - Hepworth Rd E	0.16	0.00	0.34	0.50
	3 - Moira Rd S	0.68	0.28	0.00	0.04
	4 - Hepworth Rd W	0.09	0.71	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.17	3.70	0.21	A	169.76	254.64	14.42	3.40	0.16	14.42	3.40
2 - Hepworth Rd E	0.30	2.99	0.43	A	433.12	649.67	29.71	2.74	0.33	29.71	2.74
3 - Moira Rd S	0.18	3.35	0.22	A	194.53	291.80	15.31	3.15	0.17	15.31	3.15
4 - Hepworth Rd W	0.33	2.74	0.48	A	530.38	795.57	33.19	2.50	0.37	33.19	2.50

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Moira Rd N	139.28	34.82	138.80	206.42	438.53	0.00	1299.36	676.42	0.107	0.00	0.12	3.100	A
2 - Hepworth Rd E	355.35	88.84	354.36	370.17	207.15	0.00	1792.05	1343.89	0.198	0.00	0.25	2.503	A
3 - Moira Rd S	159.60	39.90	159.08	314.52	246.99	0.00	1377.54	953.45	0.116	0.00	0.13	2.952	A
4 - Hepworth Rd W	435.15	108.79	434.06	195.19	210.89	0.00	2022.71	1332.05	0.215	0.00	0.27	2.265	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	166.31	41.58	166.18	247.05	524.68	0.00	1247.70	676.42	0.133	0.12	0.15	3.328	A
2 - Hepworth Rd E	424.32	106.08	424.04	442.92	247.94	0.00	1763.78	1343.89	0.241	0.25	0.32	2.687	A
3 - Moira Rd S	190.58	47.65	190.45	376.41	295.57	0.00	1348.22	953.45	0.141	0.13	0.16	3.109	A
4 - Hepworth Rd W	519.61	129.90	519.30	233.58	252.44	0.00	1991.71	1332.05	0.261	0.27	0.35	2.445	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	203.69	50.92	203.47	302.52	642.46	0.00	1177.08	676.42	0.173	0.15	0.21	3.697	A
2 - Hepworth Rd E	519.68	129.92	519.23	542.35	303.59	0.00	1725.21	1343.89	0.301	0.32	0.43	2.985	A
3 - Moira Rd S	233.42	58.35	233.21	460.90	361.92	0.00	1308.18	953.45	0.178	0.16	0.22	3.348	A
4 - Hepworth Rd W	636.39	159.10	635.87	286.01	309.11	0.00	1949.43	1332.05	0.326	0.35	0.48	2.739	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	203.69	50.92	203.69	302.78	642.99	0.00	1176.76	676.42	0.173	0.21	0.21	3.698	A
2 - Hepworth Rd E	519.68	129.92	519.68	542.80	303.88	0.00	1725.00	1343.89	0.301	0.43	0.43	2.986	A
3 - Moira Rd S	233.42	58.35	233.41	461.32	362.23	0.00	1307.99	953.45	0.178	0.22	0.22	3.349	A
4 - Hepworth Rd W	636.39	159.10	636.39	286.26	309.38	0.00	1949.23	1332.05	0.326	0.48	0.48	2.741	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	166.31	41.58	166.53	247.48	525.53	0.00	1247.19	676.42	0.133	0.21	0.15	3.333	A
2 - Hepworth Rd E	424.32	106.08	424.77	443.65	248.41	0.00	1763.45	1343.89	0.241	0.43	0.32	2.689	A
3 - Moira Rd S	190.58	47.65	190.79	377.10	296.08	0.00	1347.91	953.45	0.141	0.22	0.17	3.111	A
4 - Hepworth Rd W	519.61	129.90	520.13	233.99	252.88	0.00	1991.38	1332.05	0.261	0.48	0.35	2.449	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	139.28	34.82	139.41	207.20	439.99	0.00	1298.48	676.42	0.107	0.15	0.12	3.105	A
2 - Hepworth Rd E	355.35	88.84	355.63	371.44	207.97	0.00	1791.48	1343.89	0.198	0.32	0.25	2.507	A
3 - Moira Rd S	159.60	39.90	159.74	315.71	247.89	0.00	1377.00	953.45	0.116	0.17	0.13	2.957	A
4 -													

Hepworth Rd W	435.15	108.79	435.47	195.90	211.73	0.00	2022.08	1332.05	0.215	0.35	0.28	2.270	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	1.76	0.12	3.100	A	A
2 - Hepworth Rd E	3.64	0.24	2.503	A	A
3 - Moira Rd S	1.93	0.13	2.952	A	A
4 - Hepworth Rd W	4.04	0.27	2.265	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.27	0.15	3.328	A	A
2 - Hepworth Rd E	4.68	0.31	2.687	A	A
3 - Moira Rd S	2.43	0.16	3.109	A	A
4 - Hepworth Rd W	5.21	0.35	2.445	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.08	0.21	3.697	A	A
2 - Hepworth Rd E	6.34	0.42	2.985	A	A
3 - Moira Rd S	3.20	0.21	3.348	A	A
4 - Hepworth Rd W	7.13	0.48	2.739	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.13	0.21	3.698	A	A
2 - Hepworth Rd E	6.45	0.43	2.986	A	A
3 - Moira Rd S	3.25	0.22	3.349	A	A
4 - Hepworth Rd W	7.25	0.48	2.741	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.35	0.16	3.333	A	A
2 - Hepworth Rd E	4.84	0.32	2.689	A	A
3 - Moira Rd S	2.51	0.17	3.111	A	A
4 - Hepworth Rd W	5.39	0.36	2.449	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	1.83	0.12	3.105	A	A
2 - Hepworth Rd E	3.77	0.25	2.507	A	A
3 - Moira Rd S	2.00	0.13	2.957	A	A
4 - Hepworth Rd W	4.17	0.28	2.270	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, PM	2024 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.33	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	219.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	586.00	100.000
3 - Moira Rd S	ONE HOUR	✓	337.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	530.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	57.000	138.000	24.000
	2 - Hepworth Rd E	59.000	0.000	198.000	329.000
	3 - Moira Rd S	192.000	127.000	0.000	18.000
	4 - Hepworth Rd W	75.000	402.000	53.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.26	0.63	0.11
	2 - Hepworth Rd E	0.10	0.00	0.34	0.56
	3 - Moira Rd S	0.57	0.38	0.00	0.05
	4 - Hepworth Rd W	0.14	0.76	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.20	3.84	0.26	A	200.96	301.44	17.59	3.50	0.20	17.59	3.50
2 - Hepworth Rd E	0.36	3.19	0.57	A	537.72	806.59	38.93	2.90	0.43	38.93	2.90
3 - Moira Rd S	0.30	4.08	0.42	A	309.24	463.86	28.53	3.69	0.32	28.53	3.69
4 - Hepworth Rd W	0.31	2.80	0.45	A	486.34	729.51	30.94	2.55	0.34	30.95	2.55

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	164.87	41.22	164.30	244.63	436.94	0.00	1300.31	619.71	0.127	0.00	0.14	3.167	A
2 - Hepworth Rd E	441.17	110.29	439.90	439.90	161.33	0.00	1823.81	1517.70	0.242	0.00	0.32	2.599	A
3 - Moira Rd S	253.71	63.43	252.78	291.96	309.27	0.00	1339.95	879.14	0.189	0.00	0.23	3.308	A
4 - Hepworth Rd W	399.01	99.75	398.00	278.48	283.57	0.00	1968.49	1445.23	0.203	0.00	0.25	2.291	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	196.88	49.22	196.71	292.83	522.85	0.00	1248.80	619.71	0.158	0.14	0.19	3.421	A
2 - Hepworth Rd E	526.80	131.70	526.43	526.43	193.13	0.00	1801.77	1517.70	0.292	0.32	0.41	2.823	A
3 - Moira Rd S	302.96	75.74	302.68	349.44	370.11	0.00	1303.23	879.14	0.232	0.23	0.30	3.598	A
4 - Hepworth Rd W	476.46	119.11	476.16	333.28	339.52	0.00	1926.75	1445.23	0.247	0.25	0.33	2.481	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	241.12	60.28	240.85	358.53	640.19	0.00	1178.44	619.71	0.205	0.19	0.26	3.838	A
2 - Hepworth Rd E	645.20	161.30	644.57	644.57	236.46	0.00	1771.73	1517.70	0.364	0.41	0.57	3.192	A
3 - Moira Rd S	371.04	92.76	370.58	427.86	453.17	0.00	1253.11	879.14	0.296	0.30	0.42	4.077	A
4 - Hepworth Rd W	583.54	145.89	583.04	408.07	415.68	0.00	1869.93	1445.23	0.312	0.33	0.45	2.797	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	241.12	60.28	241.12	358.93	640.79	0.00	1178.09	619.71	0.205	0.26	0.26	3.841	A
2 - Hepworth Rd E	645.20	161.30	645.19	645.19	236.72	0.00	1771.56	1517.70	0.364	0.57	0.57	3.195	A
3 - Moira Rd S	371.04	92.76	371.04	428.29	453.62	0.00	1252.84	879.14	0.296	0.42	0.42	4.082	A
4 - Hepworth Rd W	583.54	145.89	583.54	408.47	416.18	0.00	1869.56	1445.23	0.312	0.45	0.45	2.798	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	196.88	49.22	197.15	293.46	523.80	0.00	1248.23	619.71	0.158	0.26	0.19	3.425	A
2 - Hepworth Rd E	526.80	131.70	527.43	527.42	193.53	0.00	1801.49	1517.70	0.292	0.57	0.42	2.828	A
3 - Moira Rd S	302.96	75.74	303.42	350.14	370.82	0.00	1302.81	879.14	0.233	0.42	0.30	3.602	A
4 - Hepworth Rd W	476.46	119.11	476.95	333.93	340.31	0.00	1926.16	1445.23	0.247	0.45	0.33	2.486	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	164.87	41.22	165.04	245.67	438.52	0.00	1299.36	619.71	0.127	0.19	0.15	3.173	A
2 - Hepworth Rd E	441.17	110.29	441.55	441.55	162.02	0.00	1823.33	1517.70	0.242	0.42	0.32	2.605	A
3 - Moira Rd S	253.71	63.43	253.99	293.12	310.44	0.00	1339.25	879.14	0.189	0.30	0.23	3.317	A
4 - Hepworth Rd W	399.01	99.75	399.31	279.55	284.88	0.00	1967.51	1445.23	0.203	0.33	0.26	2.297	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.13	0.14	3.167	A	A
2 - Hepworth Rd E	4.69	0.31	2.599	A	A
3 - Moira Rd S	3.42	0.23	3.308	A	A
4 - Hepworth Rd W	3.74	0.25	2.291	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.76	0.18	3.421	A	A
2 - Hepworth Rd E	6.09	0.41	2.823	A	A
3 - Moira Rd S	4.45	0.30	3.598	A	A
4 - Hepworth Rd W	4.85	0.32	2.481	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.78	0.25	3.838	A	A
2 - Hepworth Rd E	8.40	0.56	3.192	A	A
3 - Moira Rd S	6.16	0.41	4.077	A	A
4 - Hepworth Rd W	6.68	0.45	2.797	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.85	0.26	3.841	A	A
2 - Hepworth Rd E	8.56	0.57	3.195	A	A
3 - Moira Rd S	6.28	0.42	4.082	A	A
4 - Hepworth Rd W	6.78	0.45	2.798	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.86	0.19	3.425	A	A
2 - Hepworth Rd					

E	6.32	0.42	2.828	A	A
3 - Moira Rd S	4.65	0.31	3.602	A	A
4 - Hepworth Rd W	5.01	0.33	2.486	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.22	0.15	3.173	A	A
2 - Hepworth Rd E	4.87	0.32	2.605	A	A
3 - Moira Rd S	3.57	0.24	3.317	A	A
4 - Hepworth Rd W	3.87	0.26	2.297	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, AM	2024 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.18	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)

1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	212.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	492.00	100.000
3 - Moira Rd S	ONE HOUR	✓	229.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	629.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	31.000	150.000	31.000
	2 - Hepworth Rd E	79.000	0.000	159.000	254.000
	3 - Moira Rd S	146.000	60.000	0.000	23.000
	4 - Hepworth Rd W	62.000	435.000	132.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.15	0.71	0.15
	2 - Hepworth Rd E	0.16	0.00	0.32	0.52
	3 - Moira Rd S	0.64	0.26	0.00	0.10
	4 - Hepworth Rd W	0.10	0.69	0.21	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.20	3.93	0.25	A	194.53	291.80	17.36	3.57	0.19	17.36	3.57
2 - Hepworth Rd E	0.32	3.12	0.47	A	451.47	677.20	32.04	2.84	0.36	32.04	2.84
3 - Moira Rd S	0.20	3.48	0.24	A	210.13	315.20	17.09	3.25	0.19	17.09	3.25
4 - Hepworth Rd W	0.36	2.87	0.55	A	577.18	865.77	37.48	2.60	0.42	37.48	2.60

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	159.60	39.90	159.04	215.41	470.79	0.00	1280.02	660.10	0.125	0.00	0.14	3.209	A
2 - Hepworth Rd E	370.40	92.60	369.35	394.92	234.90	0.00	1772.81	1341.10	0.209	0.00	0.26	2.564	A
3 - Moira Rd S	172.40	43.10	171.83	331.01	273.24	0.00	1361.70	920.54	0.127	0.00	0.14	3.023	A
4 - Hepworth Rd W	473.54	118.39	472.32	231.19	213.87	0.00	2020.48	1401.65	0.234	0.00	0.31	2.322	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	190.58	47.65	190.42	257.83	563.29	0.00	1224.55	660.10	0.156	0.14	0.18	3.480	A
2 - Hepworth Rd E	442.30	110.57	441.99	472.55	281.16	0.00	1740.75	1341.10	0.254	0.26	0.34	2.771	A
3 - Moira Rd S	205.87	51.47	205.71	396.16	327.00	0.00	1329.26	920.54	0.155	0.14	0.18	3.203	A
4 - Hepworth Rd W	565.46	141.36	565.10	276.69	256.02	0.00	1989.04	1401.65	0.284	0.31	0.40	2.528	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	233.42	58.35	233.14	315.70	689.72	0.00	1148.75	660.10	0.203	0.18	0.25	3.931	A
2 - Hepworth Rd E	541.70	135.43	541.19	578.61	344.25	0.00	1697.02	1341.10	0.319	0.34	0.47	3.112	A
3 - Moira Rd S	252.13	63.03	251.89	485.06	400.39	0.00	1284.96	920.54	0.196	0.18	0.24	3.484	A
4 - Hepworth Rd W	692.54	173.14	691.93	338.79	313.49	0.00	1946.17	1401.65	0.356	0.40	0.55	2.868	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	233.42	58.35	233.41	315.99	690.33	0.00	1148.38	660.10	0.203	0.25	0.25	3.934	A
2 - Hepworth Rd E	541.70	135.43	541.70	579.13	344.62	0.00	1696.76	1341.10	0.319	0.47	0.47	3.116	A
3 - Moira Rd S	252.13	63.03	252.13	485.55	400.77	0.00	1284.73	920.54	0.196	0.24	0.24	3.485	A
4 - Hepworth Rd W	692.54	173.14	692.54	339.11	313.79	0.00	1945.94	1401.65	0.356	0.55	0.55	2.871	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	190.58	47.65	190.86	258.30	564.27	0.00	1223.97	660.10	0.156	0.25	0.19	3.487	A
2 - Hepworth Rd E	442.30	110.57	442.80	473.39	281.74	0.00	1740.34	1341.10	0.254	0.47	0.34	2.777	A
3 - Moira Rd S	205.87	51.47	206.10	396.94	327.61	0.00	1328.89	920.54	0.155	0.24	0.18	3.206	A
4 - Hepworth Rd W	565.46	141.36	566.07	277.21	256.50	0.00	1988.68	1401.65	0.284	0.55	0.40	2.531	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	159.60	39.90	159.77	216.25	472.41	0.00	1279.05	660.10	0.125	0.19	0.14	3.218	A
2 - Hepworth Rd E	370.40	92.60	370.71	396.32	235.86	0.00	1772.15	1341.10	0.209	0.34	0.27	2.568	A
3 - Moira Rd S	172.40	43.10	172.56	332.30	274.27	0.00	1361.08	920.54	0.127	0.18	0.15	3.031	A
4 - Hepworth Rd W	473.54	118.39	473.91	232.08	214.75	0.00	2019.83	1401.65	0.234	0.40	0.31	2.330	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.09	0.14	3.209	A	A
2 - Hepworth Rd E	3.88	0.26	2.564	A	A
3 - Moira Rd S	2.13	0.14	3.023	A	A
4 - Hepworth Rd W	4.51	0.30	2.322	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.72	0.18	3.480	A	A
2 - Hepworth Rd E	5.02	0.33	2.771	A	A
3 - Moira Rd S	2.70	0.18	3.203	A	A
4 - Hepworth Rd	5.86	0.39	2.528	A	A

W					

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.74	0.25	3.931	A	A
2 - Hepworth Rd E	6.89	0.46	3.112	A	A
3 - Moira Rd S	3.59	0.24	3.484	A	A
4 - Hepworth Rd W	8.12	0.54	2.868	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.81	0.25	3.934	A	A
2 - Hepworth Rd E	7.01	0.47	3.116	A	A
3 - Moira Rd S	3.65	0.24	3.485	A	A
4 - Hepworth Rd W	8.26	0.55	2.871	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.82	0.19	3.487	A	A
2 - Hepworth Rd E	5.21	0.35	2.777	A	A
3 - Moira Rd S	2.80	0.19	3.206	A	A
4 - Hepworth Rd W	6.07	0.40	2.531	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.18	0.15	3.218	A	A
2 - Hepworth Rd E	4.03	0.27	2.568	A	A
3 - Moira Rd S	2.21	0.15	3.031	A	A
4 - Hepworth Rd W	4.66	0.31	2.330	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, PM	2024 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.53	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	232.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	622.00	100.000
3 - Moira Rd S	ONE HOUR	✓	364.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	584.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	60.000	139.000	33.000
	2 - Hepworth Rd E	65.000	0.000	198.000	359.000
	3 - Moira Rd S	196.000	127.000	0.000	41.000
	4 - Hepworth Rd W	89.000	423.000	72.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.26	0.60	0.14
	2 - Hepworth Rd E	0.10	0.00	0.32	0.58
	3 - Moira Rd S	0.54	0.35	0.00	0.11
	4 - Hepworth Rd W	0.15	0.72	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.22	4.02	0.28	A	212.89	319.33	19.31	3.63	0.21	19.31	3.63
2 - Hepworth Rd E	0.39	3.38	0.64	A	570.76	856.14	43.20	3.03	0.48	43.20	3.03
3 - Moira Rd S	0.33	4.38	0.49	A	334.01	501.02	32.57	3.90	0.36	32.57	3.90
4 - Hepworth Rd W	0.35	2.95	0.53	A	535.89	803.83	35.59	2.66	0.40	35.59	2.66

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	174.66	43.67	174.03	262.62	466.93	0.00	1282.33	622.85	0.136	0.00	0.16	3.246	A
2 - Hepworth Rd E	468.27	117.07	466.88	457.88	183.09	0.00	1808.73	1487.88	0.259	0.00	0.35	2.680	A
3 - Moira Rd S	274.04	68.51	272.99	306.96	343.02	0.00	1319.59	861.02	0.208	0.00	0.26	3.436	A
4 - Hepworth Rd W	439.67	109.92	438.52	324.97	291.04	0.00	1962.92	1494.07	0.224	0.00	0.29	2.361	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	208.56	52.14	208.38	314.37	558.76	0.00	1227.27	622.85	0.170	0.16	0.20	3.533	A
2 - Hepworth Rd E	559.17	139.79	558.74	547.96	219.17	0.00	1783.72	1487.88	0.313	0.35	0.45	2.939	A
3 - Moira Rd S	327.23	81.81	326.90	367.39	410.52	0.00	1278.85	861.02	0.256	0.26	0.34	3.782	A
4 - Hepworth Rd W	525.00	131.25	524.66	388.95	348.47	0.00	1920.07	1494.07	0.273	0.29	0.37	2.580	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	255.44	63.86	255.12	384.88	684.13	0.00	1152.10	622.85	0.222	0.20	0.28	4.013	A
2 - Hepworth Rd E	684.83	171.21	684.10	670.91	268.34	0.00	1749.64	1487.88	0.391	0.45	0.64	3.377	A
3 - Moira Rd S	400.77	100.19	400.20	449.82	502.62	0.00	1223.27	861.02	0.328	0.34	0.48	4.371	A
4 - Hepworth Rd W	643.00	160.75	642.40	476.21	426.62	0.00	1861.78	1494.07	0.345	0.37	0.52	2.950	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	255.44	63.86	255.43	385.35	684.83	0.00	1151.68	622.85	0.222	0.28	0.28	4.016	A
2 - Hepworth Rd E	684.83	171.21	684.83	671.61	268.65	0.00	1749.42	1487.88	0.391	0.64	0.64	3.380	A
3 - Moira Rd S	400.77	100.19	400.76	450.31	503.16	0.00	1222.94	861.02	0.328	0.48	0.49	4.378	A
4 - Hepworth Rd W	643.00	160.75	642.99	476.74	427.19	0.00	1861.35	1494.07	0.345	0.52	0.53	2.954	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	208.56	52.14	208.88	315.11	559.86	0.00	1226.61	622.85	0.170	0.28	0.21	3.537	A
2 - Hepworth Rd E	559.17	139.79	559.89	549.08	219.66	0.00	1783.38	1487.88	0.314	0.64	0.46	2.943	A
3 - Moira Rd S	327.23	81.81	327.79	368.18	411.38	0.00	1278.33	861.02	0.256	0.49	0.35	3.791	A
4 - Hepworth Rd W	525.00	131.25	525.60	389.79	349.38	0.00	1919.40	1494.07	0.274	0.53	0.38	2.583	A

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

Name	Total Demand	Junction Arrivals	Entry Flow	Exit Flow (PCU/hr)	Circulating Flow	Pedestrian Demand	Capacity (PCU/hr)	Saturation Capacity	RFC	Start Queue	End Queue	Delay (s)	LOS

	(PCU/hr)	(PCU)	(PCU/hr)		(PCU/hr)	(Ped/hr)		(PCU/hr)		(PCU)	(PCU)		
1 - Moira Rd N	174.66	43.67	174.85	263.77	468.69	0.00	1281.28	622.85	0.136	0.21	0.16	3.253	A
2 - Hepworth Rd E	468.27	117.07	468.71	459.66	183.88	0.00	1808.18	1487.88	0.259	0.46	0.35	2.687	A
3 - Moira Rd S	274.04	68.51	274.37	308.21	344.38	0.00	1318.77	861.02	0.208	0.35	0.26	3.449	A
4 - Hepworth Rd W	439.67	109.92	440.02	326.30	292.44	0.00	1961.87	1494.07	0.224	0.38	0.29	2.365	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.31	0.15	3.246	A	A
2 - Hepworth Rd E	5.13	0.34	2.680	A	A
3 - Moira Rd S	3.83	0.26	3.436	A	A
4 - Hepworth Rd W	4.25	0.28	2.361	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.01	0.20	3.533	A	A
2 - Hepworth Rd E	6.72	0.45	2.939	A	A
3 - Moira Rd S	5.05	0.34	3.782	A	A
4 - Hepworth Rd W	5.55	0.37	2.580	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	4.18	0.28	4.013	A	A
2 - Hepworth Rd E	9.42	0.63	3.377	A	A
3 - Moira Rd S	7.11	0.47	4.371	A	A
4 - Hepworth Rd W	7.75	0.52	2.950	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	4.26	0.28	4.016	A	A
2 - Hepworth Rd E	9.61	0.64	3.380	A	A
3 - Moira Rd S	7.27	0.48	4.378	A	A
4 - Hepworth Rd W	7.89	0.53	2.954	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.14	0.21	3.537	A	A
2 - Hepworth Rd E	7.00	0.47	2.943	A	A
3 - Moira Rd S	5.29	0.35	3.791	A	A
4 - Hepworth Rd W	5.75	0.38	2.583	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.41	0.16	3.253	A	A
2 - Hepworth Rd E	5.33	0.36	2.687	A	A
3 - Moira Rd S	4.01	0.27	3.449	A	A
4 - Hepworth Rd W	4.40	0.29	2.365	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, AM	2024 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.22	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	185.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	556.00	100.000
3 - Moira Rd S	ONE HOUR	✓	212.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	653.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	24.000	145.000	16.000
	2 - Hepworth Rd E	77.000	0.000	159.000	320.000
	3 - Moira Rd S	144.000	60.000	0.000	8.000
	4 - Hepworth Rd W	54.000	490.000	109.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.13	0.78	0.09
	2 - Hepworth Rd E	0.14	0.00	0.29	0.58
	3 - Moira Rd S	0.68	0.28	0.00	0.04
	4 - Hepworth Rd W	0.08	0.75	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To

		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.18	3.90	0.22	A	169.76	254.64	15.04	3.54	0.17	15.04	3.54
2 - Hepworth Rd E	0.35	3.22	0.55	A	510.20	765.29	37.17	2.91	0.41	37.17	2.91
3 - Moira Rd S	0.19	3.53	0.23	A	194.53	291.80	15.99	3.29	0.18	15.99	3.29
4 - Hepworth Rd W	0.37	2.93	0.58	A	599.20	898.81	39.49	2.64	0.44	39.49	2.64

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	139.28	34.82	138.79	206.39	494.80	0.00	1265.62	643.66	0.110	0.00	0.12	3.192	A
2 - Hepworth Rd E	418.59	104.65	417.37	430.96	202.63	0.00	1795.19	1386.09	0.233	0.00	0.30	2.610	A
3 - Moira Rd S	159.60	39.90	159.07	309.98	310.02	0.00	1339.50	895.70	0.119	0.00	0.13	3.048	A
4 - Hepworth Rd W	491.61	122.90	490.33	258.22	210.87	0.00	2022.72	1393.86	0.243	0.00	0.32	2.347	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	166.31	41.58	166.17	247.04	592.03	0.00	1207.32	643.66	0.138	0.12	0.16	3.457	A
2 - Hepworth Rd E	499.83	124.96	499.47	515.67	242.54	0.00	1767.52	1386.09	0.283	0.30	0.39	2.839	A
3 - Moira Rd S	190.58	47.65	190.44	371.00	371.01	0.00	1302.69	895.70	0.146	0.13	0.17	3.236	A
4 - Hepworth Rd W	587.03	146.76	586.65	309.02	252.43	0.00	1991.72	1393.86	0.295	0.32	0.42	2.562	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	203.69	50.92	203.45	302.49	724.90	0.00	1127.65	643.66	0.181	0.16	0.22	3.894	A
2 - Hepworth Rd E	612.17	153.04	611.56	631.39	296.96	0.00	1729.80	1386.09	0.354	0.39	0.54	3.217	A
3 - Moira Rd S	233.42	58.35	233.19	454.25	454.27	0.00	1252.45	895.70	0.186	0.17	0.23	3.531	A
4 - Hepworth Rd W	718.97	179.74	718.31	378.37	309.08	0.00	1949.46	1393.86	0.369	0.42	0.58	2.922	A

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

	Total	Junction	Entry		Circulating	Pedestrian		Saturation		Start	End		

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	Exit Flow (PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	Capacity (PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	203.69	50.92	203.69	302.78	725.57	0.00	1127.25	643.66	0.181	0.22	0.22	3.897	A
2 - Hepworth Rd E	612.17	153.04	612.16	631.98	297.27	0.00	1729.58	1386.09	0.354	0.54	0.55	3.220	A
3 - Moira Rd S	233.42	58.35	233.41	454.72	454.72	0.00	1252.17	895.70	0.186	0.23	0.23	3.532	A
4 - Hepworth Rd W	718.97	179.74	718.96	378.75	309.38	0.00	1949.23	1393.86	0.369	0.58	0.58	2.925	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	166.31	41.58	166.55	247.51	593.09	0.00	1206.69	643.66	0.138	0.22	0.16	3.463	A
2 - Hepworth Rd E	499.83	124.96	500.43	516.60	243.04	0.00	1767.17	1386.09	0.283	0.55	0.40	2.844	A
3 - Moira Rd S	190.58	47.65	190.81	371.75	371.73	0.00	1302.26	895.70	0.146	0.23	0.17	3.241	A
4 - Hepworth Rd W	587.03	146.76	587.69	309.62	252.91	0.00	1991.36	1393.86	0.295	0.58	0.42	2.567	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	139.28	34.82	139.42	207.22	496.53	0.00	1264.58	643.66	0.110	0.16	0.12	3.199	A
2 - Hepworth Rd E	418.59	104.65	418.95	432.49	203.46	0.00	1794.61	1386.09	0.233	0.40	0.31	2.619	A
3 - Moira Rd S	159.60	39.90	159.75	311.21	311.20	0.00	1338.79	895.70	0.119	0.17	0.14	3.053	A
4 - Hepworth Rd W	491.61	122.90	492.00	259.21	211.74	0.00	2022.07	1393.86	0.243	0.42	0.32	2.354	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	1.81	0.12	3.192	A	A
2 - Hepworth Rd E	4.47	0.30	2.610	A	A
3 - Moira Rd S	1.99	0.13	3.048	A	A
4 - Hepworth Rd W	4.72	0.31	2.347	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.35	0.16	3.457	A	A
2 - Hepworth Rd E	5.81	0.39	2.839	A	A
3 - Moira Rd S	2.53	0.17	3.236	A	A
4 - Hepworth Rd W	6.17	0.41	2.562	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.24	0.22	3.894	A	A
2 - Hepworth Rd E	8.04	0.54	3.217	A	A
3 - Moira Rd S	3.37	0.22	3.531	A	A
4 - Hepworth Rd W	8.58	0.57	2.922	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service

1 - Moira Rd N	3.30	0.22	3.897	A	A
2 - Hepworth Rd E	8.19	0.55	3.220	A	A
3 - Moira Rd S	3.42	0.23	3.532	A	A
4 - Hepworth Rd W	8.73	0.58	2.925	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.45	0.16	3.463	A	A
2 - Hepworth Rd E	6.03	0.40	2.844	A	A
3 - Moira Rd S	2.62	0.17	3.241	A	A
4 - Hepworth Rd W	6.39	0.43	2.567	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	1.89	0.13	3.199	A	A
2 - Hepworth Rd E	4.64	0.31	2.619	A	A
3 - Moira Rd S	2.06	0.14	3.053	A	A
4 - Hepworth Rd W	4.89	0.33	2.354	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, PM	2024 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.59	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	219.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	698.00	100.000
3 - Moira Rd S	ONE HOUR	✓	337.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	589.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	57.000	138.000	24.000
	2 - Hepworth Rd E	59.000	0.000	198.000	441.000
	3 - Moira Rd S	192.000	127.000	0.000	18.000

	4 - Hepworth Rd W	75.000	459.000	55.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.26	0.63	0.11
	2 - Hepworth Rd E	0.08	0.00	0.28	0.63
	3 - Moira Rd S	0.57	0.38	0.00	0.05
	4 - Hepworth Rd W	0.13	0.78	0.09	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.21	4.01	0.27	A	200.96	301.44	18.20	3.62	0.20	18.20	3.62
2 - Hepworth Rd E	0.43	3.59	0.76	A	640.50	960.75	50.86	3.18	0.57	50.86	3.18
3 - Moira Rd S	0.31	4.46	0.46	A	309.24	463.86	30.59	3.96	0.34	30.59	3.96
4 - Hepworth Rd W	0.35	2.95	0.53	A	540.48	810.72	35.83	2.65	0.40	35.83	2.65

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	164.87	41.22	164.28	244.59	481.20	0.00	1273.78	590.49	0.129	0.00	0.15	3.243	A
2 - Hepworth Rd E	525.49	131.37	523.88	482.66	162.82	0.00	1822.78	1535.68	0.288	0.00	0.40	2.767	A
3 - Moira Rd S	253.71	63.43	252.74	293.43	393.27	0.00	1289.26	823.65	0.197	0.00	0.24	3.470	A
4 - Hepworth Rd W	443.43	110.86	442.27	362.49	283.52	0.00	1968.53	1501.58	0.225	0.00	0.29	2.358	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	196.88	49.22	196.70	292.80	575.82	0.00	1217.04	590.49	0.162	0.15	0.19	3.527	A
2 - Hepworth Rd E	627.49	156.87	626.97	577.61	194.92	0.00	1800.53	1535.68	0.349	0.40	0.53	3.065	A
3 - Moira Rd S	302.96	75.74	302.65	351.21	470.68	0.00	1242.54	823.65	0.244	0.24	0.32	3.830	A
4 - Hepworth Rd W	529.50	132.37	529.15	433.85	339.48	0.00	1926.78	1501.58	0.275	0.29	0.38	2.575	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	241.12	60.28	240.82	358.47	705.02	0.00	1139.57	590.49	0.212	0.19	0.27	4.005	A
2 - Hepworth Rd E	768.51	192.13	767.59	707.20	238.64	0.00	1770.22	1535.68	0.434	0.53	0.76	3.587	A
3 - Moira Rd S	371.04	92.76	370.50	429.99	576.24	0.00	1178.83	823.65	0.315	0.32	0.46	4.451	A
4 - Hepworth Rd W	648.50	162.13	647.90	531.15	415.60	0.00	1870.00	1501.58	0.347	0.38	0.53	2.944	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	241.12	60.28	241.12	358.93	705.75	0.00	1139.14	590.49	0.212	0.27	0.27	4.008	A
2 - Hepworth Rd E	768.51	192.13	768.50	707.95	238.92	0.00	1770.03	1535.68	0.434	0.76	0.76	3.593	A
3 - Moira Rd S	371.04	92.76	371.04	430.49	576.93	0.00	1178.42	823.65	0.315	0.46	0.46	4.458	A
4 - Hepworth Rd W	648.50	162.13	648.50	531.79	416.18	0.00	1869.56	1501.58	0.347	0.53	0.53	2.947	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	196.88	49.22	197.17	293.52	576.97	0.00	1216.35	590.49	0.162	0.27	0.19	3.535	A
2 - Hepworth Rd E	627.49	156.87	628.39	578.79	195.35	0.00	1800.23	1535.68	0.349	0.76	0.54	3.076	A
3 - Moira Rd S	302.96	75.74	303.49	352.00	471.75	0.00	1241.90	823.65	0.244	0.46	0.32	3.837	A
4 - Hepworth Rd W	529.50	132.37	530.10	434.84	340.40	0.00	1926.10	1501.58	0.275	0.53	0.38	2.581	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	164.87	41.22	165.05	245.70	483.01	0.00	1272.69	590.49	0.130	0.19	0.15	3.252	A
2 - Hepworth Rd E	525.49	131.37	526.01	484.52	163.53	0.00	1822.28	1535.68	0.288	0.54	0.41	2.779	A
3 - Moira Rd S	253.71	63.43	254.02	294.66	394.89	0.00	1288.28	823.65	0.197	0.32	0.25	3.483	A
4 - Hepworth Rd W	443.43	110.86	443.78	363.99	284.92	0.00	1967.48	1501.58	0.225	0.38	0.29	2.364	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.18	0.15	3.243	A	A
2 - Hepworth Rd E	5.94	0.40	2.767	A	A

3 - Moira Rd S	3.58	0.24	3.470	A	A
4 - Hepworth Rd W	4.28	0.29	2.358	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.84	0.19	3.527	A	A
2 - Hepworth Rd E	7.86	0.52	3.065	A	A
3 - Moira Rd S	4.73	0.32	3.830	A	A
4 - Hepworth Rd W	5.59	0.37	2.575	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.94	0.26	4.005	A	A
2 - Hepworth Rd E	11.20	0.75	3.587	A	A
3 - Moira Rd S	6.70	0.45	4.451	A	A
4 - Hepworth Rd W	7.80	0.52	2.944	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	4.01	0.27	4.008	A	A
2 - Hepworth Rd E	11.45	0.76	3.593	A	A
3 - Moira Rd S	6.86	0.46	4.458	A	A
4 - Hepworth Rd W	7.94	0.53	2.947	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.96	0.20	3.535	A	A
2 - Hepworth Rd E	8.21	0.55	3.076	A	A
3 - Moira Rd S	4.96	0.33	3.837	A	A
4 - Hepworth Rd W	5.79	0.39	2.581	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.27	0.15	3.252	A	A
2 - Hepworth Rd E	6.19	0.41	2.779	A	A
3 - Moira Rd S	3.75	0.25	3.483	A	A
4 - Hepworth Rd W	4.43	0.30	2.364	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

					Model	Model	Model	Time	Results	Single				

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Segment Length (min)	For Central Hour Only	Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, AM	2024 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.39	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Traffic Flows

Demand Set Data Options

Default	Vehicle	Vehicle	Vehicle Mix		PCU	Default	Estimate	Turning	Turning	Turning

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	212.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	576.00	100.000
3 - Moira Rd S	ONE HOUR	✓	229.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	705.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	31.000	150.000	31.000
	2 - Hepworth Rd E	79.000	0.000	159.000	338.000
	3 - Moira Rd S	146.000	60.000	0.000	23.000
	4 - Hepworth Rd W	62.000	516.000	127.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.15	0.71	0.15
	2 - Hepworth Rd E	0.14	0.00	0.28	0.59
	3 - Moira Rd S	0.64	0.26	0.00	0.10
	4 - Hepworth Rd W	0.09	0.73	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.21	4.16	0.27	A	194.53	291.80	18.15	3.73	0.20	18.15	3.73

2 - Hepworth Rd E	0.37	3.37	0.59	A	528.55	792.82	39.96	3.02	0.44	39.96	3.02
3 - Moira Rd S	0.21	3.68	0.26	A	210.13	315.20	17.87	3.40	0.20	17.87	3.40
4 - Hepworth Rd W	0.40	3.08	0.66	A	646.92	970.38	44.36	2.74	0.49	44.36	2.74

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	159.60	39.90	159.02	215.39	527.80	0.00	1245.83	629.48	0.128	0.00	0.15	3.310	A
2 - Hepworth Rd E	433.64	108.41	432.36	455.70	231.12	0.00	1775.43	1381.24	0.244	0.00	0.32	2.678	A
3 - Moira Rd S	172.40	43.10	171.81	327.22	336.26	0.00	1323.67	867.56	0.130	0.00	0.15	3.123	A
4 - Hepworth Rd W	530.76	132.69	529.34	294.22	213.85	0.00	2020.50	1456.52	0.263	0.00	0.35	2.412	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	190.58	47.65	190.40	257.81	631.54	0.00	1183.63	629.48	0.161	0.15	0.19	3.624	A
2 - Hepworth Rd E	517.81	129.45	517.42	545.29	276.65	0.00	1743.87	1381.24	0.297	0.32	0.42	2.935	A
3 - Moira Rd S	205.87	51.47	205.70	391.64	402.43	0.00	1283.73	867.56	0.160	0.15	0.19	3.339	A
4 - Hepworth Rd W	633.78	158.45	633.34	352.13	256.01	0.00	1989.05	1456.52	0.319	0.35	0.47	2.655	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	233.42	58.35	233.11	315.66	773.24	0.00	1098.67	629.48	0.212	0.19	0.27	4.158	A
2 - Hepworth Rd E	634.19	158.55	633.51	667.64	338.71	0.00	1700.86	1381.24	0.373	0.42	0.59	3.371	A
3 - Moira Rd S	252.13	63.03	251.87	479.50	492.72	0.00	1229.24	867.56	0.205	0.19	0.26	3.683	A
4 - Hepworth Rd W	776.22	194.05	775.44	431.13	313.46	0.00	1946.19	1456.52	0.399	0.47	0.66	3.073	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	233.42	58.35	233.41	315.99	774.01	0.00	1098.21	629.48	0.213	0.27	0.27	4.162	A
2 - Hepworth Rd E	634.19	158.55	634.18	668.31	339.11	0.00	1700.58	1381.24	0.373	0.59	0.59	3.375	A
3 - Moira Rd S	252.13	63.03	252.13	480.04	493.25	0.00	1228.92	867.56	0.205	0.26	0.26	3.684	A
4 - Hepworth Rd W	776.22	194.05	776.21	431.59	313.79	0.00	1945.95	1456.52	0.399	0.66	0.66	3.076	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	190.58	47.65	190.89	258.33	632.75	0.00	1182.90	629.48	0.161	0.27	0.19	3.629	A

2 - Hepworth Rd E	517.81	129.45	518.49	546.36	277.28	0.00	1743.44	1381.24	0.297	0.59	0.42	2.939	A
3 - Moira Rd S	205.87	51.47	206.13	392.49	403.28	0.00	1283.22	867.56	0.160	0.26	0.19	3.344	A
4 - Hepworth Rd W	633.78	158.45	634.55	352.87	256.54	0.00	1988.65	1456.52	0.319	0.66	0.47	2.659	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	159.60	39.90	159.79	216.27	529.71	0.00	1244.69	629.48	0.128	0.19	0.15	3.320	A
2 - Hepworth Rd E	433.64	108.41	434.04	457.38	232.11	0.00	1774.75	1381.24	0.244	0.42	0.32	2.685	A
3 - Moira Rd S	172.40	43.10	172.57	328.56	337.59	0.00	1322.86	867.56	0.130	0.19	0.15	3.129	A
4 - Hepworth Rd W	530.76	132.69	531.21	295.40	214.77	0.00	2019.81	1456.52	0.263	0.47	0.36	2.420	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.15	0.14	3.310	A	A
2 - Hepworth Rd E	4.74	0.32	2.678	A	A
3 - Moira Rd S	2.20	0.15	3.123	A	A
4 - Hepworth Rd W	5.24	0.35	2.412	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.82	0.19	3.624	A	A
2 - Hepworth Rd E	6.22	0.41	2.935	A	A
3 - Moira Rd S	2.82	0.19	3.339	A	A
4 - Hepworth Rd W	6.89	0.46	2.655	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.95	0.26	4.158	A	A
2 - Hepworth Rd E	8.71	0.58	3.371	A	A
3 - Moira Rd S	3.79	0.25	3.683	A	A
4 - Hepworth Rd W	9.73	0.65	3.073	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	4.03	0.27	4.162	A	A
2 - Hepworth Rd E	8.88	0.59	3.375	A	A
3 - Moira Rd S	3.86	0.26	3.684	A	A
4 - Hepworth Rd W	9.91	0.66	3.076	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.94	0.20	3.629	A	A
2 - Hepworth Rd E	6.47	0.43	2.939	A	A
3 - Moira Rd S	2.92	0.19	3.344	A	A
4 - Hepworth Rd W	7.15	0.48	2.659	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.25	0.15	3.320	A	A
2 - Hepworth Rd E	4.93	0.33	2.685	A	A
3 - Moira Rd S	2.29	0.15	3.129	A	A
4 - Hepworth Rd W	5.43	0.36	2.420	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, PM	2024 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.82	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Moira Rd N	1	1 - Moira Rd N	
2 - Hepworth Rd E	2	2 - Hepworth Rd E	
3 - Moira Rd S	3	3 - Moira Rd S	
4 - Hepworth Rd W	4	4 - Hepworth Rd W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Moira Rd N	0.00	99999.00		0.00
2 - Hepworth Rd E	0.00	99999.00		0.00
3 - Moira Rd S	0.00	99999.00		0.00
4 - Hepworth Rd W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Moira Rd N	3.10	7.70	15.00	22.90	40.00	45.90	
2 - Hepworth Rd E	5.00	6.80	15.00	22.40	40.00	27.50	
3 - Moira Rd S	3.20	6.40	15.00	26.40	40.00	37.00	
4 - Hepworth Rd W	5.00	8.50	15.00	31.20	40.00	27.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Moira Rd N		(calculated)	(calculated)	0.600	1562.302
2 - Hepworth Rd E		(calculated)	(calculated)	0.693	1935.639
3 - Moira Rd S		(calculated)	(calculated)	0.604	1526.605
4 - Hepworth Rd W		(calculated)	(calculated)	0.746	2180.027

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd N	ONE HOUR	✓	232.00	100.000
2 - Hepworth Rd E	ONE HOUR	✓	734.00	100.000
3 - Moira Rd S	ONE HOUR	✓	364.00	100.000
4 - Hepworth Rd W	ONE HOUR	✓	643.00	100.000

Turning Proportions

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

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.000	60.000	139.000	33.000
	2 - Hepworth Rd E	65.000	0.000	198.000	471.000
	3 - Moira Rd S	196.000	127.000	0.000	41.000
	4 - Hepworth Rd W	89.000	480.000	74.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.00	0.26	0.60	0.14
	2 - Hepworth Rd E	0.09	0.00	0.27	0.64
	3 - Moira Rd S	0.54	0.35	0.00	0.11
	4 - Hepworth Rd W	0.14	0.75	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	1.000	1.000	1.000	1.000
	2 - Hepworth Rd E	1.000	1.000	1.000	1.000
	3 - Moira Rd S	1.000	1.000	1.000	1.000
	4 - Hepworth Rd W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Moira Rd N	2 - Hepworth Rd E	3 - Moira Rd S	4 - Hepworth Rd W
From	1 - Moira Rd N	0.0	0.0	0.0	0.0
	2 - Hepworth Rd E	0.0	0.0	0.0	0.0
	3 - Moira Rd S	0.0	0.0	0.0	0.0
	4 - Hepworth Rd W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Moira Rd N	0.23	4.20	0.30	A	212.89	319.33	20.00	3.76	0.22	20.00	3.76
2 - Hepworth Rd E	0.46	3.83	0.86	A	673.53	1010.30	56.19	3.34	0.62	56.20	3.34
3 - Moira Rd S	0.35	4.81	0.53	A	334.01	501.02	35.07	4.20	0.39	35.08	4.20
4 - Hepworth Rd W	0.38	3.12	0.61	A	590.03	885.04	40.91	2.77	0.45	40.91	2.77

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	174.66	43.67	174.02	262.57	511.19	0.00	1255.80	595.25	0.139	0.00	0.16	3.326	A
2 - Hepworth Rd E	552.59	138.15	550.84	500.63	184.57	0.00	1807.70	1506.63	0.306	0.00	0.44	2.860	A
3 - Moira Rd S	274.04	68.51	272.94	308.41	427.00	0.00	1268.90	811.51	0.216	0.00	0.27	3.612	A
4 - Hepworth Rd W	484.08	121.02	482.78	408.96	290.98	0.00	1962.96	1543.31	0.247	0.00	0.33	2.430	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	208.56	52.14	208.37	314.34	611.72	0.00	1195.51	595.25	0.174	0.16	0.21	3.646	A
2 - Hepworth Rd E	659.85	164.96	659.27	599.13	220.96	0.00	1782.48	1506.63	0.370	0.44	0.58	3.203	A
3 - Moira Rd S	327.23	81.81	326.86	369.16	511.06	0.00	1218.17	811.51	0.269	0.27	0.37	4.037	A
4 - Hepworth Rd W	578.04	144.51	577.63	489.50	348.43	0.00	1920.10	1543.31	0.301	0.33	0.43	2.681	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	255.44	63.86	255.09	384.80	748.94	0.00	1113.24	595.25	0.229	0.21	0.30	4.193	A

2 - Hepworth Rd E	808.15	202.04	807.07	733.52	270.51	0.00	1748.13	1506.63	0.462	0.58	0.85	3.822	A
3 - Moira Rd S	400.77	100.19	400.11	451.94	625.65	0.00	1149.01	811.51	0.349	0.37	0.53	4.803	A
4 - Hepworth Rd W	707.96	176.99	707.23	599.24	426.51	0.00	1861.85	1543.31	0.380	0.43	0.61	3.116	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	255.44	63.86	255.43	385.35	749.79	0.00	1112.73	595.25	0.230	0.30	0.30	4.198	A
2 - Hepworth Rd E	808.15	202.04	808.14	734.37	270.85	0.00	1747.90	1506.63	0.462	0.85	0.86	3.829	A
3 - Moira Rd S	400.77	100.19	400.76	452.51	626.47	0.00	1148.52	811.51	0.349	0.53	0.53	4.814	A
4 - Hepworth Rd W	707.96	176.99	707.95	600.05	427.19	0.00	1861.35	1543.31	0.380	0.61	0.61	3.120	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	208.56	52.14	208.90	315.19	613.05	0.00	1194.72	595.25	0.175	0.30	0.21	3.654	A
2 - Hepworth Rd E	659.85	164.96	660.91	600.47	221.48	0.00	1782.12	1506.63	0.370	0.86	0.59	3.215	A
3 - Moira Rd S	327.23	81.81	327.88	370.05	512.34	0.00	1217.40	811.51	0.269	0.53	0.37	4.049	A
4 - Hepworth Rd W	578.04	144.51	578.76	490.75	349.48	0.00	1919.32	1543.31	0.301	0.61	0.43	2.688	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Moira Rd N	174.66	43.67	174.86	263.81	513.18	0.00	1254.60	595.25	0.139	0.21	0.16	3.336	A
2 - Hepworth Rd E	552.59	138.15	553.19	502.64	185.40	0.00	1807.13	1506.63	0.306	0.59	0.44	2.871	A
3 - Moira Rd S	274.04	68.51	274.41	309.75	428.84	0.00	1267.79	811.51	0.216	0.37	0.28	3.627	A
4 - Hepworth Rd W	484.08	121.02	484.50	410.76	292.49	0.00	1961.83	1543.31	0.247	0.43	0.33	2.438	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.37	0.16	3.326	A	A
2 - Hepworth Rd E	6.45	0.43	2.860	A	A
3 - Moira Rd S	4.02	0.27	3.612	A	A
4 - Hepworth Rd W	4.81	0.32	2.430	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.11	0.21	3.646	A	A
2 - Hepworth Rd E	8.63	0.58	3.203	A	A
3 - Moira Rd S	5.38	0.36	4.037	A	A
4 - Hepworth Rd W	6.35	0.42	2.681	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service

1 - Moira Rd N	4.36	0.29	4.193	A	A
2 - Hepworth Rd E	12.52	0.83	3.822	A	A
3 - Moira Rd S	7.79	0.52	4.803	A	A
4 - Hepworth Rd W	9.00	0.60	3.116	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	4.45	0.30	4.198	A	A
2 - Hepworth Rd E	12.83	0.86	3.829	A	A
3 - Moira Rd S	7.99	0.53	4.814	A	A
4 - Hepworth Rd W	9.17	0.61	3.120	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	3.24	0.22	3.654	A	A
2 - Hepworth Rd E	9.04	0.60	3.215	A	A
3 - Moira Rd S	5.66	0.38	4.049	A	A
4 - Hepworth Rd W	6.59	0.44	2.688	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Moira Rd N	2.47	0.16	3.336	A	A
2 - Hepworth Rd E	6.74	0.45	2.871	A	A
3 - Moira Rd S	4.23	0.28	3.627	A	A
4 - Hepworth Rd W	4.99	0.33	2.438	A	A

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.6.541 [19821,26/11/2015]
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Filename: MoiraRd-Phase1AccessRd Priority Junction_v01.arc8
Path: \\lefs02\Projects\067895.100 TPLE Woodville\Q3-Design\3A-Calculations\TP\Junction Modelling\Junction Models for 24.07.2019 Submission
Report generation date: 24/07/2019 11:24:07

Summary of junction performance

	AM				PM			
	Queue (PCU)	**Delay (s)**	**RFC**	**LOS**	**Queue (PCU)**	**Delay (s)**	**RFC**	**LOS**
	A1 - 2021 Base Reg Link 25% with Dev							
Stream B-AC	0.05	6.29	0.05	A	0.02	6.09	0.02	A
Stream C-AB	0.00	4.98	0.00	A	0.01	5.02	0.01	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2021 Base Reg Link 50% with Dev							
Stream B-AC	0.05	6.29	0.05	A	0.02	6.09	0.02	A
Stream C-AB	0.00	4.98	0.00	A	0.01	5.02	0.01	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2024 Base Reg Link 25% with Dev							
Stream B-AC	0.05	6.30	0.05	A	0.02	6.10	0.02	A
Stream C-AB	0.00	4.97	0.00	A	0.01	5.02	0.01	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2024 Base Reg Link 50% with Dev							
Stream B-AC	0.05	6.30	0.05	A	0.02	6.10	0.02	A
Stream C-AB	0.00	4.97	0.00	A	0.01	5.02	0.01	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 - 2021 Base Reg Link 25% with Dev, AM " model duration: 07:15 - 08:45
"D2 - 2021 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D3 - 2021 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D4 - 2021 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15
"D5 - 2024 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D6 - 2024 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D7 - 2024 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D8 - 2024 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 24/07/2019 11:24:02

File summary

Title	(untitled)
Location	
Site Number	
Date	12/06/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	RodriguezMartin_d
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) - 2021 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, AM	2021 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		6.19	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Moira Rd S	A	1 - Moira Rd S		Major
2 - Phase 1 Access Rd	B	2 - Phase 1 Access Rd		Minor
3 - Moira Rd N	C	3 - Moira Rd N		Major

Major Arm Geometry

Name	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)
3 - Moira Rd N	6.00		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Phase 1 Access Rd	One lane	3.20										170	140

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	618.622	0.113	0.285	0.179	0.407
1	B-C	726.329	0.111	0.281	-	-
1	C-B	718.741	0.278	0.278	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd S	ONE HOUR	✓	73.00	100.000
2 - Phase 1 Access Rd	ONE HOUR	✓	27.00	100.000
3 - Moira Rd N	ONE HOUR	✓	49.00	100.000

Turning Proportions

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

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.000	8.000	65.000
	2 - Phase 1 Access Rd	23.000	0.000	4.000
	3 - Moira Rd N	47.000	2.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.00	0.11	0.89
	2 - Phase 1 Access Rd	0.85	0.00	0.15
	3 - Moira Rd N	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	1.000	1.000	1.000

	2 - Phase 1 Access Rd	1.000	1.000	1.000
	3 - Moira Rd N	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.0	0.0	0.0
	2 - Phase 1 Access Rd	0.0	0.0	0.0
	3 - Moira Rd N	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.05	6.29	0.05	A	24.78	37.16	3.81	6.15	0.04	3.81	6.15
C-AB	0.00	4.98	0.00	A	1.95	2.93	0.25	5.08	0.00	0.25	5.08
C-A	-	-	-	-	43.01	64.51	-	-	-	-	-
A-B	-	-	-	-	7.34	11.01	-	-	-	-	-
A-C	-	-	-	-	59.65	89.47	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	20.33	5.08	20.19	0.00	611.67	0.033	0.00	0.03	6.084	A
C-AB	1.58	0.40	1.57	0.00	724.98	0.002	0.00	0.00	4.976	A
C-A	35.31	8.83	35.31	0.00	-	-	-	-	-	-
A-B	6.02	1.51	6.02	0.00	-	-	-	-	-	-
A-C	48.94	12.23	48.94	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	24.27	6.07	24.24	0.00	607.62	0.040	0.03	0.04	6.170	A
C-AB	1.91	0.48	1.91	0.00	726.26	0.003	0.00	0.00	4.969	A
C-A	42.14	10.54	42.14	0.00	-	-	-	-	-	-
A-B	7.19	1.80	7.19	0.00	-	-	-	-	-	-
A-C	58.43	14.61	58.43	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	29.73	7.43	29.69	0.00	602.02	0.049	0.04	0.05	6.289	A
C-AB	2.37	0.59	2.37	0.00	728.06	0.003	0.00	0.00	4.960	A
C-A	51.58	12.90	51.58	0.00	-	-	-	-	-	-
A-B	8.81	2.20	8.81	0.00	-	-	-	-	-	-
A-C	71.57	17.89	71.57	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	29.73	7.43	29.73	0.00	602.02	0.049	0.05	0.05	6.289	A
C-AB	2.37	0.59	2.37	0.00	728.06	0.003	0.00	0.00	4.960	A
C-A	51.58	12.90	51.58	0.00	-	-	-	-	-	-
A-B	8.81	2.20	8.81	0.00	-	-	-	-	-	-
A-C	71.57	17.89	71.57	0.00	-	-	-	-	-	-

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

	Total Demand	Junction Arrivals	Entry Flow	Pedestrian Demand	Capacity		Start Queue	End Queue	Delay	

Stream	(PCU/hr)	(PCU)	(PCU/hr)	(Ped/hr)	(PCU/hr)	RFC	(PCU)	(PCU)	(s)	LOS
B-AC	24.27	6.07	24.31	0.00	607.62	0.040	0.05	0.04	6.171	A
C-AB	1.91	0.48	1.91	0.00	726.26	0.003	0.00	0.00	4.971	A
C-A	42.14	10.54	42.14	0.00	-	-	-	-	-	-
A-B	7.19	1.80	7.19	0.00	-	-	-	-	-	-
A-C	58.43	14.61	58.43	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	20.33	5.08	20.36	0.00	611.67	0.033	0.04	0.03	6.090	A
C-AB	1.58	0.40	1.58	0.00	724.98	0.002	0.00	0.00	4.977	A
C-A	35.31	8.83	35.31	0.00	-	-	-	-	-	-
A-B	6.02	1.51	6.02	0.00	-	-	-	-	-	-
A-C	48.94	12.23	48.94	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.50	0.03	6.084	A	A
C-AB	0.03	0.00	4.976	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.61	0.04	6.170	A	A
C-AB	0.04	0.00	4.969	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.76	0.05	6.289	A	A
C-AB	0.05	0.00	4.960	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.78	0.05	6.289	A	A
C-AB	0.05	0.00	4.960	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.64	0.04	6.171	A	A
C-AB	0.04	0.00	4.971	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.53	0.04	6.090	A	A
C-AB	0.03	0.00	4.977	A	A
C-A	-	-	-	-	-

A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, PM	2021 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		5.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Moira Rd S	A	1 - Moira Rd S		Major
2 - Phase 1 Access Rd	B	2 - Phase 1 Access Rd		Minor
3 - Moira Rd N	C	3 - Moira Rd N		Major

Major Arm Geometry

Name	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)
3 - Moira Rd N	6.00		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Phase 1 Access Rd	One lane	3.20										170	140

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	618.622	0.113	0.285	0.179	0.407
1	B-C	726.329	0.111	0.281	-	-
1	C-B	718.741	0.278	0.278	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd S	ONE HOUR	✓	87.00	100.000
2 - Phase 1 Access Rd	ONE HOUR	✓	11.00	100.000
3 - Moira Rd N	ONE HOUR	✓	48.00	100.000

Turning Proportions

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

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.000	21.000	66.000
	2 - Phase 1 Access Rd	9.000	0.000	2.000
	3 - Moira Rd N	44.000	4.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.00	0.24	0.76
	2 - Phase 1 Access Rd	0.82	0.00	0.18
	3 - Moira Rd N	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	1.000	1.000	1.000
	2 - Phase 1 Access Rd	1.000	1.000	1.000
	3 - Moira Rd N	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To		
	1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N

From	1 - Moira Rd S	0.0	0.0	0.0
	2 - Phase 1 Access Rd	0.0	0.0	0.0
	3 - Moira Rd N	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.02	6.09	0.02	A	10.09	15.14	1.51	5.98	0.02	1.51	5.98
C-AB	0.01	5.02	0.01	A	3.89	5.84	0.51	5.26	0.01	0.51	5.26
C-A	-	-	-	-	40.15	60.23	-	-	-	-	-
A-B	-	-	-	-	19.27	28.90	-	-	-	-	-
A-C	-	-	-	-	60.56	90.84	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	8.28	2.07	8.23	0.00	613.59	0.014	0.00	0.01	5.946	A
C-AB	3.16	0.79	3.14	0.00	720.73	0.004	0.00	0.00	5.016	A
C-A	32.98	8.25	32.98	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	49.69	12.42	49.69	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	9.89	2.47	9.88	0.00	609.28	0.016	0.01	0.02	6.005	A
C-AB	3.80	0.95	3.80	0.00	721.19	0.005	0.00	0.01	5.017	A
C-A	39.35	9.84	39.35	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	59.33	14.83	59.33	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	12.11	3.03	12.10	0.00	603.32	0.020	0.02	0.02	6.088	A
C-AB	4.72	1.18	4.71	0.00	721.86	0.007	0.01	0.01	5.019	A
C-A	48.13	12.03	48.13	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	72.67	18.17	72.67	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	12.11	3.03	12.11	0.00	603.32	0.020	0.02	0.02	6.088	A
C-AB	4.72	1.18	4.72	0.00	721.86	0.007	0.01	0.01	5.019	A
C-A	48.13	12.03	48.13	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	72.67	18.17	72.67	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	9.89	2.47	9.90	0.00	609.28	0.016	0.02	0.02	6.005	A
C-AB	3.80	0.95	3.81	0.00	721.19	0.005	0.01	0.01	5.017	A
C-A	39.35	9.84	39.35	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	59.33	14.83	59.33	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	8.28	2.07	8.29	0.00	613.59	0.014	0.02	0.01	5.949	A
C-AB	3.16	0.79	3.16	0.00	720.73	0.004	0.01	0.00	5.016	A
C-A	32.98	8.25	32.98	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	49.69	12.42	49.69	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.20	0.01	5.946	A	A
C-AB	0.07	0.00	5.016	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.24	0.02	6.005	A	A
C-AB	0.08	0.01	5.017	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.30	0.02	6.088	A	A
C-AB	0.10	0.01	5.019	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.31	0.02	6.088	A	A
C-AB	0.10	0.01	5.019	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.25	0.02	6.005	A	A
C-AB	0.08	0.01	5.017	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.21	0.01	5.949	A	A
C-AB	0.07	0.00	5.016	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2021 Base Reg Link 50%

with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, AM	2021 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		6.19	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Moira Rd S	A	1 - Moira Rd S		Major
2 - Phase 1 Access Rd	B	2 - Phase 1 Access Rd		Minor
3 - Moira Rd N	C	3 - Moira Rd N		Major

Major Arm Geometry

Name	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)
3 - Moira Rd N	6.00		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Phase 1 Access Rd	One lane	3.20										170	140

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	618.622	0.113	0.285	0.179	0.407

1	B-C	726.329	0.111	0.281	-	-
1	C-B	718.741	0.278	0.278	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd S	ONE HOUR	✓	73.00	100.000
2 - Phase 1 Access Rd	ONE HOUR	✓	27.00	100.000
3 - Moira Rd N	ONE HOUR	✓	49.00	100.000

Turning Proportions

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

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.000	8.000	65.000
	2 - Phase 1 Access Rd	23.000	0.000	4.000
	3 - Moira Rd N	47.000	2.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.00	0.11	0.89
	2 - Phase 1 Access Rd	0.85	0.00	0.15
	3 - Moira Rd N	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	1.000	1.000	1.000
	2 - Phase 1 Access Rd	1.000	1.000	1.000
	3 - Moira Rd N	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.0	0.0	0.0
	2 - Phase 1 Access Rd	0.0	0.0	0.0
	3 - Moira Rd N	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.05	6.29	0.05	A	24.78	37.16	3.81	6.15	0.04	3.81	6.15
C-AB	0.00	4.98	0.00	A	1.95	2.93	0.25	5.08	0.00	0.25	5.08
C-A	-	-	-	-	43.01	64.51	-	-	-	-	-
A-B	-	-	-	-	7.34	11.01	-	-	-	-	-
A-C	-	-	-	-	59.65	89.47	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	20.33	5.08	20.19	0.00	611.67	0.033	0.00	0.03	6.084	A
C-AB	1.58	0.40	1.57	0.00	724.98	0.002	0.00	0.00	4.976	A
C-A	35.31	8.83	35.31	0.00	-	-	-	-	-	-
A-B	6.02	1.51	6.02	0.00	-	-	-	-	-	-
A-C	48.94	12.23	48.94	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	24.27	6.07	24.24	0.00	607.62	0.040	0.03	0.04	6.170	A
C-AB	1.91	0.48	1.91	0.00	726.26	0.003	0.00	0.00	4.969	A
C-A	42.14	10.54	42.14	0.00	-	-	-	-	-	-
A-B	7.19	1.80	7.19	0.00	-	-	-	-	-	-
A-C	58.43	14.61	58.43	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	29.73	7.43	29.69	0.00	602.02	0.049	0.04	0.05	6.289	A
C-AB	2.37	0.59	2.37	0.00	728.06	0.003	0.00	0.00	4.960	A
C-A	51.58	12.90	51.58	0.00	-	-	-	-	-	-
A-B	8.81	2.20	8.81	0.00	-	-	-	-	-	-
A-C	71.57	17.89	71.57	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	29.73	7.43	29.73	0.00	602.02	0.049	0.05	0.05	6.289	A
C-AB	2.37	0.59	2.37	0.00	728.06	0.003	0.00	0.00	4.960	A
C-A	51.58	12.90	51.58	0.00	-	-	-	-	-	-
A-B	8.81	2.20	8.81	0.00	-	-	-	-	-	-
A-C	71.57	17.89	71.57	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	24.27	6.07	24.31	0.00	607.62	0.040	0.05	0.04	6.171	A
C-AB	1.91	0.48	1.91	0.00	726.26	0.003	0.00	0.00	4.971	A
C-A	42.14	10.54	42.14	0.00	-	-	-	-	-	-
A-B	7.19	1.80	7.19	0.00	-	-	-	-	-	-
A-C	58.43	14.61	58.43	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	20.33	5.08	20.36	0.00	611.67	0.033	0.04	0.03	6.090	A
C-AB	1.58	0.40	1.58	0.00	724.98	0.002	0.00	0.00	4.977	A
C-A	35.31	8.83	35.31	0.00	-	-	-	-	-	-
A-B	6.02	1.51	6.02	0.00	-	-	-	-	-	-
A-C	48.94	12.23	48.94	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.50	0.03	6.084	A	A
C-AB	0.03	0.00	4.976	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.61	0.04	6.170	A	A
C-AB	0.04	0.00	4.969	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.76	0.05	6.289	A	A
C-AB	0.05	0.00	4.960	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.78	0.05	6.289	A	A
C-AB	0.05	0.00	4.960	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.64	0.04	6.171	A	A
C-AB	0.04	0.00	4.971	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.53	0.04	6.090	A	A
C-AB	0.03	0.00	4.977	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors

(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, PM	2021 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		5.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Moira Rd S	A	1 - Moira Rd S		Major
2 - Phase 1 Access Rd	B	2 - Phase 1 Access Rd		Minor
3 - Moira Rd N	C	3 - Moira Rd N		Major

Major Arm Geometry

Name	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)
3 - Moira Rd N	6.00		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Phase 1 Access Rd	One lane	3.20										170	140

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	618.622	0.113	0.285	0.179	0.407
1	B-C	726.329	0.111	0.281	-	-
1	C-B	718.741	0.278	0.278	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd S	ONE HOUR	✓	87.00	100.000
2 - Phase 1 Access Rd	ONE HOUR	✓	11.00	100.000
3 - Moira Rd N	ONE HOUR	✓	48.00	100.000

Turning Proportions

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

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.000	21.000	66.000
	2 - Phase 1 Access Rd	9.000	0.000	2.000
	3 - Moira Rd N	44.000	4.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.00	0.24	0.76
	2 - Phase 1 Access Rd	0.82	0.00	0.18
	3 - Moira Rd N	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	1.000	1.000	1.000
	2 - Phase 1 Access Rd	1.000	1.000	1.000
	3 - Moira Rd N	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.0	0.0	0.0
	2 - Phase 1 Access Rd	0.0	0.0	0.0
	3 - Moira Rd N	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.02	6.09	0.02	A	10.09	15.14	1.51	5.98	0.02	1.51	5.98
C-AB	0.01	5.02	0.01	A	3.89	5.84	0.51	5.26	0.01	0.51	5.26
C-A	-	-	-	-	40.15	60.23	-	-	-	-	-
A-B	-	-	-	-	19.27	28.90	-	-	-	-	-
A-C	-	-	-	-	60.56	90.84	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	8.28	2.07	8.23	0.00	613.59	0.014	0.00	0.01	5.946	A
C-AB	3.16	0.79	3.14	0.00	720.73	0.004	0.00	0.00	5.016	A
C-A	32.98	8.25	32.98	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	49.69	12.42	49.69	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	9.89	2.47	9.88	0.00	609.28	0.016	0.01	0.02	6.005	A
C-AB	3.80	0.95	3.80	0.00	721.19	0.005	0.00	0.01	5.017	A
C-A	39.35	9.84	39.35	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	59.33	14.83	59.33	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	12.11	3.03	12.10	0.00	603.32	0.020	0.02	0.02	6.088	A
C-AB	4.72	1.18	4.71	0.00	721.86	0.007	0.01	0.01	5.019	A
C-A	48.13	12.03	48.13	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	72.67	18.17	72.67	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	12.11	3.03	12.11	0.00	603.32	0.020	0.02	0.02	6.088	A
C-AB	4.72	1.18	4.72	0.00	721.86	0.007	0.01	0.01	5.019	A
C-A	48.13	12.03	48.13	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	72.67	18.17	72.67	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	9.89	2.47	9.90	0.00	609.28	0.016	0.02	0.02	6.005	A
C-AB	3.80	0.95	3.81	0.00	721.19	0.005	0.01	0.01	5.017	A
C-A	39.35	9.84	39.35	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	59.33	14.83	59.33	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	8.28	2.07	8.29	0.00	613.59	0.014	0.02	0.01	5.949	A
C-AB	3.16	0.79	3.16	0.00	720.73	0.004	0.01	0.00	5.016	A
C-A	32.98	8.25	32.98	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	49.69	12.42	49.69	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.20	0.01	5.946	A	A
C-AB	0.07	0.00	5.016	A	A
C-A	-	-	-	-	-

A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.24	0.02	6.005	A	A
C-AB	0.08	0.01	5.017	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.30	0.02	6.088	A	A
C-AB	0.10	0.01	5.019	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.31	0.02	6.088	A	A
C-AB	0.10	0.01	5.019	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.25	0.02	6.005	A	A
C-AB	0.08	0.01	5.017	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.21	0.01	5.949	A	A
C-AB	0.07	0.00	5.016	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship

2024 Base Reg Link 25% with Dev, AM	2024 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		6.21	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Moira Rd S	A	1 - Moira Rd S		Major
2 - Phase 1 Access Rd	B	2 - Phase 1 Access Rd		Minor
3 - Moira Rd N	C	3 - Moira Rd N		Major

Major Arm Geometry

Name	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)
3 - Moira Rd N	6.00		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Phase 1 Access Rd	One lane	3.20										170	140

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	618.622	0.113	0.285	0.179	0.407
1	B-C	726.329	0.111	0.281	-	-
1	C-B	718.741	0.278	0.278	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd S	ONE HOUR	✓	76.00	100.000
2 - Phase 1 Access Rd	ONE HOUR	✓	27.00	100.000
3 - Moira Rd N	ONE HOUR	✓	51.00	100.000

Turning Proportions

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

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.000	8.000	68.000
	2 - Phase 1 Access Rd	23.000	0.000	4.000
	3 - Moira Rd N	49.000	2.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.00	0.11	0.89
	2 - Phase 1 Access Rd	0.85	0.00	0.15
	3 - Moira Rd N	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	1.000	1.000	1.000
	2 - Phase 1 Access Rd	1.000	1.000	1.000
	3 - Moira Rd N	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.0	0.0	0.0
	2 - Phase 1 Access Rd	0.0	0.0	0.0
	3 - Moira Rd N	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.05	6.30	0.05	A	24.78	37.16	3.82	6.16	0.04	3.82	6.16
C-AB	0.00	4.97	0.00	A	1.96	2.94	0.25	5.08	0.00	0.25	5.08
C-A	-	-	-	-	44.84	67.26	-	-	-	-	-
A-B	-	-	-	-	7.34	11.01	-	-	-	-	-
A-C	-	-	-	-	62.40	93.60	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	20.33	5.08	20.19	0.00	610.79	0.033	0.00	0.03	6.093	A
C-AB	1.59	0.40	1.58	0.00	725.28	0.002	0.00	0.00	4.973	A
C-A	36.81	9.20	36.81	0.00	-	-	-	-	-	-
A-B	6.02	1.51	6.02	0.00	-	-	-	-	-	-
A-C	51.19	12.80	51.19	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	24.27	6.07	24.24	0.00	606.56	0.040	0.03	0.04	6.181	A
C-AB	1.91	0.48	1.91	0.00	726.63	0.003	0.00	0.00	4.967	A
C-A	43.93	10.98	43.93	0.00	-	-	-	-	-	-
A-B	7.19	1.80	7.19	0.00	-	-	-	-	-	-
A-C	61.13	15.28	61.13	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	29.73	7.43	29.69	0.00	600.72	0.049	0.04	0.05	6.304	A
C-AB	2.38	0.59	2.37	0.00	728.52	0.003	0.00	0.00	4.957	A
C-A	53.78	13.44	53.78	0.00	-	-	-	-	-	-
A-B	8.81	2.20	8.81	0.00	-	-	-	-	-	-
A-C	74.87	18.72	74.87	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	29.73	7.43	29.73	0.00	600.72	0.049	0.05	0.05	6.304	A
C-AB	2.38	0.59	2.38	0.00	728.52	0.003	0.00	0.00	4.957	A
C-A	53.78	13.44	53.78	0.00	-	-	-	-	-	-
A-B	8.81	2.20	8.81	0.00	-	-	-	-	-	-
A-C	74.87	18.72	74.87	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	24.27	6.07	24.31	0.00	606.56	0.040	0.05	0.04	6.182	A
C-AB	1.91	0.48	1.92	0.00	726.63	0.003	0.00	0.00	4.967	A
C-A	43.93	10.98	43.93	0.00	-	-	-	-	-	-
A-B	7.19	1.80	7.19	0.00	-	-	-	-	-	-
A-C	61.13	15.28	61.13	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	20.33	5.08	20.36	0.00	610.78	0.033	0.04	0.03	6.096	A
C-AB	1.59	0.40	1.59	0.00	725.28	0.002	0.00	0.00	4.974	A
C-A	36.81	9.20	36.81	0.00	-	-	-	-	-	-
A-B	6.02	1.51	6.02	0.00	-	-	-	-	-	-
A-C	51.19	12.80	51.19	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.50	0.03	6.093	A	A
C-AB	0.03	0.00	4.973	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.61	0.04	6.181	A	A

C-AB	0.04	0.00	4.967	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.76	0.05	6.304	A	A
C-AB	0.05	0.00	4.957	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.78	0.05	6.304	A	A
C-AB	0.05	0.00	4.957	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.64	0.04	6.182	A	A
C-AB	0.04	0.00	4.967	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.53	0.04	6.096	A	A
C-AB	0.03	0.00	4.974	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, PM	2024 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		5.80	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Moira Rd S	A	1 - Moira Rd S		Major
2 - Phase 1 Access Rd	B	2 - Phase 1 Access Rd		Minor
3 - Moira Rd N	C	3 - Moira Rd N		Major

Major Arm Geometry

Name	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)
3 - Moira Rd N	6.00		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Phase 1 Access Rd	One lane	3.20										170	140

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	618.622	0.113	0.285	0.179	0.407
1	B-C	726.329	0.111	0.281	-	-
1	C-B	718.741	0.278	0.278	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)

1 - Moira Rd S	ONE HOUR	✓	90.00	100.000
2 - Phase 1 Access Rd	ONE HOUR	✓	11.00	100.000
3 - Moira Rd N	ONE HOUR	✓	50.00	100.000

Turning Proportions

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

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.000	21.000	69.000
	2 - Phase 1 Access Rd	9.000	0.000	2.000
	3 - Moira Rd N	46.000	4.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.00	0.23	0.77
	2 - Phase 1 Access Rd	0.82	0.00	0.18
	3 - Moira Rd N	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	1.000	1.000	1.000
	2 - Phase 1 Access Rd	1.000	1.000	1.000
	3 - Moira Rd N	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.0	0.0	0.0
	2 - Phase 1 Access Rd	0.0	0.0	0.0
	3 - Moira Rd N	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.02	6.10	0.02	A	10.09	15.14	1.51	5.99	0.02	1.51	5.99
C-AB	0.01	5.02	0.01	A	3.90	5.86	0.51	5.26	0.01	0.51	5.26
C-A	-	-	-	-	41.98	62.97	-	-	-	-	-
A-B	-	-	-	-	19.27	28.90	-	-	-	-	-
A-C	-	-	-	-	63.32	94.97	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	8.28	2.07	8.23	0.00	612.71	0.014	0.00	0.01	5.955	A
C-AB	3.16	0.79	3.14	0.00	721.03	0.004	0.00	0.00	5.014	A
C-A	34.48	8.62	34.48	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-

A-C	51.95	12.99	51.95	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	9.89	2.47	9.88	0.00	608.23	0.016	0.01	0.02	6.015	A
C-AB	3.81	0.95	3.81	0.00	721.56	0.005	0.00	0.01	5.015	A
C-A	41.14	10.28	41.14	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	62.03	15.51	62.03	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	12.11	3.03	12.10	0.00	602.03	0.020	0.02	0.02	6.101	A
C-AB	4.73	1.18	4.73	0.00	722.32	0.007	0.01	0.01	5.016	A
C-A	50.32	12.58	50.32	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	75.97	18.99	75.97	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	12.11	3.03	12.11	0.00	602.03	0.020	0.02	0.02	6.101	A
C-AB	4.73	1.18	4.73	0.00	722.32	0.007	0.01	0.01	5.016	A
C-A	50.32	12.58	50.32	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	75.97	18.99	75.97	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	9.89	2.47	9.90	0.00	608.23	0.016	0.02	0.02	6.018	A
C-AB	3.81	0.95	3.82	0.00	721.56	0.005	0.01	0.01	5.015	A
C-A	41.13	10.28	41.13	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	62.03	15.51	62.03	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	8.28	2.07	8.29	0.00	612.71	0.014	0.02	0.01	5.957	A
C-AB	3.16	0.79	3.17	0.00	721.03	0.004	0.01	0.00	5.016	A
C-A	34.48	8.62	34.48	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	51.95	12.99	51.95	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.20	0.01	5.955	A	A
C-AB	0.07	0.00	5.014	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.24	0.02	6.015	A	A
C-AB	0.08	0.01	5.015	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.30	0.02	6.101	A	A
C-AB	0.10	0.01	5.016	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.31	0.02	6.101	A	A
C-AB	0.10	0.01	5.016	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.25	0.02	6.018	A	A
C-AB	0.08	0.01	5.015	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.21	0.01	5.957	A	A
C-AB	0.07	0.00	5.016	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, AM	2024 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS

1	(untitled)	T-Junction	Two-way	A,B,C		6.21	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Moira Rd S	A	1 - Moira Rd S		Major
2 - Phase 1 Access Rd	B	2 - Phase 1 Access Rd		Minor
3 - Moira Rd N	C	3 - Moira Rd N		Major

Major Arm Geometry

Name	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)
3 - Moira Rd N	6.00		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Phase 1 Access Rd	One lane	3.20										170	140

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	618.622	0.113	0.285	0.179	0.407
1	B-C	726.329	0.111	0.281	-	-
1	C-B	718.741	0.278	0.278	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd S	ONE HOUR	✓	76.00	100.000
2 - Phase 1 Access Rd	ONE HOUR	✓	27.00	100.000
3 - Moira Rd N	ONE HOUR	✓	51.00	100.000

Turning Proportions

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

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.000	8.000	68.000
	2 - Phase 1 Access Rd	23.000	0.000	4.000
	3 - Moira Rd N	49.000	2.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.00	0.11	0.89
	2 - Phase 1 Access Rd	0.85	0.00	0.15
	3 - Moira Rd N	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	1.000	1.000	1.000
	2 - Phase 1 Access Rd	1.000	1.000	1.000
	3 - Moira Rd N	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.0	0.0	0.0
	2 - Phase 1 Access Rd	0.0	0.0	0.0
	3 - Moira Rd N	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.05	6.30	0.05	A	24.78	37.16	3.82	6.16	0.04	3.82	6.16
C-AB	0.00	4.97	0.00	A	1.96	2.94	0.25	5.08	0.00	0.25	5.08
C-A	-	-	-	-	44.84	67.26	-	-	-	-	-
A-B	-	-	-	-	7.34	11.01	-	-	-	-	-
A-C	-	-	-	-	62.40	93.60	-	-	-	-	-

Main Results for each time segment

Main results: (07:15-07:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	20.33	5.08	20.19	0.00	610.79	0.033	0.00	0.03	6.093	A
C-AB	1.59	0.40	1.58	0.00	725.28	0.002	0.00	0.00	4.973	A
C-A	36.81	9.20	36.81	0.00	-	-	-	-	-	-
A-B	6.02	1.51	6.02	0.00	-	-	-	-	-	-
A-C	51.19	12.80	51.19	0.00	-	-	-	-	-	-

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	24.27	6.07	24.24	0.00	606.56	0.040	0.03	0.04	6.181	A
C-AB	1.91	0.48	1.91	0.00	726.63	0.003	0.00	0.00	4.967	A
C-A	43.93	10.98	43.93	0.00	-	-	-	-	-	-
A-B	7.19	1.80	7.19	0.00	-	-	-	-	-	-

A-C	61.13	15.28	61.13	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	29.73	7.43	29.69	0.00	600.72	0.049	0.04	0.05	6.304	A
C-AB	2.38	0.59	2.37	0.00	728.52	0.003	0.00	0.00	4.957	A
C-A	53.78	13.44	53.78	0.00	-	-	-	-	-	-
A-B	8.81	2.20	8.81	0.00	-	-	-	-	-	-
A-C	74.87	18.72	74.87	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	29.73	7.43	29.73	0.00	600.72	0.049	0.05	0.05	6.304	A
C-AB	2.38	0.59	2.38	0.00	728.52	0.003	0.00	0.00	4.957	A
C-A	53.78	13.44	53.78	0.00	-	-	-	-	-	-
A-B	8.81	2.20	8.81	0.00	-	-	-	-	-	-
A-C	74.87	18.72	74.87	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	24.27	6.07	24.31	0.00	606.56	0.040	0.05	0.04	6.182	A
C-AB	1.91	0.48	1.92	0.00	726.63	0.003	0.00	0.00	4.967	A
C-A	43.93	10.98	43.93	0.00	-	-	-	-	-	-
A-B	7.19	1.80	7.19	0.00	-	-	-	-	-	-
A-C	61.13	15.28	61.13	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	20.33	5.08	20.36	0.00	610.78	0.033	0.04	0.03	6.096	A
C-AB	1.59	0.40	1.59	0.00	725.28	0.002	0.00	0.00	4.974	A
C-A	36.81	9.20	36.81	0.00	-	-	-	-	-	-
A-B	6.02	1.51	6.02	0.00	-	-	-	-	-	-
A-C	51.19	12.80	51.19	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.50	0.03	6.093	A	A
C-AB	0.03	0.00	4.973	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.61	0.04	6.181	A	A
C-AB	0.04	0.00	4.967	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.76	0.05	6.304	A	A
C-AB	0.05	0.00	4.957	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.78	0.05	6.304	A	A
C-AB	0.05	0.00	4.957	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.64	0.04	6.182	A	A
C-AB	0.04	0.00	4.967	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.53	0.04	6.096	A	A
C-AB	0.03	0.00	4.974	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, PM	2024 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		5.80	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
1 - Moira Rd S	A	1 - Moira Rd S		Major
2 - Phase 1 Access Rd	B	2 - Phase 1 Access Rd		Minor
3 - Moira Rd N	C	3 - Moira Rd N		Major

Major Arm Geometry

Name	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)
3 - Moira Rd N	6.00		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	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)
2 - Phase 1 Access Rd	One lane	3.20										170	140

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	618.622	0.113	0.285	0.179	0.407
1	B-C	726.329	0.111	0.281	-	-
1	C-B	718.741	0.278	0.278	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Moira Rd S	ONE HOUR	✓	90.00	100.000
2 - Phase 1 Access Rd	ONE HOUR	✓	11.00	100.000
3 - Moira Rd N	ONE HOUR	✓	50.00	100.000

Turning Proportions

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

		To		
		1 - Moira Rd S	**2 - Phase 1 Access Rd**	**3 - Moira Rd N**
From	**1 - Moira Rd S**	0.000	21.000	69.000

	2 - Phase 1 Access Rd	9.000	0.000	2.000
	3 - Moira Rd N	46.000	4.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.00	0.23	0.77
	2 - Phase 1 Access Rd	0.82	0.00	0.18
	3 - Moira Rd N	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	1.000	1.000	1.000
	2 - Phase 1 Access Rd	1.000	1.000	1.000
	3 - Moira Rd N	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Moira Rd S	2 - Phase 1 Access Rd	3 - Moira Rd N
From	1 - Moira Rd S	0.0	0.0	0.0
	2 - Phase 1 Access Rd	0.0	0.0	0.0
	3 - Moira Rd N	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.02	6.10	0.02	A	10.09	15.14	1.51	5.99	0.02	1.51	5.99
C-AB	0.01	5.02	0.01	A	3.90	5.86	0.51	5.26	0.01	0.51	5.26
C-A	-	-	-	-	41.98	62.97	-	-	-	-	-
A-B	-	-	-	-	19.27	28.90	-	-	-	-	-
A-C	-	-	-	-	63.32	94.97	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	8.28	2.07	8.23	0.00	612.71	0.014	0.00	0.01	5.955	A
C-AB	3.16	0.79	3.14	0.00	721.03	0.004	0.00	0.00	5.014	A
C-A	34.48	8.62	34.48	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	51.95	12.99	51.95	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	9.89	2.47	9.88	0.00	608.23	0.016	0.01	0.02	6.015	A
C-AB	3.81	0.95	3.81	0.00	721.56	0.005	0.00	0.01	5.015	A
C-A	41.14	10.28	41.14	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	62.03	15.51	62.03	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	12.11	3.03	12.10	0.00	602.03	0.020	0.02	0.02	6.101	A
C-AB	4.73	1.18	4.73	0.00	722.32	0.007	0.01	0.01	5.016	A
C-A	50.32	12.58	50.32	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	75.97	18.99	75.97	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	12.11	3.03	12.11	0.00	602.03	0.020	0.02	0.02	6.101	A
C-AB	4.73	1.18	4.73	0.00	722.32	0.007	0.01	0.01	5.016	A
C-A	50.32	12.58	50.32	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	75.97	18.99	75.97	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	9.89	2.47	9.90	0.00	608.23	0.016	0.02	0.02	6.018	A
C-AB	3.81	0.95	3.82	0.00	721.56	0.005	0.01	0.01	5.015	A
C-A	41.13	10.28	41.13	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	62.03	15.51	62.03	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	8.28	2.07	8.29	0.00	612.71	0.014	0.02	0.01	5.957	A
C-AB	3.16	0.79	3.17	0.00	721.03	0.004	0.01	0.00	5.016	A
C-A	34.48	8.62	34.48	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	51.95	12.99	51.95	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.20	0.01	5.955	A	A
C-AB	0.07	0.00	5.014	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.24	0.02	6.015	A	A
C-AB	0.08	0.01	5.015	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.30	0.02	6.101	A	A
C-AB	0.10	0.01	5.016	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.31	0.02	6.101	A	A
C-AB	0.10	0.01	5.016	A	A

C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.25	0.02	6.018	A	A
C-AB	0.08	0.01	5.015	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.21	0.01	5.957	A	A
C-AB	0.07	0.00	5.016	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]
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Filename: OccupationLn-HepworthRd-RegenerationLink Roundabout_v01.arc8
Path: \\lefs02\Projects\067895.100 TPLE Woodville\Q3-Design\3A-Calculations\TP\Junction Modelling\Junction Models for 24.07.2019 Submission
Report generation date: 24/07/2019 11:25:13

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2021 Base Reg Link 25%							
Occupation Ln E	0.04	5.01	0.04	A	0.02	5.09	0.02	A
Hepworth Rd	0.16	2.18	0.14	A	0.23	2.32	0.19	A
Occupation Ln W	0.36	3.47	0.27	A	0.47	3.82	0.32	A
Regeneration Link	0.33	3.58	0.25	A	0.34	3.77	0.25	A
	A1 - 2021 Base Reg Link 25% with Dev							
Occupation Ln E	0.04	5.24	0.04	A	0.02	5.36	0.02	A
Hepworth Rd	0.20	2.26	0.17	A	0.29	2.44	0.23	A
Occupation Ln W	0.39	3.61	0.28	A	0.52	4.06	0.34	A
Regeneration Link	0.42	3.83	0.30	A	0.45	4.08	0.31	A
	A1 - 2021 Base Reg Link 50%							
Occupation Ln E	0.04	5.27	0.04	A	0.02	5.19	0.02	A
Hepworth Rd	0.23	2.30	0.19	A	0.33	2.49	0.25	A
Occupation Ln W	0.38	3.65	0.28	A	0.51	4.12	0.34	A
Regeneration Link	0.43	3.87	0.30	A	0.38	3.88	0.28	A
	A1 - 2021 Base Reg Link 50% with Dev							
Occupation Ln E	0.05	5.53	0.04	A	0.02	5.46	0.02	A
Hepworth Rd	0.27	2.39	0.21	A	0.40	2.63	0.29	A
Occupation Ln W	0.41	3.80	0.29	A	0.56	4.41	0.36	A
Regeneration Link	0.54	4.16	0.35	A	0.49	4.20	0.33	A
	A1 - 2024 Base Reg Link 25%							
Occupation Ln E	0.04	5.12	0.04	A	0.02	5.23	0.02	A
Hepworth Rd	0.17	2.20	0.15	A	0.25	2.35	0.20	A
Occupation Ln W	0.39	3.53	0.28	A	0.51	3.92	0.34	A
Regeneration Link	0.35	3.67	0.26	A	0.37	3.89	0.27	A
	A1 - 2024 Base Reg Link 25% with Dev							
Occupation Ln E	0.05	5.38	0.04	A	0.02	5.51	0.02	A
Hepworth Rd	0.21	2.29	0.18	A	0.31	2.47	0.24	A
Occupation Ln W	0.41	3.68	0.29	A	0.56	4.18	0.36	A
Regeneration Link	0.45	3.94	0.31	A	0.48	4.21	0.32	A
	A1 - 2024 Base Reg Link 50%							
Occupation Ln E	0.05	5.41	0.04	A	0.02	5.33	0.02	A
Hepworth Rd	0.24	2.32	0.19	A	0.35	2.53	0.26	A
Occupation Ln W	0.41	3.73	0.29	A	0.55	4.26	0.36	A
Regeneration Link	0.46	3.99	0.32	A	0.41	4.00	0.29	A
	A1 - 2024 Base Reg Link 50% with Dev							
Occupation Ln E	0.05	5.69	0.05	A	0.02	5.63	0.02	A
Hepworth Rd	0.29	2.42	0.22	A	0.42	2.67	0.30	A
Occupation Ln W	0.44	3.89	0.30	A	0.61	4.56	0.38	A
Regeneration Link	0.58	4.30	0.37	A	0.53	4.35	0.35	A

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

"D1 - 2021 Base Reg Link 25%, AM " model duration: 07:15 - 08:45
"D2 - 2021 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D3 - 2021 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D4 - 2021 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D5 - 2021 Base Reg Link 50%, AM" model duration: 07:15 - 08:45

"D6 - 2021 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D7 - 2021 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D8 - 2021 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15
"D9 - 2024 Base Reg Link 25%, AM" model duration: 07:15 - 08:45
"D10 - 2024 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D11 - 2024 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D12 - 2024 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D13 - 2024 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D14 - 2024 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D15 - 2024 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D16 - 2024 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 24/07/2019 11:25:01

File summary

Title	(untitled)
Location	
Site Number	
Date	12/06/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	RodriguezMartin_d
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) - 2021 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, AM	2021 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.21	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	27.00	100.000
Hepworth Rd	ONE HOUR	✓	245.00	100.000
Occupation Ln W	ONE HOUR	✓	343.00	100.000
Regeneration Link	ONE HOUR	✓	298.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	18.000	9.000	0.000
	Hepworth Rd	2.000	0.000	162.000	81.000
	Occupation Ln W	4.000	339.000	0.000	0.000
	Regeneration Link	0.000	188.000	110.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.67	0.33	0.00
	Hepworth Rd	0.01	0.00	0.66	0.33
	Occupation Ln W	0.01	0.99	0.00	0.00
	Regeneration Link	0.00	0.63	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.04	5.01	0.04	A	24.78	37.16	2.88	4.64	0.03	2.88	4.64
Hepworth Rd	0.14	2.18	0.16	A	224.82	337.22	11.84	2.11	0.13	11.84	2.11
Occupation Ln W	0.27	3.47	0.36	A	314.74	472.11	25.67	3.26	0.29	25.67	3.26
Regeneration Link	0.25	3.58	0.33	A	273.45	410.18	22.62	3.31	0.25	22.62	3.31

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	20.33	5.08	20.23	4.50	477.95	0.00	858.50	122.16	0.024	0.00	0.02	4.294	A

Hepworth Rd	184.45	46.11	184.03	408.90	89.28	0.00	1950.79	1757.91	0.095	0.00	0.10	2.037	A
Occupation Ln W	258.23	64.56	257.35	210.96	62.35	0.00	1431.96	1120.91	0.180	0.00	0.22	3.064	A
Regeneration Link	224.35	56.09	223.59	60.84	258.85	0.00	1407.20	866.91	0.159	0.00	0.19	3.040	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	24.27	6.07	24.25	5.39	572.22	0.00	812.12	122.16	0.030	0.02	0.03	4.569	A
Hepworth Rd	220.25	55.06	220.16	489.57	106.89	0.00	1938.28	1757.91	0.114	0.10	0.13	2.095	A
Occupation Ln W	308.35	77.09	308.13	252.47	74.58	0.00	1424.83	1120.91	0.216	0.22	0.27	3.223	A
Regeneration Link	267.90	66.97	267.69	72.79	309.92	0.00	1375.71	866.91	0.195	0.19	0.24	3.248	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	29.73	7.43	29.69	6.60	700.67	0.00	748.93	122.16	0.040	0.03	0.04	5.005	A
Hepworth Rd	269.75	67.44	269.61	599.47	130.88	0.00	1921.23	1757.91	0.140	0.13	0.16	2.179	A
Occupation Ln W	377.65	94.41	377.30	309.16	91.34	0.00	1415.05	1120.91	0.267	0.27	0.36	3.469	A
Regeneration Link	328.10	82.03	327.77	89.14	379.50	0.00	1332.82	866.91	0.246	0.24	0.32	3.582	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	29.73	7.43	29.73	6.61	701.34	0.00	748.60	122.16	0.040	0.04	0.04	5.007	A
Hepworth Rd	269.75	67.44	269.75	600.05	131.02	0.00	1921.13	1757.91	0.140	0.16	0.16	2.179	A
Occupation Ln W	377.65	94.41	377.65	309.38	91.38	0.00	1415.02	1120.91	0.267	0.36	0.36	3.469	A
Regeneration Link	328.10	82.03	328.10	89.18	379.85	0.00	1332.61	866.91	0.246	0.32	0.33	3.582	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	24.27	6.07	24.31	5.40	573.32	0.00	811.58	122.16	0.030	0.04	0.03	4.574	A
Hepworth Rd	220.25	55.06	220.39	490.52	107.11	0.00	1938.12	1757.91	0.114	0.16	0.13	2.095	A
Occupation Ln W	308.35	77.09	308.69	252.84	74.66	0.00	1424.78	1120.91	0.216	0.36	0.28	3.225	A
Regeneration Link	267.90	66.97	268.23	72.86	310.49	0.00	1375.36	866.91	0.195	0.33	0.24	3.254	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	20.33	5.08	20.35	4.52	480.00	0.00	857.49	122.16	0.024	0.03	0.02	4.301	A
Hepworth Rd	184.45	46.11	184.54	410.68	89.68	0.00	1950.51	1757.91	0.095	0.13	0.10	2.039	A
Occupation Ln W	258.23	64.56	258.45	211.70	62.52	0.00	1431.86	1120.91	0.180	0.28	0.22	3.067	A
Regeneration Link	224.35	56.09	224.56	61.01	259.96	0.00	1406.51	866.91	0.160	0.24	0.19	3.048	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.35	0.02	4.294	A	A
Hepworth Rd	1.54	0.10	2.037	A	A
Occupation Ln W	3.23	0.22	3.064	A	A
Regeneration Link	2.78	0.19	3.040	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.45	0.03	4.569	A	A
Hepworth Rd	1.90	0.13	2.095	A	A
Occupation Ln W	4.07	0.27	3.223	A	A
Regeneration Link	3.56	0.24	3.248	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.61	0.04	5.005	A	A
Hepworth Rd	2.42	0.16	2.179	A	A
Occupation Ln W	5.35	0.36	3.469	A	A
Regeneration Link	4.80	0.32	3.582	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.62	0.04	5.007	A	A
Hepworth Rd	2.45	0.16	2.179	A	A
Occupation Ln W	5.44	0.36	3.469	A	A
Regeneration Link	4.88	0.33	3.582	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.47	0.03	4.574	A	A
Hepworth Rd	1.95	0.13	2.095	A	A
Occupation Ln W	4.22	0.28	3.225	A	A
Regeneration Link	3.70	0.25	3.254	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.37	0.02	4.301	A	A
Hepworth Rd	1.58	0.11	2.039	A	A
Occupation Ln W	3.36	0.22	3.067	A	A
Regeneration Link	2.90	0.19	3.048	A	A

(Default Analysis Set) - 2021 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base	2021													

Reg Link 25%, PM	Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.34	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	11.00	100.000
Hepworth Rd	ONE HOUR	✓	330.00	100.000
Occupation Ln W	ONE HOUR	✓	405.00	100.000
Regeneration Link	ONE HOUR	✓	296.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	8.000	3.000	0.000
	Hepworth Rd	18.000	0.000	205.000	107.000
	Occupation Ln W	9.000	396.000	0.000	0.000
	Regeneration Link	0.000	175.000	121.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.73	0.27	0.00
	Hepworth Rd	0.05	0.00	0.62	0.32
	Occupation Ln W	0.02	0.98	0.00	0.00
	Regeneration Link	0.00	0.59	0.41	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.02	5.09	0.02	A	10.09	15.14	1.19	4.71	0.01	1.19	4.71
Hepworth Rd	0.19	2.32	0.23	A	302.81	454.22	16.77	2.22	0.19	16.77	2.22
Occupation Ln W	0.32	3.82	0.47	A	371.64	557.45	32.76	3.53	0.36	32.76	3.53
Regeneration Link	0.25	3.77	0.34	A	271.61	407.42	23.42	3.45	0.26	23.42	3.45

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	8.28	2.07	8.24	20.27	519.13	0.00	838.24	158.97	0.010	0.00	0.01	4.337	A
Hepworth Rd	248.44	62.11	247.86	434.34	93.03	0.00	1948.13	1739.41	0.128	0.00	0.15	2.117	A
Occupation Ln W	304.91	76.23	303.81	247.00	93.89	0.00	1413.56	1083.97	0.216	0.00	0.27	3.241	A
Regeneration Link	222.84	55.71	222.07	80.37	317.33	0.00	1371.15	840.04	0.163	0.00	0.19	3.131	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.89	2.47	9.88	24.26	621.58	0.00	787.84	158.97	0.013	0.01	0.01	4.627	A
Hepworth Rd	296.66	74.17	296.52	520.08	111.38	0.00	1935.09	1739.41	0.153	0.15	0.18	2.196	A
Occupation Ln W	364.09	91.02	363.79	295.58	112.32	0.00	1402.81	1083.97	0.260	0.27	0.35	3.464	A
Regeneration Link	266.10	66.52	265.88	96.15	379.96	0.00	1332.54	840.04	0.200	0.19	0.25	3.374	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	12.11	3.03	12.09	29.71	761.07	0.00	719.22	158.97	0.017	0.01	0.02	5.090	A
Hepworth Rd	363.34	90.83	363.13	636.79	136.37	0.00	1917.33	1739.41	0.190	0.18	0.23	2.316	A
Occupation Ln W	445.91	111.48	445.43	361.95	137.55	0.00	1388.09	1083.97	0.321	0.35	0.47	3.816	A
Regeneration Link	325.90	81.48	325.54	117.74	465.23	0.00	1279.97	840.04	0.255	0.25	0.34	3.772	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	12.11	3.03	12.11	29.73	761.90	0.00	718.81	158.97	0.017	0.02	0.02	5.093	A
Hepworth Rd	363.34	90.83	363.34	637.48	136.52	0.00	1917.22	1739.41	0.190	0.23	0.23	2.316	A
Occupation Ln W	445.91	111.48	445.91	362.23	137.63	0.00	1388.05	1083.97	0.321	0.47	0.47	3.820	A
Regeneration Link	325.90	81.48	325.90	117.81	465.73	0.00	1279.66	840.04	0.255	0.34	0.34	3.773	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.89	2.47	9.91	24.29	622.92	0.00	787.18	158.97	0.013	0.02	0.01	4.633	A
Hepworth Rd	296.66	74.17	296.87	521.20	111.63	0.00	1934.91	1739.41	0.153	0.23	0.18	2.199	A
Occupation Ln W	364.09	91.02	364.56	296.04	112.45	0.00	1402.73	1083.97	0.260	0.47	0.35	3.471	A
Regeneration Link	266.10	66.52	266.46	96.26	380.76	0.00	1332.05	840.04	0.200	0.34	0.25	3.381	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	8.28	2.07	8.29	20.34	521.49	0.00	837.08	158.97	0.010	0.01	0.01	4.345	A
Hepworth Rd	248.44	62.11	248.58	436.34	93.45	0.00	1947.83	1739.41	0.128	0.18	0.15	2.118	A
Occupation Ln W	304.91	76.23	305.21	247.87	94.16	0.00	1413.41	1083.97	0.216	0.35	0.28	3.251	A
Regeneration Link	222.84	55.71	223.07	80.60	318.77	0.00	1370.26	840.04	0.163	0.25	0.20	3.140	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.15	0.01	4.337	A	A
Hepworth Rd	2.16	0.14	2.117	A	A
Occupation Ln W	4.03	0.27	3.241	A	A
Regeneration Link	2.85	0.19	3.131	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.19	0.01	4.627	A	A
Hepworth Rd	2.68	0.18	2.196	A	A
Occupation Ln W	5.15	0.34	3.464	A	A
Regeneration Link	3.67	0.24	3.374	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.25	0.02	5.090	A	A
Hepworth Rd	3.46	0.23	2.316	A	A
Occupation Ln W	6.93	0.46	3.816	A	A
Regeneration Link	5.01	0.33	3.772	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.26	0.02	5.093	A	A
Hepworth Rd	3.50	0.23	2.316	A	A
Occupation Ln W	7.07	0.47	3.820	A	A
Regeneration Link	5.11	0.34	3.773	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.20	0.01	4.633	A	A
Hepworth Rd	2.75	0.18	2.199	A	A
Occupation Ln W	5.37	0.36	3.471	A	A
Regeneration Link	3.82	0.25	3.381	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.15	0.01	4.345	A	A
Hepworth Rd	2.22	0.15	2.118	A	A
Occupation Ln W	4.20	0.28	3.251	A	A
Regeneration Link	2.96	0.20	3.140	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, AM	2021 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.35	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	27.00	100.000
Hepworth Rd	ONE HOUR	✓	292.00	100.000
Occupation Ln W	ONE HOUR	✓	353.00	100.000
Regeneration Link	ONE HOUR	✓	357.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	18.000	9.000	0.000
	Hepworth Rd	2.000	0.000	164.000	126.000
	Occupation Ln W	4.000	340.000	0.000	9.000
	Regeneration Link	0.000	237.000	120.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.67	0.33	0.00
	Hepworth Rd	0.01	0.00	0.56	0.43
	Occupation Ln W	0.01	0.96	0.00	0.03
	Regeneration Link	0.00	0.66	0.34	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.04	5.24	0.04	A	24.78	37.16	2.98	4.82	0.03	2.98	4.82
Hepworth Rd	0.17	2.26	0.20	A	267.94	401.92	14.55	2.17	0.16	14.55	2.17
Occupation Ln W	0.28	3.61	0.39	A	323.92	485.88	27.27	3.37	0.30	27.27	3.37
Regeneration Link	0.30	3.83	0.42	A	327.59	491.38	28.60	3.49	0.32	28.60	3.49

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	20.33	5.08	20.23	4.50	522.91	0.00	836.38	144.68	0.024	0.00	0.02	4.411	A
Hepworth Rd	219.83	54.96	219.32	446.37	96.77	0.00	1945.47	1753.84	0.113	0.00	0.13	2.085	A
Occupation Ln W	265.76	66.44	264.83	219.95	96.14	0.00	1412.25	1019.83	0.188	0.00	0.23	3.134	A
Regeneration Link	268.77	67.19	267.83	101.39	259.58	0.00	1406.75	946.69	0.191	0.00	0.24	3.157	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	24.27	6.07	24.24	5.39	626.08	0.00	785.62	144.68	0.031	0.02	0.03	4.728	A
Hepworth Rd	262.50	65.63	262.38	534.46	115.87	0.00	1931.90	1753.84	0.136	0.13	0.16	2.156	A
Occupation Ln W	317.34	79.33	317.10	263.23	115.02	0.00	1401.24	1019.83	0.226	0.23	0.29	3.320	A
Regeneration Link	320.94	80.23	320.66	121.30	310.81	0.00	1375.17	946.69	0.233	0.24	0.30	3.413	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	29.73	7.43	29.68	6.60	766.59	0.00	716.50	144.68	0.041	0.03	0.04	5.241	A
Hepworth Rd	321.50	80.37	321.32	654.41	141.86	0.00	1913.43	1753.84	0.168	0.16	0.20	2.261	A
Occupation Ln W	388.66	97.17	388.28	322.33	140.85	0.00	1386.17	1019.83	0.280	0.29	0.39	3.608	A
Regeneration Link	393.06	98.27	392.61	148.55	380.58	0.00	1332.16	946.69	0.295	0.30	0.42	3.829	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	29.73	7.43	29.73	6.61	767.40	0.00	716.10	144.68	0.042	0.04	0.04	5.244	A
Hepworth Rd	321.50	80.37	321.50	655.10	142.03	0.00	1913.31	1753.84	0.168	0.20	0.20	2.261	A
Occupation Ln W	388.66	97.17	388.66	322.60	140.93	0.00	1386.12	1019.83	0.280	0.39	0.39	3.608	A
Regeneration Link	393.06	98.27	393.06	148.64	380.95	0.00	1331.93	946.69	0.295	0.42	0.42	3.833	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	24.27	6.07	24.32	5.40	627.40	0.00	784.98	144.68	0.031	0.04	0.03	4.732	A
Hepworth Rd	262.50	65.63	262.68	535.58	116.13	0.00	1931.71	1753.84	0.136	0.20	0.16	2.156	A
Occupation Ln W	317.34	79.33	317.72	263.66	115.15	0.00	1401.16	1019.83	0.226	0.39	0.29	3.323	A
Regeneration Link	320.94	80.23	321.38	121.45	311.42	0.00	1374.79	946.69	0.233	0.42	0.31	3.420	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	20.33	5.08	20.36	4.52	525.25	0.00	835.23	144.68	0.024	0.03	0.03	4.419	A
Hepworth Rd	219.83	54.96	219.95	448.38	97.22	0.00	1945.15	1753.84	0.113	0.16	0.13	2.088	A
Occupation Ln W	265.76	66.44	266.00	220.75	96.42	0.00	1412.09	1019.83	0.188	0.29	0.23	3.141	A
Regeneration Link	268.77	67.19	269.04	101.69	260.73	0.00	1406.04	946.69	0.191	0.31	0.24	3.166	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.36	0.02	4.411	A	A
Hepworth Rd	1.88	0.13	2.085	A	A
Occupation Ln W	3.40	0.23	3.134	A	A
Regeneration Link	3.46	0.23	3.157	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.47	0.03	4.728	A	A
Hepworth Rd	2.33	0.16	2.156	A	A
Occupation Ln W	4.31	0.29	3.320	A	A
Regeneration Link	4.48	0.30	3.413	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.63	0.04	5.241	A	A
Hepworth Rd	2.99	0.20	2.261	A	A
Occupation Ln W	5.72	0.38	3.608	A	A
Regeneration Link	6.13	0.41	3.829	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.65	0.04	5.244	A	A
Hepworth Rd	3.02	0.20	2.261	A	A
Occupation Ln W	5.82	0.39	3.608	A	A
Regeneration Link	6.25	0.42	3.833	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.49	0.03	4.732	A	A
Hepworth Rd	2.39	0.16	2.156	A	A
Occupation Ln W	4.48	0.30	3.323	A	A
Regeneration Link	4.67	0.31	3.420	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.38	0.03	4.419	A	A
Hepworth Rd	1.93	0.13	2.088	A	A
Occupation Ln W	3.54	0.24	3.141	A	A
Regeneration Link	3.61	0.24	3.166	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, PM	2021 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration	3.50	7.00	10.00	59.00	40.00	38.20	

Link							

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	11.00	100.000
Hepworth Rd	ONE HOUR	✓	392.00	100.000
Occupation Ln W	ONE HOUR	✓	420.00	100.000
Regeneration Link	ONE HOUR	✓	359.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	8.000	3.000	0.000
	Hepworth Rd	18.000	0.000	206.000	168.000
	Occupation Ln W	9.000	398.000	0.000	13.000
	Regeneration Link	0.000	227.000	132.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.73	0.27	0.00
	Hepworth Rd	0.05	0.00	0.53	0.43
	Occupation Ln W	0.02	0.95	0.00	0.03
	Regeneration Link	0.00	0.63	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.02	5.36	0.02	A	10.09	15.14	1.24	4.90	0.01	1.24	4.90
Hepworth Rd	0.23	2.44	0.29	A	359.71	539.56	20.77	2.31	0.23	20.77	2.31
Occupation Ln W	0.34	4.06	0.52	A	385.40	578.10	35.67	3.70	0.40	35.67	3.70
Regeneration Link	0.31	4.08	0.45	A	329.42	494.14	30.20	3.67	0.34	30.20	3.67

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	8.28	2.07	8.24	20.27	567.82	0.00	814.29	176.94	0.010	0.00	0.01	4.466	A
Hepworth Rd	295.12	73.78	294.40	474.79	101.26	0.00	1942.28	1737.55	0.152	0.00	0.18	2.183	A
Occupation Ln W	316.20	79.05	315.02	255.98	139.69	0.00	1386.84	987.37	0.228	0.00	0.29	3.356	A
Regeneration Link	270.27	67.57	269.30	135.92	318.79	0.00	1370.25	927.74	0.197	0.00	0.24	3.266	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.89	2.47	9.88	24.26	679.91	0.00	759.14	176.94	0.013	0.01	0.01	4.804	A
Hepworth Rd	352.40	88.10	352.22	568.54	121.25	0.00	1928.07	1737.55	0.183	0.18	0.22	2.284	A
Occupation Ln W	377.57	94.39	377.23	306.35	167.13	0.00	1370.84	987.37	0.275	0.29	0.38	3.623	A
Regeneration Link	322.73	80.68	322.44	162.63	381.73	0.00	1331.45	927.74	0.242	0.24	0.32	3.568	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	12.11	3.03	12.09	29.70	832.44	0.00	684.11	176.94	0.018	0.01	0.02	5.356	A
Hepworth Rd	431.60	107.90	431.33	696.08	148.45	0.00	1908.75	1737.55	0.226	0.22	0.29	2.436	A
Occupation Ln W	462.43	115.61	461.87	375.11	204.66	0.00	1348.94	987.37	0.343	0.38	0.52	4.055	A
Regeneration Link	395.27	98.82	394.76	199.15	467.38	0.00	1278.65	927.74	0.309	0.32	0.44	4.071	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	12.11	3.03	12.11	29.73	833.46	0.00	683.61	176.94	0.018	0.02	0.02	5.360	A
Hepworth Rd	431.60	107.90	431.60	696.94	148.64	0.00	1908.62	1737.55	0.226	0.29	0.29	2.436	A
Occupation Ln W	462.43	115.61	462.42	375.44	204.79	0.00	1348.87	987.37	0.343	0.52	0.52	4.060	A

Regeneration Link	395.27	98.82	395.26	199.28	467.93	0.00	1278.31	927.74	0.309	0.44	0.45	4.076	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.89	2.47	9.91	24.30	681.55	0.00	758.34	176.94	0.013	0.02	0.01	4.811	A
Hepworth Rd	352.40	88.10	352.67	569.90	121.55	0.00	1927.86	1737.55	0.183	0.29	0.22	2.287	A
Occupation Ln W	377.57	94.39	378.12	306.88	167.34	0.00	1370.71	987.37	0.275	0.52	0.38	3.630	A
Regeneration Link	322.73	80.68	323.23	162.85	382.61	0.00	1330.90	927.74	0.242	0.45	0.32	3.573	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	8.28	2.07	8.29	20.34	570.53	0.00	812.95	176.94	0.010	0.01	0.01	4.475	A
Hepworth Rd	295.12	73.78	295.30	477.08	101.75	0.00	1941.93	1737.55	0.152	0.22	0.18	2.186	A
Occupation Ln W	316.20	79.05	316.54	256.93	140.12	0.00	1386.60	987.37	0.228	0.38	0.30	3.364	A
Regeneration Link	270.27	67.57	270.57	136.35	320.30	0.00	1369.32	927.74	0.197	0.32	0.25	3.276	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.15	0.01	4.466	A	A
Hepworth Rd	2.64	0.18	2.183	A	A
Occupation Ln W	4.32	0.29	3.356	A	A
Regeneration Link	3.60	0.24	3.266	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.19	0.01	4.804	A	A
Hepworth Rd	3.31	0.22	2.284	A	A
Occupation Ln W	5.58	0.37	3.623	A	A
Regeneration Link	4.70	0.31	3.568	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.26	0.02	5.356	A	A
Hepworth Rd	4.32	0.29	2.436	A	A
Occupation Ln W	7.63	0.51	4.055	A	A
Regeneration Link	6.54	0.44	4.071	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.27	0.02	5.360	A	A
Hepworth Rd	4.37	0.29	2.436	A	A
Occupation Ln W	7.79	0.52	4.060	A	A
Regeneration Link	6.68	0.45	4.076	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.20	0.01	4.811	A	A
Hepworth Rd	3.40	0.23	2.287	A	A

Occupation Ln W	5.84	0.39	3.630	A	A
Regeneration Link	4.91	0.33	3.573	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.16	0.01	4.475	A	A
Hepworth Rd	2.72	0.18	2.186	A	A
Occupation Ln W	4.52	0.30	3.364	A	A
Regeneration Link	3.76	0.25	3.276	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, AM	2021 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.35	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00

Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	27.00	100.000
Hepworth Rd	ONE HOUR	✓	325.00	100.000
Occupation Ln W	ONE HOUR	✓	343.00	100.000
Regeneration Link	ONE HOUR	✓	365.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	18.000	9.000	0.000
	Hepworth Rd	2.000	0.000	162.000	161.000
	Occupation Ln W	4.000	339.000	0.000	0.000
	Regeneration Link	0.000	260.000	105.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.67	0.33	0.00
	Hepworth Rd	0.01	0.00	0.50	0.50
	Occupation Ln W	0.01	0.99	0.00	0.00
	Regeneration Link	0.00	0.71	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.04	5.27	0.04	A	24.78	37.16	3.00	4.84	0.03	3.00	4.84
Hepworth Rd	0.19	2.30	0.23	A	298.23	447.34	16.40	2.20	0.18	16.40	2.20
Occupation Ln W	0.28	3.65	0.38	A	314.74	472.11	26.75	3.40	0.30	26.75	3.40
Regeneration Link	0.30	3.87	0.43	A	334.93	502.40	29.45	3.52	0.33	29.45	3.52

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	20.33	5.08	20.23	4.50	528.15	0.00	833.80	152.77	0.024	0.00	0.02	4.425	A
Hepworth Rd	244.68	61.17	244.11	462.86	85.51	0.00	1953.47	1778.61	0.125	0.00	0.14	2.106	A
Occupation Ln W	258.23	64.56	257.33	207.19	122.43	0.00	1396.91	947.94	0.185	0.00	0.23	3.154	A
Regeneration Link	274.79	68.70	273.82	120.93	258.83	0.00	1407.21	975.64	0.195	0.00	0.24	3.173	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	24.27	6.07	24.24	5.39	632.36	0.00	782.53	152.77	0.031	0.02	0.03	4.747	A
Hepworth Rd	292.17	73.04	292.03	554.22	102.39	0.00	1941.47	1778.61	0.150	0.14	0.18	2.182	A
Occupation Ln W	308.35	77.09	308.11	247.96	146.47	0.00	1382.89	947.94	0.223	0.23	0.29	3.349	A
Regeneration Link	328.13	82.03	327.85	144.67	309.91	0.00	1375.72	975.64	0.239	0.24	0.31	3.435	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	29.73	7.43	29.68	6.60	774.27	0.00	712.72	152.77	0.042	0.03	0.04	5.270	A

Hepworth Rd	357.83	89.46	357.63	678.59	125.37	0.00	1925.15	1778.61	0.186	0.18	0.23	2.296	A
Occupation Ln W	377.65	94.41	377.27	303.63	179.36	0.00	1363.70	947.94	0.277	0.29	0.38	3.650	A
Regeneration Link	401.87	100.47	401.40	177.16	379.47	0.00	1332.84	975.64	0.302	0.31	0.43	3.863	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	29.73	7.43	29.73	6.61	775.11	0.00	712.31	152.77	0.042	0.04	0.04	5.273	A
Hepworth Rd	357.83	89.46	357.83	679.32	125.51	0.00	1925.04	1778.61	0.186	0.23	0.23	2.296	A
Occupation Ln W	377.65	94.41	377.65	303.88	179.47	0.00	1363.64	947.94	0.277	0.38	0.38	3.650	A
Regeneration Link	401.87	100.47	401.87	177.26	379.85	0.00	1332.61	975.64	0.302	0.43	0.43	3.867	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	24.27	6.07	24.32	5.40	633.71	0.00	781.87	152.77	0.031	0.04	0.03	4.753	A
Hepworth Rd	292.17	73.04	292.37	555.40	102.63	0.00	1941.31	1778.61	0.151	0.23	0.18	2.183	A
Occupation Ln W	308.35	77.09	308.72	248.37	146.63	0.00	1382.79	947.94	0.223	0.38	0.29	3.352	A
Regeneration Link	328.13	82.03	328.59	144.84	310.52	0.00	1375.34	975.64	0.239	0.43	0.31	3.439	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	20.33	5.08	20.36	4.52	530.53	0.00	832.63	152.77	0.024	0.03	0.03	4.433	A
Hepworth Rd	244.68	61.17	244.81	464.97	85.92	0.00	1953.18	1778.61	0.125	0.18	0.14	2.107	A
Occupation Ln W	258.23	64.56	258.47	207.95	122.78	0.00	1396.71	947.94	0.185	0.29	0.23	3.165	A
Regeneration Link	274.79	68.70	275.08	121.28	259.98	0.00	1406.50	975.64	0.195	0.31	0.24	3.181	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.36	0.02	4.425	A	A
Hepworth Rd	2.11	0.14	2.106	A	A
Occupation Ln W	3.32	0.22	3.154	A	A
Regeneration Link	3.55	0.24	3.173	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.47	0.03	4.747	A	A
Hepworth Rd	2.63	0.18	2.182	A	A
Occupation Ln W	4.23	0.28	3.349	A	A
Regeneration Link	4.61	0.31	3.435	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.64	0.04	5.270	A	A
Hepworth Rd	3.38	0.23	2.296	A	A
Occupation Ln W	5.62	0.37	3.650	A	A
Regeneration Link	6.32	0.42	3.863	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.65	0.04	5.273	A	A
Hepworth Rd	3.42	0.23	2.296	A	A
Occupation Ln W	5.72	0.38	3.650	A	A
Regeneration Link	6.45	0.43	3.867	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.49	0.03	4.753	A	A
Hepworth Rd	2.69	0.18	2.183	A	A
Occupation Ln W	4.39	0.29	3.352	A	A
Regeneration Link	4.80	0.32	3.439	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.38	0.03	4.433	A	A
Hepworth Rd	2.17	0.14	2.107	A	A
Occupation Ln W	3.46	0.23	3.165	A	A
Regeneration Link	3.71	0.25	3.181	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, PM	2021 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.46	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	11.00	100.000
Hepworth Rd	ONE HOUR	✓	438.00	100.000
Occupation Ln W	ONE HOUR	✓	405.00	100.000
Regeneration Link	ONE HOUR	✓	320.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	8.000	3.000	0.000
	Hepworth Rd	18.000	0.000	205.000	215.000
	Occupation Ln W	9.000	396.000	0.000	0.000

	Regeneration Link	0.000	214.000	106.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.73	0.27	0.00
	Hepworth Rd	0.04	0.00	0.47	0.49
	Occupation Ln W	0.02	0.98	0.00	0.00
	Regeneration Link	0.00	0.67	0.33	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.02	5.19	0.02	A	10.09	15.14	1.21	4.78	0.01	1.21	4.78
Hepworth Rd	0.25	2.49	0.33	A	401.92	602.87	23.60	2.35	0.26	23.60	2.35
Occupation Ln W	0.34	4.12	0.51	A	371.64	557.45	34.83	3.75	0.39	34.83	3.75
Regeneration Link	0.28	3.88	0.38	A	293.64	440.46	25.89	3.53	0.29	25.90	3.53

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	8.28	2.07	8.24	20.27	537.08	0.00	829.41	180.55	0.010	0.00	0.01	4.383	A
Hepworth Rd	329.75	82.44	328.94	463.55	81.77	0.00	1956.13	1754.95	0.169	0.00	0.20	2.211	A
Occupation Ln W	304.91	76.23	303.76	235.73	174.98	0.00	1366.25	923.71	0.223	0.00	0.29	3.385	A
Regeneration Link	240.91	60.23	240.06	161.47	317.28	0.00	1371.18	952.87	0.176	0.00	0.21	3.181	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.89	2.47	9.88	24.26	643.10	0.00	777.25	180.55	0.013	0.01	0.01	4.690	A

Hepworth Rd	393.75	98.44	393.55	555.07	97.90	0.00	1944.66	1754.95	0.202	0.20	0.25	2.320	A
Occupation Ln W	364.09	91.02	363.76	282.10	209.35	0.00	1346.20	923.71	0.270	0.29	0.37	3.664	A
Regeneration Link	287.67	71.92	287.43	193.18	379.93	0.00	1332.56	952.87	0.216	0.21	0.27	3.444	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	12.11	3.03	12.09	29.70	787.37	0.00	706.28	180.55	0.017	0.01	0.02	5.185	A
Hepworth Rd	482.25	120.56	481.93	679.60	119.87	0.00	1929.06	1754.95	0.250	0.25	0.33	2.487	A
Occupation Ln W	445.91	111.48	445.36	345.43	256.37	0.00	1318.78	923.71	0.338	0.37	0.51	4.119	A
Regeneration Link	352.33	88.08	351.91	236.56	465.16	0.00	1280.01	952.87	0.275	0.27	0.38	3.877	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	12.11	3.03	12.11	29.73	788.32	0.00	705.81	180.55	0.017	0.02	0.02	5.189	A
Hepworth Rd	482.25	120.56	482.24	680.42	120.01	0.00	1928.96	1754.95	0.250	0.33	0.33	2.487	A
Occupation Ln W	445.91	111.48	445.91	345.72	256.54	0.00	1318.68	923.71	0.338	0.51	0.51	4.124	A
Regeneration Link	352.33	88.08	352.32	236.72	465.72	0.00	1279.67	952.87	0.275	0.38	0.38	3.881	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.89	2.47	9.91	24.30	644.61	0.00	776.51	180.55	0.013	0.02	0.01	4.695	A
Hepworth Rd	393.75	98.44	394.07	556.39	98.13	0.00	1944.51	1754.95	0.203	0.33	0.25	2.321	A
Occupation Ln W	364.09	91.02	364.63	282.57	209.63	0.00	1346.04	923.71	0.270	0.51	0.37	3.672	A
Regeneration Link	287.67	71.92	288.08	193.43	380.83	0.00	1332.00	952.87	0.216	0.38	0.28	3.451	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	8.28	2.07	8.29	20.34	539.62	0.00	828.16	180.55	0.010	0.01	0.01	4.392	A
Hepworth Rd	329.75	82.44	329.95	465.77	82.15	0.00	1955.86	1754.95	0.169	0.25	0.20	2.214	A
Occupation Ln W	304.91	76.23	305.24	236.58	175.52	0.00	1365.94	923.71	0.223	0.37	0.29	3.394	A
Regeneration Link	240.91	60.23	241.16	161.96	318.80	0.00	1370.24	952.87	0.176	0.28	0.21	3.190	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.15	0.01	4.383	A	A
Hepworth Rd	2.99	0.20	2.211	A	A
Occupation Ln W	4.20	0.28	3.385	A	A
Regeneration Link	3.12	0.21	3.181	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.19	0.01	4.690	A	A
Hepworth Rd	3.76	0.25	2.320	A	A
Occupation Ln W	5.44	0.36	3.664	A	A
Regeneration Link	4.05	0.27	3.444	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.26	0.02	5.185	A	A
Hepworth Rd	4.92	0.33	2.487	A	A
Occupation Ln W	7.47	0.50	4.119	A	A
Regeneration Link	5.57	0.37	3.877	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.26	0.02	5.189	A	A
Hepworth Rd	4.99	0.33	2.487	A	A
Occupation Ln W	7.63	0.51	4.124	A	A
Regeneration Link	5.67	0.38	3.881	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.20	0.01	4.695	A	A
Hepworth Rd	3.86	0.26	2.321	A	A
Occupation Ln W	5.69	0.38	3.672	A	A
Regeneration Link	4.22	0.28	3.451	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.15	0.01	4.392	A	A
Hepworth Rd	3.08	0.21	2.214	A	A
Occupation Ln W	4.40	0.29	3.394	A	A
Regeneration Link	3.26	0.22	3.190	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, AM	2021 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.52	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	27.00	100.000
Hepworth Rd	ONE HOUR	✓	372.00	100.000
Occupation Ln W	ONE HOUR		353.00	100.000

		✓		
Regeneration Link	ONE HOUR	✓	423.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	**Hepworth Rd**	**Occupation Ln W**	**Regeneration Link**
From	**Occupation Ln E**	0.000	18.000	9.000	0.000
	Hepworth Rd	2.000	0.000	164.000	206.000
	Occupation Ln W	4.000	340.000	0.000	9.000
	Regeneration Link	0.000	309.000	114.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	**Hepworth Rd**	**Occupation Ln W**	**Regeneration Link**
From	**Occupation Ln E**	0.00	0.67	0.33	0.00
	Hepworth Rd	0.01	0.00	0.44	0.55
	Occupation Ln W	0.01	0.96	0.00	0.03
	Regeneration Link	0.00	0.73	0.27	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	**Hepworth Rd**	**Occupation Ln W**	**Regeneration Link**
From	**Occupation Ln E**	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	**Hepworth Rd**	**Occupation Ln W**	**Regeneration Link**
From	**Occupation Ln E**	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.04	5.53	0.05	A	24.78	37.16	3.12	5.03	0.03	3.12	5.03
Hepworth Rd	0.21	2.39	0.27	A	341.35	512.03	19.37	2.27	0.22	19.37	2.27
Occupation Ln W	0.29	3.80	0.41	A	323.92	485.88	28.46	3.51	0.32	28.46	3.51
Regeneration Link	0.35	4.16	0.54	A	388.15	582.23	36.12	3.72	0.40	36.12	3.72

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand	Junction Arrivals	Entry Flow	Exit Flow	Circulating Flow	Pedestrian Demand	Capacity	Saturation Capacity	RFC	Start Queue	End Queue	Delay	LOS

	(PCU/hr)	(PCU)	(PCU/hr)	(PCU/hr)	(PCU/hr)	(Ped/hr)	(PCU/hr)	(PCU/hr)		(PCU)	(PCU)	(s)	
Occupation Ln E	20.33	5.08	20.22	4.50	572.34	0.00	812.06	167.37	0.025	0.00	0.03	4.546	A
Hepworth Rd	280.06	70.02	279.39	500.32	92.25	0.00	1948.68	1777.88	0.144	0.00	0.17	2.155	A
Occupation Ln W	265.76	66.44	264.80	215.43	156.22	0.00	1377.20	888.41	0.193	0.00	0.24	3.233	A
Regeneration Link	318.46	79.61	317.29	161.47	259.56	0.00	1406.76	1027.16	0.226	0.00	0.29	3.301	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	24.27	6.07	24.24	5.39	685.32	0.00	756.49	167.37	0.032	0.03	0.03	4.916	A
Hepworth Rd	334.42	83.61	334.26	599.09	110.47	0.00	1935.74	1777.88	0.173	0.17	0.21	2.247	A
Occupation Ln W	317.34	79.33	317.08	257.83	186.90	0.00	1359.30	888.41	0.233	0.24	0.30	3.454	A
Regeneration Link	380.27	95.07	379.91	193.18	310.79	0.00	1375.18	1027.16	0.277	0.29	0.38	3.617	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	29.73	7.43	29.68	6.60	839.06	0.00	680.85	167.37	0.044	0.03	0.05	5.528	A
Hepworth Rd	409.58	102.39	409.33	733.49	135.24	0.00	1918.13	1777.88	0.214	0.21	0.27	2.385	A
Occupation Ln W	388.66	97.17	388.24	315.70	228.87	0.00	1334.82	888.41	0.291	0.30	0.41	3.800	A
Regeneration Link	465.73	116.43	465.12	236.57	380.54	0.00	1332.18	1027.16	0.350	0.38	0.53	4.149	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	29.73	7.43	29.73	6.61	840.07	0.00	680.36	167.37	0.044	0.05	0.05	5.532	A
Hepworth Rd	409.58	102.39	409.58	734.37	135.42	0.00	1918.00	1777.88	0.214	0.27	0.27	2.386	A
Occupation Ln W	388.66	97.17	388.66	315.99	229.01	0.00	1334.74	888.41	0.291	0.41	0.41	3.804	A
Regeneration Link	465.73	116.43	465.72	236.72	380.95	0.00	1331.93	1027.16	0.350	0.53	0.54	4.155	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	24.27	6.07	24.32	5.40	686.93	0.00	755.69	167.37	0.032	0.05	0.03	4.922	A
Hepworth Rd	334.42	83.61	334.67	600.49	110.75	0.00	1935.53	1777.88	0.173	0.27	0.21	2.248	A
Occupation Ln W	317.34	79.33	317.75	258.30	187.13	0.00	1359.17	888.41	0.233	0.41	0.31	3.457	A
Regeneration Link	380.27	95.07	380.87	193.43	311.45	0.00	1374.77	1027.16	0.277	0.54	0.38	3.626	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	20.33	5.08	20.36	4.52	575.04	0.00	810.73	167.37	0.025	0.03	0.03	4.554	A
Hepworth Rd	280.06	70.02	280.23	502.69	92.71	0.00	1948.36	1777.88	0.144	0.21	0.17	2.157	A
Occupation Ln W	265.76	66.44	266.02	216.25	156.69	0.00	1376.93	888.41	0.193	0.31	0.24	3.243	A
Regeneration Link	318.46	79.61	318.82	161.96	260.74	0.00	1406.03	1027.16	0.226	0.38	0.29	3.311	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.37	0.02	4.546	A	A
Hepworth Rd	2.48	0.17	2.155	A	A
Occupation Ln					

W	3.50	0.23	3.233	A	A
Regeneration Link	4.28	0.29	3.301	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.49	0.03	4.916	A	A
Hepworth Rd	3.09	0.21	2.247	A	A
Occupation Ln W	4.48	0.30	3.454	A	A
Regeneration Link	5.61	0.37	3.617	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.67	0.04	5.528	A	A
Hepworth Rd	4.01	0.27	2.385	A	A
Occupation Ln W	6.02	0.40	3.800	A	A
Regeneration Link	7.85	0.52	4.149	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.68	0.05	5.532	A	A
Hepworth Rd	4.06	0.27	2.386	A	A
Occupation Ln W	6.14	0.41	3.804	A	A
Regeneration Link	8.02	0.54	4.155	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.51	0.03	4.922	A	A
Hepworth Rd	3.18	0.21	2.248	A	A
Occupation Ln W	4.67	0.31	3.457	A	A
Regeneration Link	5.87	0.39	3.626	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.39	0.03	4.554	A	A
Hepworth Rd	2.55	0.17	2.157	A	A
Occupation Ln W	3.65	0.24	3.243	A	A
Regeneration Link	4.48	0.30	3.311	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

					Model	Model	Model	Time	Results	Single				

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Segment Length (min)	For Central Hour Only	Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, PM	2021 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.68	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Traffic Flows

Demand Set Data Options

Default	Vehicle	Vehicle	Vehicle Mix		PCU	Default	Estimate	Turning	Turning	Turning

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	11.00	100.000
Hepworth Rd	ONE HOUR	✓	500.00	100.000
Occupation Ln W	ONE HOUR	✓	420.00	100.000
Regeneration Link	ONE HOUR	✓	382.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	8.000	3.000	0.000
	Hepworth Rd	18.000	0.000	206.000	276.000
	Occupation Ln W	9.000	398.000	0.000	13.000
	Regeneration Link	0.000	266.000	116.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.73	0.27	0.00
	Hepworth Rd	0.04	0.00	0.41	0.55
	Occupation Ln W	0.02	0.95	0.00	0.03
	Regeneration Link	0.00	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.02	5.46	0.02	A	10.09	15.14	1.26	4.98	0.01	1.26	4.98

Hepworth Rd	0.29	2.63	0.40	A	458.81	688.21	28.15	2.45	0.31	28.16	2.45
Occupation Ln W	0.36	4.41	0.56	A	385.40	578.10	38.05	3.95	0.42	38.06	3.95
Regeneration Link	0.33	4.20	0.49	A	350.53	525.79	32.88	3.75	0.37	32.88	3.75

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	8.28	2.07	8.24	20.27	585.00	0.00	805.83	193.02	0.010	0.00	0.01	4.513	A
Hepworth Rd	376.43	94.11	375.47	503.99	89.26	0.00	1950.81	1758.68	0.193	0.00	0.24	2.284	A
Occupation Ln W	316.20	79.05	314.97	243.95	220.78	0.00	1339.54	865.06	0.236	0.00	0.31	3.508	A
Regeneration Link	287.59	71.90	286.53	217.01	318.74	0.00	1370.28	1010.96	0.210	0.00	0.26	3.319	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.89	2.47	9.88	24.26	700.52	0.00	749.00	193.02	0.013	0.01	0.01	4.870	A
Hepworth Rd	449.49	112.37	449.24	603.53	106.88	0.00	1938.29	1758.68	0.232	0.24	0.30	2.417	A
Occupation Ln W	377.57	94.39	377.20	291.96	264.15	0.00	1314.23	865.06	0.287	0.31	0.40	3.840	A
Regeneration Link	343.41	85.85	343.08	259.66	381.70	0.00	1331.47	1010.96	0.258	0.26	0.35	3.642	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	12.11	3.03	12.09	29.70	857.62	0.00	671.72	193.02	0.018	0.01	0.02	5.457	A
Hepworth Rd	550.51	137.63	550.11	738.87	130.84	0.00	1921.26	1758.68	0.287	0.30	0.40	2.625	A
Occupation Ln W	462.43	115.61	461.79	357.49	323.47	0.00	1279.63	865.06	0.361	0.40	0.56	4.398	A
Regeneration Link	420.59	105.15	420.03	317.96	467.30	0.00	1278.70	1010.96	0.329	0.35	0.49	4.190	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	12.11	3.03	12.11	29.73	858.78	0.00	671.15	193.02	0.018	0.02	0.02	5.461	A
Hepworth Rd	550.51	137.63	550.51	739.87	131.02	0.00	1921.13	1758.68	0.287	0.40	0.40	2.626	A
Occupation Ln W	462.43	115.61	462.42	357.83	323.70	0.00	1279.50	865.06	0.361	0.56	0.56	4.405	A
Regeneration Link	420.59	105.15	420.58	318.19	467.93	0.00	1278.31	1010.96	0.329	0.49	0.49	4.196	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.89	2.47	9.91	24.30	702.36	0.00	748.10	193.02	0.013	0.02	0.01	4.878	A
Hepworth Rd	449.49	112.37	449.88	605.12	107.15	0.00	1938.09	1758.68	0.232	0.40	0.30	2.421	A
Occupation Ln W	377.57	94.39	378.20	292.50	264.53	0.00	1314.01	865.06	0.287	0.56	0.41	3.849	A
Regeneration Link	343.41	85.85	343.97	260.04	382.69	0.00	1330.85	1010.96	0.258	0.49	0.35	3.648	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation	8.28	2.07	8.29	20.34	587.91	0.00	804.40	193.02	0.010	0.01	0.01	4.521	A

Ln E													
Hepworth Rd	376.43	94.11	376.68	506.52	89.69	0.00	1950.50	1758.68	0.193	0.30	0.24	2.287	A
Occupation Ln W	316.20	79.05	316.58	244.88	221.49	0.00	1339.12	865.06	0.236	0.41	0.31	3.521	A
Regeneration Link	287.59	71.90	287.92	217.73	320.34	0.00	1369.29	1010.96	0.210	0.35	0.27	3.331	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.15	0.01	4.513	A	A
Hepworth Rd	3.52	0.23	2.284	A	A
Occupation Ln W	4.51	0.30	3.508	A	A
Regeneration Link	3.89	0.26	3.319	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.20	0.01	4.870	A	A
Hepworth Rd	4.46	0.30	2.417	A	A
Occupation Ln W	5.91	0.39	3.840	A	A
Regeneration Link	5.11	0.34	3.642	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.27	0.02	5.457	A	A
Hepworth Rd	5.92	0.39	2.625	A	A
Occupation Ln W	8.25	0.55	4.398	A	A
Regeneration Link	7.16	0.48	4.190	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.27	0.02	5.461	A	A
Hepworth Rd	6.01	0.40	2.626	A	A
Occupation Ln W	8.44	0.56	4.405	A	A
Regeneration Link	7.32	0.49	4.196	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.21	0.01	4.878	A	A
Hepworth Rd	4.60	0.31	2.421	A	A
Occupation Ln W	6.20	0.41	3.849	A	A
Regeneration Link	5.34	0.36	3.648	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.16	0.01	4.521	A	A
Hepworth Rd	3.64	0.24	2.287	A	A
Occupation Ln W	4.73	0.32	3.521	A	A
Regeneration Link	4.07	0.27	3.331	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%,

AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, AM	2024 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.27	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	28.00	100.000
Hepworth Rd	ONE HOUR	✓	255.00	100.000
Occupation Ln W	ONE HOUR	✓	358.00	100.000
Regeneration Link	ONE HOUR	✓	311.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	18.000	10.000	0.000
	Hepworth Rd	2.000	0.000	169.000	84.000
	Occupation Ln W	4.000	354.000	0.000	0.000
	Regeneration Link	0.000	196.000	115.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.64	0.36	0.00
	Hepworth Rd	0.01	0.00	0.66	0.33
	Occupation Ln W	0.01	0.99	0.00	0.00
	Regeneration Link	0.00	0.63	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0

	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.04	5.12	0.04	A	25.69	38.54	3.04	4.73	0.03	3.04	4.73
Hepworth Rd	0.15	2.20	0.17	A	233.99	350.99	12.42	2.12	0.14	12.42	2.12
Occupation Ln W	0.28	3.53	0.39	A	328.51	492.76	27.18	3.31	0.30	27.18	3.31
Regeneration Link	0.26	3.67	0.35	A	285.38	428.07	24.08	3.38	0.27	24.08	3.38

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	21.08	5.27	20.98	4.50	498.93	0.00	848.17	121.36	0.025	0.00	0.03	4.352	A
Hepworth Rd	191.98	47.99	191.54	426.14	93.77	0.00	1947.60	1755.87	0.099	0.00	0.11	2.050	A
Occupation Ln W	269.52	67.38	268.60	220.72	64.60	0.00	1430.65	1122.87	0.188	0.00	0.23	3.094	A
Regeneration Link	234.14	58.53	233.34	63.10	270.10	0.00	1400.26	866.06	0.167	0.00	0.20	3.084	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	25.17	6.29	25.14	5.39	597.36	0.00	799.75	121.36	0.031	0.03	0.03	4.647	A
Hepworth Rd	229.24	57.31	229.14	510.23	112.28	0.00	1934.45	1755.87	0.119	0.11	0.13	2.110	A
Occupation Ln W	321.83	80.46	321.60	264.14	77.28	0.00	1423.25	1122.87	0.226	0.23	0.29	3.267	A
Regeneration Link	279.58	69.90	279.36	75.48	323.39	0.00	1367.41	866.06	0.204	0.20	0.26	3.308	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	30.83	7.71	30.78	6.60	731.44	0.00	733.79	121.36	0.042	0.03	0.04	5.120	A
Hepworth Rd	280.76	70.19	280.61	624.75	137.48	0.00	1916.54	1755.87	0.146	0.13	0.17	2.200	A
Occupation Ln W	394.17	98.54	393.79	323.45	94.64	0.00	1413.13	1122.87	0.279	0.29	0.38	3.532	A
Regeneration Link	342.42	85.60	342.05	92.44	395.99	0.00	1322.66	866.06	0.259	0.26	0.35	3.671	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	30.83	7.71	30.83	6.61	732.17	0.00	733.44	121.36	0.042	0.04	0.04	5.123	A
Hepworth Rd	280.76	70.19	280.76	625.37	137.63	0.00	1916.44	1755.87	0.147	0.17	0.17	2.200	A
Occupation Ln W	394.17	98.54	394.16	323.70	94.69	0.00	1413.10	1122.87	0.279	0.38	0.39	3.532	A
Regeneration Link	342.42	85.60	342.41	92.49	396.36	0.00	1322.43	866.06	0.259	0.35	0.35	3.672	A

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

	Total	Junction	Entry		Circulating	Pedestrian		Saturation		Start	End		

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	Exit Flow (PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	Capacity (PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	Delay (s)	LOS
Occupation Ln E	25.17	6.29	25.22	5.40	598.55	0.00	799.17	121.36	0.032	0.04	0.03	4.653	A
Hepworth Rd	229.24	57.31	229.39	511.24	112.52	0.00	1934.28	1755.87	0.119	0.17	0.13	2.111	A
Occupation Ln W	321.83	80.46	322.20	264.55	77.36	0.00	1423.20	1122.87	0.226	0.39	0.29	3.272	A
Regeneration Link	279.58	69.90	279.94	75.56	324.00	0.00	1367.03	866.06	0.205	0.35	0.26	3.314	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	21.08	5.27	21.11	4.52	501.11	0.00	847.10	121.36	0.025	0.03	0.03	4.359	A
Hepworth Rd	191.98	47.99	192.08	428.02	94.20	0.00	1947.30	1755.87	0.099	0.13	0.11	2.052	A
Occupation Ln W	269.52	67.38	269.76	221.50	64.78	0.00	1430.55	1122.87	0.188	0.29	0.23	3.103	A
Regeneration Link	234.14	58.53	234.36	63.27	271.27	0.00	1399.54	866.06	0.167	0.26	0.20	3.089	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.37	0.02	4.352	A	A
Hepworth Rd	1.62	0.11	2.050	A	A
Occupation Ln W	3.40	0.23	3.094	A	A
Regeneration Link	2.94	0.20	3.084	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.48	0.03	4.647	A	A
Hepworth Rd	1.99	0.13	2.110	A	A
Occupation Ln W	4.30	0.29	3.267	A	A
Regeneration Link	3.79	0.25	3.308	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.64	0.04	5.120	A	A
Hepworth Rd	2.54	0.17	2.200	A	A
Occupation Ln W	5.68	0.38	3.532	A	A
Regeneration Link	5.13	0.34	3.671	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.66	0.04	5.123	A	A
Hepworth Rd	2.57	0.17	2.200	A	A
Occupation Ln W	5.78	0.39	3.532	A	A
Regeneration Link	5.22	0.35	3.672	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.50	0.03	4.653	A	A
Hepworth Rd	2.04	0.14	2.111	A	A
Occupation Ln W	4.47	0.30	3.272	A	A
Regeneration Link	3.93	0.26	3.314	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.39	0.03	4.359	A	A
Hepworth Rd	1.66	0.11	2.052	A	A
Occupation Ln W	3.54	0.24	3.103	A	A
Regeneration Link	3.07	0.20	3.089	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, PM	2024 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.43	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	12.00	100.000
Hepworth Rd	ONE HOUR	✓	345.00	100.000
Occupation Ln W	ONE HOUR	✓	424.00	100.000
Regeneration Link	ONE HOUR	✓	310.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	9.000	3.000	0.000
	Hepworth Rd	18.000	0.000	215.000	112.000
	Occupation Ln W	10.000	414.000	0.000	0.000
	Regeneration Link	0.000	183.000	127.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.75	0.25	0.00
	Hepworth Rd	0.05	0.00	0.62	0.32
	Occupation Ln W	0.02	0.98	0.00	0.00
	Regeneration Link	0.00	0.59	0.41	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To

		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.02	5.23	0.02	A	11.01	16.52	1.32	4.81	0.01	1.32	4.81
Hepworth Rd	0.20	2.35	0.25	A	316.58	474.87	17.73	2.24	0.20	17.73	2.24
Occupation Ln W	0.34	3.92	0.51	A	389.07	583.60	35.02	3.60	0.39	35.02	3.60
Regeneration Link	0.27	3.89	0.37	A	284.46	426.69	25.13	3.53	0.28	25.13	3.53

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.03	2.26	8.99	21.02	543.11	0.00	826.44	158.19	0.011	0.00	0.01	4.403	A
Hepworth Rd	259.73	64.93	259.12	454.57	97.52	0.00	1944.94	1741.15	0.134	0.00	0.15	2.135	A
Occupation Ln W	319.21	79.80	318.05	259.00	97.64	0.00	1411.38	1085.59	0.226	0.00	0.29	3.290	A
Regeneration Link	233.38	58.35	232.56	84.12	331.57	0.00	1362.37	841.53	0.171	0.00	0.21	3.185	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	10.79	2.70	10.78	25.16	650.30	0.00	773.71	158.19	0.014	0.01	0.01	4.718	A
Hepworth Rd	310.15	77.54	310.00	544.31	116.77	0.00	1931.26	1741.15	0.161	0.15	0.19	2.220	A
Occupation Ln W	381.17	95.29	380.84	309.95	116.81	0.00	1400.19	1085.59	0.272	0.29	0.37	3.531	A
Regeneration Link	278.68	69.67	278.44	100.64	397.02	0.00	1322.02	841.53	0.211	0.21	0.27	3.449	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	13.21	3.30	13.19	30.80	796.22	0.00	701.93	158.19	0.019	0.01	0.02	5.226	A
Hepworth Rd	379.85	94.96	379.63	666.45	142.96	0.00	1912.65	1741.15	0.199	0.19	0.25	2.348	A
Occupation Ln W	466.83	116.71	466.30	379.54	143.05	0.00	1384.88	1085.59	0.337	0.37	0.51	3.916	A
Regeneration Link	341.32	85.33	340.91	123.24	486.11	0.00	1267.10	841.53	0.269	0.27	0.37	3.885	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	13.21	3.30	13.21	30.83	797.13	0.00	701.48	158.19	0.019	0.02	0.02	5.230	A
Hepworth Rd	379.85	94.96	379.85	667.21	143.13	0.00	1912.53	1741.15	0.199	0.25	0.25	2.348	A
Occupation Ln W	466.83	116.71	466.83	379.85	143.13	0.00	1384.84	1085.59	0.337	0.51	0.51	3.921	A
Regeneration Link	341.32	85.33	341.31	123.31	486.64	0.00	1266.77	841.53	0.269	0.37	0.37	3.889	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	10.79	2.70	10.81	25.20	651.77	0.00	772.99	158.19	0.014	0.02	0.01	4.722	A
Hepworth Rd	310.15	77.54	310.37	545.54	117.03	0.00	1931.07	1741.15	0.161	0.25	0.19	2.222	A
Occupation Ln W	381.17	95.29	381.69	310.45	116.95	0.00	1400.11	1085.59	0.272	0.51	0.38	3.538	A
Regeneration Link	278.68	69.67	279.08	100.76	397.88	0.00	1321.49	841.53	0.211	0.37	0.27	3.456	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.03	2.26	9.05	21.10	545.63	0.00	825.20	158.19	0.011	0.01	0.01	4.412	A
Hepworth Rd	259.73	64.93	259.88	456.70	97.97	0.00	1944.62	1741.15	0.134	0.19	0.15	2.136	A
Occupation Ln W	319.21	79.80	319.54	259.93	97.93	0.00	1411.21	1085.59	0.226	0.38	0.29	3.297	A
Regeneration Link	233.38	58.35	233.63	84.37	333.10	0.00	1361.43	841.53	0.171	0.27	0.21	3.194	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.16	0.01	4.403	A	A
Hepworth Rd	2.27	0.15	2.135	A	A
Occupation Ln W	4.28	0.29	3.290	A	A
Regeneration Link	3.03	0.20	3.185	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.21	0.01	4.718	A	A
Hepworth Rd	2.83	0.19	2.220	A	A
Occupation Ln W	5.50	0.37	3.531	A	A
Regeneration Link	3.93	0.26	3.449	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.28	0.02	5.226	A	A
Hepworth Rd	3.67	0.24	2.348	A	A
Occupation Ln W	7.44	0.50	3.916	A	A
Regeneration Link	5.40	0.36	3.885	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.29	0.02	5.230	A	A
Hepworth Rd	3.71	0.25	2.348	A	A
Occupation Ln W	7.59	0.51	3.921	A	A
Regeneration Link	5.51	0.37	3.889	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.22	0.01	4.722	A	A
Hepworth Rd	2.91	0.19	2.222	A	A
Occupation Ln W	5.74	0.38	3.538	A	A
Regeneration Link	4.09	0.27	3.456	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.17	0.01	4.412	A	A
Hepworth Rd	2.34	0.16	2.136	A	A
Occupation Ln W	4.47	0.30	3.297	A	A
Regeneration Link	3.16	0.21	3.194	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, AM	2024 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	

Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	28.00	100.000
Hepworth Rd	ONE HOUR	✓	304.00	100.000
Occupation Ln W	ONE HOUR	✓	368.00	100.000
Regeneration Link	ONE HOUR	✓	371.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	18.000	10.000	0.000
	Hepworth Rd	2.000	0.000	172.000	130.000
	Occupation Ln W	4.000	355.000	0.000	9.000
	Regeneration Link	0.000	246.000	125.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

	To				
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link

From	Occupation Ln E	0.00	0.64	0.36	0.00
	Hepworth Rd	0.01	0.00	0.57	0.43
	Occupation Ln W	0.01	0.96	0.00	0.02
	Regeneration Link	0.00	0.66	0.34	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.04	5.38	0.05	A	25.69	38.54	3.16	4.92	0.04	3.16	4.92
Hepworth Rd	0.18	2.29	0.21	A	278.96	418.43	15.29	2.19	0.17	15.29	2.19
Occupation Ln W	0.29	3.68	0.41	A	337.68	506.52	28.88	3.42	0.32	28.88	3.42
Regeneration Link	0.31	3.94	0.45	A	340.44	510.65	30.38	3.57	0.34	30.39	3.57

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	21.08	5.27	20.98	4.50	544.64	0.00	825.69	143.26	0.026	0.00	0.03	4.473	A
Hepworth Rd	228.87	57.22	228.33	464.35	101.26	0.00	1942.28	1751.98	0.118	0.00	0.13	2.100	A
Occupation Ln W	277.05	69.26	276.08	230.45	99.15	0.00	1410.50	1024.54	0.196	0.00	0.24	3.170	A
Regeneration Link	279.31	69.83	278.32	104.39	270.83	0.00	1399.82	943.51	0.200	0.00	0.25	3.207	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	25.17	6.29	25.14	5.39	652.12	0.00	772.82	143.26	0.033	0.03	0.03	4.814	A
Hepworth Rd	273.29	68.32	273.16	556.01	121.25	0.00	1928.07	1751.98	0.142	0.13	0.16	2.175	A
Occupation Ln W	330.82	82.71	330.57	275.81	118.61	0.00	1399.14	1024.54	0.236	0.24	0.31	3.368	A
Regeneration Link	333.52	83.38	333.23	124.90	324.28	0.00	1366.86	943.51	0.244	0.25	0.32	3.482	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	30.83	7.71	30.78	6.60	798.45	0.00	700.83	143.26	0.044	0.03	0.05	5.372	A
Hepworth Rd	334.71	83.68	334.52	680.77	148.45	0.00	1908.74	1751.98	0.175	0.16	0.21	2.286	A
Occupation Ln W	405.18	101.29	404.76	337.72	145.25	0.00	1383.60	1024.54	0.293	0.31	0.41	3.675	A
Regeneration Link	408.48	102.12	407.99	152.95	397.06	0.00	1321.99	943.51	0.309	0.32	0.44	3.937	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	30.83	7.71	30.83	6.61	799.33	0.00	700.40	143.26	0.044	0.05	0.05	5.376	A
Hepworth Rd	334.71	83.68	334.71	681.52	148.64	0.00	1908.61	1751.98	0.175	0.21	0.21	2.286	A
Occupation Ln W	405.18	101.29	405.17	338.01	145.33	0.00	1383.55	1024.54	0.293	0.41	0.41	3.678	A
Regeneration Link	408.48	102.12	408.47	153.04	397.46	0.00	1321.75	943.51	0.309	0.44	0.45	3.941	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	25.17	6.29	25.22	5.40	653.54	0.00	772.12	143.26	0.033	0.05	0.03	4.819	A
Hepworth Rd	273.29	68.32	273.48	557.21	121.54	0.00	1927.87	1751.98	0.142	0.21	0.17	2.175	A
Occupation Ln W	330.82	82.71	331.23	276.27	118.75	0.00	1399.06	1024.54	0.236	0.41	0.31	3.374	A
Regeneration Link	333.52	83.38	334.01	125.05	324.93	0.00	1366.46	943.51	0.244	0.45	0.32	3.487	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	21.08	5.27	21.11	4.52	547.12	0.00	824.47	143.26	0.026	0.03	0.03	4.482	A
Hepworth Rd	228.87	57.22	228.99	466.48	101.75	0.00	1941.94	1751.98	0.118	0.17	0.13	2.101	A
Occupation Ln W	277.05	69.26	277.31	231.31	99.43	0.00	1410.33	1024.54	0.196	0.31	0.25	3.177	A
Regeneration Link	279.31	69.83	279.60	104.71	272.04	0.00	1399.07	943.51	0.200	0.32	0.25	3.218	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.38	0.03	4.473	A	A
Hepworth Rd	1.97	0.13	2.100	A	A
Occupation Ln W	3.58	0.24	3.170	A	A
Regeneration Link	3.65	0.24	3.207	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.49	0.03	4.814	A	A
Hepworth Rd	2.45	0.16	2.175	A	A
Occupation Ln W	4.56	0.30	3.368	A	A
Regeneration Link	4.75	0.32	3.482	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.67	0.04	5.372	A	A
Hepworth Rd	3.15	0.21	2.286	A	A
Occupation Ln W	6.08	0.41	3.675	A	A

Regeneration Link	6.55	0.44	3.937	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.69	0.05	5.376	A	A
Hepworth Rd	3.18	0.21	2.286	A	A
Occupation Ln W	6.19	0.41	3.678	A	A
Regeneration Link	6.68	0.45	3.941	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.52	0.03	4.819	A	A
Hepworth Rd	2.51	0.17	2.175	A	A
Occupation Ln W	4.74	0.32	3.374	A	A
Regeneration Link	4.95	0.33	3.487	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.40	0.03	4.482	A	A
Hepworth Rd	2.03	0.14	2.101	A	A
Occupation Ln W	3.73	0.25	3.177	A	A
Regeneration Link	3.81	0.25	3.218	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, PM	2024 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.64	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	12.00	100.000
Hepworth Rd	ONE HOUR	✓	407.00	100.000
Occupation Ln W	ONE HOUR	✓	440.00	100.000
Regeneration Link	ONE HOUR	✓	372.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	9.000	3.000	0.000
	Hepworth Rd	18.000	0.000	216.000	173.000
	Occupation Ln W	10.000	417.000	0.000	13.000
	Regeneration Link	0.000	235.000	137.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.75	0.25	0.00
	Hepworth Rd	0.04	0.00	0.53	0.43
	Occupation Ln W	0.02	0.95	0.00	0.03
	Regeneration Link	0.00	0.63	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.02	5.51	0.02	A	11.01	16.52	1.38	5.01	0.02	1.38	5.01
Hepworth Rd	0.24	2.47	0.31	A	373.47	560.21	21.81	2.34	0.24	21.81	2.34
Occupation Ln W	0.36	4.18	0.56	A	403.75	605.63	38.24	3.79	0.42	38.24	3.79
Regeneration Link	0.32	4.21	0.48	A	341.35	512.03	32.09	3.76	0.36	32.09	3.76

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.03	2.26	8.99	21.02	591.78	0.00	802.50	175.71	0.011	0.00	0.01	4.536	A
Hepworth Rd	306.41	76.60	305.66	495.76	105.01	0.00	1939.62	1740.70	0.158	0.00	0.19	2.202	A
Occupation Ln W	331.26	82.81	330.00	267.23	143.44	0.00	1384.65	991.78	0.239	0.00	0.31	3.408	A
Regeneration Link	280.06	70.02	279.03	139.68	333.77	0.00	1361.01	925.97	0.206	0.00	0.26	3.324	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	10.79	2.70	10.77	25.15	708.63	0.00	745.02	175.71	0.014	0.01	0.01	4.902	A
Hepworth Rd	365.88	91.47	365.70	593.67	125.74	0.00	1924.89	1740.70	0.190	0.19	0.23	2.308	A
Occupation Ln W	395.55	98.89	395.19	319.82	171.62	0.00	1368.22	991.78	0.289	0.31	0.40	3.700	A
Regeneration Link	334.42	83.61	334.10	167.12	399.68	0.00	1320.38	925.97	0.253	0.26	0.34	3.650	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	13.21	3.30	13.19	30.80	867.57	0.00	666.83	175.71	0.020	0.01	0.02	5.507	A
Hepworth Rd	448.12	112.03	447.83	726.82	153.93	0.00	1904.85	1740.70	0.235	0.23	0.31	2.470	A
Occupation Ln W	484.45	121.11	483.83	391.60	210.16	0.00	1345.73	991.78	0.360	0.40	0.56	4.174	A
Regeneration Link	409.58	102.39	409.03	204.65	489.34	0.00	1265.11	925.97	0.324	0.34	0.48	4.202	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	13.21	3.30	13.21	30.83	868.69	0.00	666.28	175.71	0.020	0.02	0.02	5.511	A
Hepworth Rd	448.12	112.03	448.11	727.76	154.14	0.00	1904.70	1740.70	0.235	0.31	0.31	2.471	A
Occupation Ln W	484.45	121.11	484.44	391.96	210.29	0.00	1345.65	991.78	0.360	0.56	0.56	4.179	A
Regeneration Link	409.58	102.39	409.57	204.79	489.95	0.00	1264.73	925.97	0.324	0.48	0.48	4.209	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	10.79	2.70	10.81	25.20	710.41	0.00	744.14	175.71	0.015	0.02	0.01	4.908	A
Hepworth Rd	365.88	91.47	366.17	595.16	126.06	0.00	1924.66	1740.70	0.190	0.31	0.24	2.311	A
Occupation Ln W	395.55	98.89	396.16	320.39	171.84	0.00	1368.09	991.78	0.289	0.56	0.41	3.705	A
Regeneration Link	334.42	83.61	334.96	167.35	400.65	0.00	1319.78	925.97	0.253	0.48	0.34	3.656	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.03	2.26	9.05	21.10	594.68	0.00	801.07	175.71	0.011	0.01	0.01	4.546	A
Hepworth Rd	306.41	76.60	306.60	498.20	105.52	0.00	1939.25	1740.70	0.158	0.24	0.19	2.206	A
Occupation Ln W	331.26	82.81	331.63	268.24	143.88	0.00	1384.40	991.78	0.239	0.41	0.32	3.422	A
Regeneration Link	280.06	70.02	280.38	140.12	335.39	0.00	1360.02	925.97	0.206	0.34	0.26	3.334	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.17	0.01	4.536	A	A
Hepworth Rd	2.77	0.18	2.202	A	A
Occupation Ln W	4.59	0.31	3.408	A	A
Regeneration Link	3.79	0.25	3.324	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.22	0.01	4.902	A	A
Hepworth Rd	3.47	0.23	2.308	A	A

Occupation Ln W	5.97	0.40	3.700	A	A
Regeneration Link	4.98	0.33	3.650	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.30	0.02	5.507	A	A
Hepworth Rd	4.54	0.30	2.470	A	A
Occupation Ln W	8.21	0.55	4.174	A	A
Regeneration Link	6.99	0.47	4.202	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.30	0.02	5.511	A	A
Hepworth Rd	4.60	0.31	2.471	A	A
Occupation Ln W	8.40	0.56	4.179	A	A
Regeneration Link	7.15	0.48	4.209	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.23	0.02	4.908	A	A
Hepworth Rd	3.57	0.24	2.311	A	A
Occupation Ln W	6.25	0.42	3.705	A	A
Regeneration Link	5.21	0.35	3.656	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.17	0.01	4.546	A	A
Hepworth Rd	2.85	0.19	2.206	A	A
Occupation Ln W	4.81	0.32	3.422	A	A
Regeneration Link	3.97	0.26	3.334	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, AM	2024 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.43	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	28.00	100.000
Hepworth Rd	ONE HOUR	✓	339.00	100.000
Occupation Ln W	ONE HOUR	✓	358.00	100.000
Regeneration Link	ONE HOUR	✓	381.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	18.000	10.000	0.000
	Hepworth Rd	2.000	0.000	169.000	168.000
	Occupation Ln W	4.000	354.000	0.000	0.000
	Regeneration Link	0.000	272.000	109.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.64	0.36	0.00
	Hepworth Rd	0.01	0.00	0.50	0.50
	Occupation Ln W	0.01	0.99	0.00	0.00
	Regeneration Link	0.00	0.71	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.04	5.41	0.05	A	25.69	38.54	3.18	4.94	0.04	3.18	4.94
Hepworth Rd	0.19	2.32	0.24	A	311.07	466.61	17.28	2.22	0.19	17.28	2.22
Occupation Ln W	0.29	3.73	0.41	A	328.51	492.76	28.41	3.46	0.32	28.41	3.46
Regeneration Link	0.32	3.99	0.46	A	349.61	524.42	31.48	3.60	0.35	31.49	3.60

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	21.08	5.27	20.98	4.50	551.38	0.00	822.37	152.32	0.026	0.00	0.03	4.492	A
Hepworth Rd	255.22	63.80	254.62	483.09	89.26	0.00	1950.81	1777.24	0.131	0.00	0.15	2.122	A
Occupation Ln W	269.52	67.38	268.57	216.19	127.68	0.00	1393.85	948.40	0.193	0.00	0.24	3.196	A
Regeneration Link	286.84	71.71	285.81	126.18	270.07	0.00	1400.28	975.64	0.205	0.00	0.26	3.227	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	25.17	6.29	25.14	5.39	660.19	0.00	768.84	152.32	0.033	0.03	0.03	4.840	A
Hepworth Rd	304.75	76.19	304.61	578.45	106.88	0.00	1938.29	1777.24	0.157	0.15	0.19	2.203	A
Occupation Ln W	321.83	80.46	321.58	258.74	152.75	0.00	1379.22	948.40	0.233	0.24	0.30	3.403	A
Regeneration Link	342.51	85.63	342.21	150.96	323.37	0.00	1367.42	975.64	0.250	0.26	0.33	3.511	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	30.83	7.71	30.78	6.60	808.33	0.00	695.97	152.32	0.044	0.03	0.05	5.411	A
Hepworth Rd	373.25	93.31	373.03	708.25	130.86	0.00	1921.25	1777.24	0.194	0.19	0.24	2.325	A
Occupation Ln W	394.17	98.54	393.75	316.82	187.06	0.00	1359.21	948.40	0.290	0.30	0.41	3.726	A
Regeneration Link	419.49	104.87	418.97	184.86	395.95	0.00	1322.68	975.64	0.317	0.33	0.46	3.982	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	30.83	7.71	30.83	6.61	809.24	0.00	695.52	152.32	0.044	0.05	0.05	5.415	A
Hepworth Rd	373.25	93.31	373.24	709.05	131.02	0.00	1921.13	1777.24	0.194	0.24	0.24	2.325	A
Occupation Ln W	394.17	98.54	394.16	317.09	187.17	0.00	1359.14	948.40	0.290	0.41	0.41	3.729	A
Regeneration Link	419.49	104.87	419.48	184.97	396.36	0.00	1322.43	975.64	0.317	0.46	0.46	3.986	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	25.17	6.29	25.22	5.40	661.66	0.00	768.12	152.32	0.033	0.05	0.03	4.847	A
Hepworth Rd	304.75	76.19	304.97	579.74	107.14	0.00	1938.10	1777.24	0.157	0.24	0.19	2.204	A
Occupation Ln W	321.83	80.46	322.24	259.18	152.93	0.00	1379.12	948.40	0.233	0.41	0.31	3.406	A
Regeneration Link	342.51	85.63	343.02	151.13	324.04	0.00	1367.01	975.64	0.251	0.46	0.34	3.516	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	21.08	5.27	21.11	4.52	553.91	0.00	821.13	152.32	0.026	0.03	0.03	4.499	A
Hepworth Rd	255.22	63.80	255.36	485.33	89.69	0.00	1950.50	1777.24	0.131	0.19	0.15	2.123	A
Occupation Ln W	269.52	67.38	269.78	216.99	128.06	0.00	1393.63	948.40	0.193	0.31	0.24	3.205	A
Regeneration Link	286.84	71.71	287.15	126.55	271.29	0.00	1399.53	975.64	0.205	0.34	0.26	3.238	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service

Occupation Ln E	0.38	0.03	4.492	A	A
Hepworth Rd	2.22	0.15	2.122	A	A
Occupation Ln W	3.51	0.23	3.196	A	A
Regeneration Link	3.77	0.25	3.227	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.50	0.03	4.840	A	A
Hepworth Rd	2.76	0.18	2.203	A	A
Occupation Ln W	4.48	0.30	3.403	A	A
Regeneration Link	4.91	0.33	3.511	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.68	0.05	5.411	A	A
Hepworth Rd	3.57	0.24	2.325	A	A
Occupation Ln W	5.99	0.40	3.726	A	A
Regeneration Link	6.80	0.45	3.982	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.69	0.05	5.415	A	A
Hepworth Rd	3.61	0.24	2.325	A	A
Occupation Ln W	6.10	0.41	3.729	A	A
Regeneration Link	6.94	0.46	3.986	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.52	0.03	4.847	A	A
Hepworth Rd	2.84	0.19	2.204	A	A
Occupation Ln W	4.66	0.31	3.406	A	A
Regeneration Link	5.13	0.34	3.516	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.40	0.03	4.499	A	A
Hepworth Rd	2.29	0.15	2.123	A	A
Occupation Ln W	3.66	0.24	3.205	A	A
Regeneration Link	3.94	0.26	3.238	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, PM	2024 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.56	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Traffic Flows

Demand Set Data Options

					PCU		Estimate			

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	Factor for a HV (PCU)	Default Turning Proportions	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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	12.00	100.000
Hepworth Rd	ONE HOUR	✓	458.00	100.000
Occupation Ln W	ONE HOUR	✓	424.00	100.000
Regeneration Link	ONE HOUR	✓	334.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	9.000	3.000	0.000
	Hepworth Rd	18.000	0.000	215.000	225.000
	Occupation Ln W	10.000	414.000	0.000	0.000
	Regeneration Link	0.000	224.000	110.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.75	0.25	0.00
	Hepworth Rd	0.04	0.00	0.47	0.49
	Occupation Ln W	0.02	0.98	0.00	0.00
	Regeneration Link	0.00	0.67	0.33	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.02	5.33	0.02	A	11.01	16.52	1.34	4.88	0.01	1.34	4.88

Hepworth Rd	0.26	2.53	0.35	A	420.27	630.40	25.04	2.38	0.28	25.04	2.38
Occupation Ln W	0.36	4.26	0.55	A	389.07	583.60	37.39	3.84	0.42	37.39	3.84
Regeneration Link	0.29	4.00	0.41	A	306.48	459.73	27.70	3.62	0.31	27.70	3.62

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.03	2.26	8.99	21.02	561.04	0.00	817.62	180.22	0.011	0.00	0.01	4.451	A
Hepworth Rd	344.81	86.20	343.95	485.27	84.76	0.00	1954.00	1758.82	0.176	0.00	0.21	2.235	A
Occupation Ln W	319.21	79.80	317.99	246.23	182.49	0.00	1361.88	923.94	0.234	0.00	0.30	3.446	A
Regeneration Link	251.45	62.86	250.55	168.97	331.51	0.00	1362.41	954.57	0.185	0.00	0.23	3.234	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	10.79	2.70	10.78	25.15	671.82	0.00	763.13	180.22	0.014	0.01	0.01	4.784	A
Hepworth Rd	411.73	102.93	411.51	581.10	101.49	0.00	1942.11	1758.82	0.212	0.21	0.27	2.351	A
Occupation Ln W	381.17	95.29	380.81	294.67	218.34	0.00	1340.96	923.94	0.284	0.30	0.39	3.749	A
Regeneration Link	300.26	75.06	299.99	202.16	396.98	0.00	1322.05	954.57	0.227	0.23	0.29	3.522	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	13.21	3.30	13.19	30.80	822.51	0.00	688.99	180.22	0.019	0.01	0.02	5.326	A
Hepworth Rd	504.27	126.07	503.93	711.44	124.26	0.00	1925.94	1758.82	0.262	0.27	0.35	2.531	A
Occupation Ln W	466.83	116.71	466.22	360.82	267.37	0.00	1312.36	923.94	0.356	0.39	0.55	4.252	A
Regeneration Link	367.74	91.94	367.29	247.56	486.02	0.00	1267.15	954.57	0.290	0.29	0.41	3.999	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	13.21	3.30	13.21	30.83	823.55	0.00	688.48	180.22	0.019	0.02	0.02	5.330	A
Hepworth Rd	504.27	126.07	504.26	712.35	124.41	0.00	1925.83	1758.82	0.262	0.35	0.35	2.531	A
Occupation Ln W	466.83	116.71	466.82	361.13	267.55	0.00	1312.25	923.94	0.356	0.55	0.55	4.257	A
Regeneration Link	367.74	91.94	367.74	247.73	486.64	0.00	1266.77	954.57	0.290	0.41	0.41	4.004	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	10.79	2.70	10.81	25.20	673.47	0.00	762.31	180.22	0.014	0.02	0.01	4.791	A
Hepworth Rd	411.73	102.93	412.07	582.54	101.74	0.00	1941.94	1758.82	0.212	0.35	0.27	2.355	A
Occupation Ln W	381.17	95.29	381.77	295.18	218.63	0.00	1340.79	923.94	0.284	0.55	0.40	3.758	A
Regeneration Link	300.26	75.06	300.71	202.44	397.96	0.00	1321.44	954.57	0.227	0.41	0.30	3.530	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation	9.03	2.26	9.05	21.10	563.76	0.00	816.28	180.22	0.011	0.01	0.01	4.459	A

Ln E													
Hepworth Rd	344.81	86.20	345.03	487.65	85.17	0.00	1953.72	1758.82	0.176	0.27	0.21	2.237	A
Occupation Ln W	319.21	79.80	319.58	247.13	183.06	0.00	1361.54	923.94	0.234	0.40	0.31	3.458	A
Regeneration Link	251.45	62.86	251.72	169.50	333.14	0.00	1361.40	954.57	0.185	0.30	0.23	3.246	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.16	0.01	4.451	A	A
Hepworth Rd	3.16	0.21	2.235	A	A
Occupation Ln W	4.47	0.30	3.446	A	A
Regeneration Link	3.32	0.22	3.234	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.21	0.01	4.784	A	A
Hepworth Rd	3.98	0.27	2.351	A	A
Occupation Ln W	5.83	0.39	3.749	A	A
Regeneration Link	4.32	0.29	3.522	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.29	0.02	5.326	A	A
Hepworth Rd	5.24	0.35	2.531	A	A
Occupation Ln W	8.06	0.54	4.252	A	A
Regeneration Link	5.99	0.40	3.999	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.29	0.02	5.330	A	A
Hepworth Rd	5.31	0.35	2.531	A	A
Occupation Ln W	8.24	0.55	4.257	A	A
Regeneration Link	6.11	0.41	4.004	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.22	0.01	4.791	A	A
Hepworth Rd	4.10	0.27	2.355	A	A
Occupation Ln W	6.10	0.41	3.758	A	A
Regeneration Link	4.51	0.30	3.530	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.17	0.01	4.459	A	A
Hepworth Rd	3.26	0.22	2.237	A	A
Occupation Ln W	4.69	0.31	3.458	A	A
Regeneration Link	3.46	0.23	3.246	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%

with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, AM	2024 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.61	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	28.00	100.000
Hepworth Rd	ONE HOUR	✓	388.00	100.000
Occupation Ln W	ONE HOUR	✓	368.00	100.000
Regeneration Link	ONE HOUR	✓	440.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	18.000	10.000	0.000
	Hepworth Rd	2.000	0.000	172.000	214.000
	Occupation Ln W	4.000	355.000	0.000	9.000
	Regeneration Link	0.000	321.000	119.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.64	0.36	0.00
	Hepworth Rd	0.01	0.00	0.44	0.55
	Occupation Ln W	0.01	0.96	0.00	0.02
	Regeneration Link	0.00	0.73	0.27	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
	Occupation Ln E	0.0	0.0	0.0	0.0

From	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.05	5.69	0.05	A	25.69	38.54	3.31	5.15	0.04	3.31	5.15
Hepworth Rd	0.22	2.42	0.29	A	356.04	534.05	20.46	2.30	0.23	20.46	2.30
Occupation Ln W	0.30	3.89	0.44	A	337.68	506.52	30.23	3.58	0.34	30.23	3.58
Regeneration Link	0.37	4.30	0.58	A	403.75	605.63	38.59	3.82	0.43	38.59	3.82

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	21.08	5.27	20.97	4.50	596.31	0.00	800.27	166.26	0.026	0.00	0.03	4.619	A
Hepworth Rd	292.11	73.03	291.40	520.54	96.75	0.00	1945.49	1775.10	0.150	0.00	0.18	2.175	A
Occupation Ln W	277.05	69.26	276.04	225.92	162.22	0.00	1373.70	891.84	0.202	0.00	0.25	3.276	A
Regeneration Link	331.26	82.81	330.02	167.47	270.79	0.00	1399.84	1024.78	0.237	0.00	0.31	3.362	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	25.17	6.29	25.14	5.39	714.03	0.00	742.36	166.26	0.034	0.03	0.03	5.019	A
Hepworth Rd	348.80	87.20	348.63	623.32	115.85	0.00	1931.91	1775.10	0.181	0.18	0.22	2.273	A
Occupation Ln W	330.82	82.71	330.54	270.40	194.08	0.00	1355.11	891.84	0.244	0.25	0.32	3.513	A
Regeneration Link	395.55	98.89	395.17	200.37	324.26	0.00	1366.88	1024.78	0.289	0.31	0.40	3.702	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	30.83	7.71	30.77	6.60	874.19	0.00	663.57	166.26	0.046	0.03	0.05	5.688	A
Hepworth Rd	427.20	106.80	426.93	763.14	141.83	0.00	1913.45	1775.10	0.223	0.22	0.29	2.421	A
Occupation Ln W	405.18	101.29	404.72	331.09	237.67	0.00	1329.68	891.84	0.305	0.32	0.44	3.890	A
Regeneration Link	484.45	121.11	483.77	245.37	397.02	0.00	1322.02	1024.78	0.366	0.40	0.57	4.291	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	30.83	7.71	30.83	6.61	875.30	0.00	663.03	166.26	0.047	0.05	0.05	5.693	A
Hepworth Rd	427.20	106.80	427.19	764.10	142.03	0.00	1913.31	1775.10	0.223	0.29	0.29	2.421	A
Occupation Ln W	405.18	101.29	405.17	331.40	237.82	0.00	1329.60	891.84	0.305	0.44	0.44	3.894	A
Regeneration Link	484.45	121.11	484.44	245.53	397.46	0.00	1321.75	1024.78	0.367	0.57	0.58	4.299	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	25.17	6.29	25.22	5.40	715.79	0.00	741.49	166.26	0.034	0.05	0.04	5.025	A
Hepworth Rd	348.80	87.20	349.07	624.85	116.17	0.00	1931.69	1775.10	0.181	0.29	0.22	2.276	A
Occupation Ln W	330.82	82.71	331.27	270.91	194.33	0.00	1354.97	891.84	0.244	0.44	0.32	3.520	A
Regeneration Link	395.55	98.89	396.22	200.63	324.97	0.00	1366.44	1024.78	0.289	0.58	0.41	3.712	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	21.08	5.27	21.11	4.52	599.18	0.00	798.86	166.26	0.026	0.04	0.03	4.630	A
Hepworth Rd	292.11	73.03	292.28	523.06	97.24	0.00	1945.14	1775.10	0.150	0.22	0.18	2.177	A
Occupation Ln W	277.05	69.26	277.33	226.80	162.71	0.00	1373.41	891.84	0.202	0.32	0.25	3.287	A
Regeneration Link	331.26	82.81	331.65	167.99	272.06	0.00	1399.06	1024.78	0.237	0.41	0.31	3.375	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.39	0.03	4.619	A	A
Hepworth Rd	2.61	0.17	2.175	A	A
Occupation Ln W	3.70	0.25	3.276	A	A
Regeneration Link	4.53	0.30	3.362	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.52	0.03	5.019	A	A
Hepworth Rd	3.26	0.22	2.273	A	A
Occupation Ln W	4.75	0.32	3.513	A	A
Regeneration Link	5.98	0.40	3.702	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.71	0.05	5.688	A	A
Hepworth Rd	4.25	0.28	2.421	A	A
Occupation Ln W	6.42	0.43	3.890	A	A
Regeneration Link	8.43	0.56	4.291	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.73	0.05	5.693	A	A
Hepworth Rd	4.30	0.29	2.421	A	A
Occupation Ln W	6.55	0.44	3.894	A	A
Regeneration Link	8.63	0.58	4.299	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.54	0.04	5.025	A	A
Hepworth Rd	3.35	0.22	2.276	A	A
Occupation Ln W	4.95	0.33	3.520	A	A
Regeneration Link	6.26	0.42	3.712	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.42	0.03	4.630	A	A
Hepworth Rd	2.68	0.18	2.177	A	A
Occupation Ln W	3.86	0.26	3.287	A	A
Regeneration Link	4.75	0.32	3.375	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, PM	2024 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				3.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Occupation Ln E	1	Occupation Ln E	
Hepworth Rd	2	Hepworth Rd	
Occupation Ln W	3	Occupation Ln W	
Regeneration Link	4	Regeneration Link	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Occupation Ln E	0.00	99999.00		0.00
Hepworth Rd	0.00	99999.00		0.00
Occupation Ln W	0.00	99999.00		0.00
Regeneration Link	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Occupation Ln E	3.20	4.80	5.00	11.00	40.00	46.00	
Hepworth Rd	5.10	7.70	10.00	56.20	40.00	33.40	
Occupation Ln W	3.40	6.90	10.00	36.20	40.00	48.00	
Regeneration Link	3.50	7.00	10.00	59.00	40.00	38.20	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Occupation Ln E		(calculated)	(calculated)	0.492	1093.619
Hepworth Rd		(calculated)	(calculated)	0.711	2014.235
Occupation Ln W		(calculated)	(calculated)	0.583	1468.336
Regeneration Link		(calculated)	(calculated)	0.616	1566.775

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Occupation Ln E	ONE HOUR	✓	12.00	100.000
Hepworth Rd	ONE HOUR	✓	519.00	100.000
Occupation Ln W	ONE HOUR	✓	440.00	100.000
Regeneration Link	ONE HOUR	✓	397.00	100.000

Turning Proportions

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

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.000	9.000	3.000	0.000
	Hepworth Rd	18.000	0.000	216.000	285.000
	Occupation Ln W	10.000	417.000	0.000	13.000
	Regeneration Link	0.000	276.000	121.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.00	0.75	0.25	0.00
	Hepworth Rd	0.03	0.00	0.42	0.55
	Occupation Ln W	0.02	0.95	0.00	0.03
	Regeneration Link	0.00	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	1.000	1.000	1.000	1.000
	Hepworth Rd	1.000	1.000	1.000	1.000
	Occupation Ln W	1.000	1.000	1.000	1.000
	Regeneration Link	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Occupation Ln E	Hepworth Rd	Occupation Ln W	Regeneration Link
From	Occupation Ln E	0.0	0.0	0.0	0.0
	Hepworth Rd	0.0	0.0	0.0	0.0
	Occupation Ln W	0.0	0.0	0.0	0.0
	Regeneration Link	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Occupation Ln E	0.02	5.63	0.02	A	11.01	16.52	1.40	5.10	0.02	1.40	5.10
Hepworth Rd	0.30	2.67	0.42	A	476.24	714.37	29.66	2.49	0.33	29.66	2.49
Occupation Ln W	0.38	4.56	0.61	A	403.75	605.63	40.96	4.06	0.46	40.97	4.06
Regeneration Link	0.35	4.35	0.53	A	364.29	546.44	35.14	3.86	0.39	35.14	3.86

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.03	2.26	8.99	21.02	610.46	0.00	793.31	192.10	0.011	0.00	0.01	4.589	A
Hepworth Rd	390.73	97.68	389.73	526.45	93.00	0.00	1948.15	1761.46	0.201	0.00	0.25	2.309	A
Occupation Ln W	331.26	82.81	329.94	255.20	227.53	0.00	1335.60	868.41	0.248	0.00	0.33	3.575	A
Regeneration Link	298.88	74.72	297.76	223.76	333.71	0.00	1361.05	1009.57	0.220	0.00	0.28	3.383	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	10.79	2.70	10.77	25.15	731.03	0.00	734.00	192.10	0.015	0.01	0.01	4.977	A
Hepworth Rd	466.57	116.64	466.30	630.44	111.36	0.00	1935.10	1761.46	0.241	0.25	0.32	2.450	A
Occupation Ln W	395.55	98.89	395.14	305.43	272.24	0.00	1309.52	868.41	0.302	0.33	0.43	3.935	A
Regeneration Link	356.89	89.22	356.54	267.74	399.64	0.00	1320.41	1009.57	0.270	0.28	0.37	3.735	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	13.21	3.30	13.19	30.80	894.93	0.00	653.37	192.10	0.020	0.01	0.02	5.623	A
Hepworth Rd	571.43	142.86	571.00	771.79	136.33	0.00	1917.36	1761.46	0.298	0.32	0.42	2.674	A
Occupation Ln W	484.45	121.11	483.73	373.97	333.36	0.00	1273.86	868.41	0.380	0.43	0.61	4.552	A
Regeneration Link	437.11	109.28	436.48	327.85	489.25	0.00	1265.17	1009.57	0.345	0.37	0.52	4.342	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	13.21	3.30	13.21	30.83	896.21	0.00	652.74	192.10	0.020	0.02	0.02	5.628	A
Hepworth Rd	571.43	142.86	571.43	772.90	136.52	0.00	1917.22	1761.46	0.298	0.42	0.42	2.674	A
Occupation Ln W	484.45	121.11	484.44	374.34	333.61	0.00	1273.72	868.41	0.380	0.61	0.61	4.560	A
Regeneration Link	437.11	109.28	437.10	328.10	489.94	0.00	1264.73	1009.57	0.346	0.52	0.53	4.349	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	10.79	2.70	10.81	25.20	733.05	0.00	733.00	192.10	0.015	0.02	0.02	4.986	A
Hepworth Rd	466.57	116.64	466.99	632.19	111.67	0.00	1934.89	1761.46	0.241	0.42	0.32	2.454	A
Occupation Ln W	395.55	98.89	396.25	306.02	272.64	0.00	1309.29	868.41	0.302	0.61	0.44	3.945	A
Regeneration Link	356.89	89.22	357.51	268.15	400.74	0.00	1319.73	1009.57	0.270	0.53	0.37	3.742	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Occupation Ln E	9.03	2.26	9.05	21.10	613.57	0.00	791.78	192.10	0.011	0.02	0.01	4.598	A
Hepworth Rd	390.73	97.68	391.00	529.16	93.47	0.00	1947.82	1761.46	0.201	0.32	0.25	2.312	A
Occupation Ln W	331.26	82.81	331.67	256.19	228.27	0.00	1335.17	868.41	0.248	0.44	0.33	3.588	A
Regeneration Link	298.88	74.72	299.24	224.51	335.43	0.00	1359.99	1009.57	0.220	0.37	0.28	3.394	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.17	0.01	4.589	A	A
Hepworth Rd	3.70	0.25	2.309	A	A
Occupation Ln W	4.81	0.32	3.575	A	A
Regeneration Link	4.11	0.27	3.383	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.22	0.01	4.977	A	A
Hepworth Rd	4.70	0.31	2.450	A	A
Occupation Ln W	6.34	0.42	3.935	A	A
Regeneration Link	5.44	0.36	3.735	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.30	0.02	5.623	A	A
Hepworth Rd	6.26	0.42	2.674	A	A
Occupation Ln W	8.93	0.60	4.552	A	A
Regeneration Link	7.70	0.51	4.342	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.31	0.02	5.628	A	A
Hepworth Rd	6.35	0.42	2.674	A	A
Occupation Ln W	9.15	0.61	4.560	A	A
Regeneration					

Link	7.88	0.53	4.349	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.23	0.02	4.986	A	A
Hepworth Rd	4.84	0.32	2.454	A	A
Occupation Ln W	6.66	0.44	3.945	A	A
Regeneration Link	5.70	0.38	3.742	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Occupation Ln E	0.18	0.01	4.598	A	A
Hepworth Rd	3.82	0.25	2.312	A	A
Occupation Ln W	5.06	0.34	3.588	A	A
Regeneration Link	4.31	0.29	3.394	A	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]
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Filename: RegenerationLink-Phase2Accesses North Roundabout_v01.arc8
Path: \\lefs02\Projects\067895.100 TPLE Woodville\Q3-Design\3A-Calculations\TP\Junction Modelling\Junction Models for 24.07.2019 Submission
Report generation date: 24/07/2019 11:26:23

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2021 Base Reg Link 25%							
1 - Regeneration Link N	0.19	2.11	0.16	A	0.19	2.10	0.16	A
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	A
3 - Regeneration Link S	0.05	1.85	0.04	A	0.06	1.87	0.06	A
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	A
	A1 - 2021 Base Reg Link 25% with Dev							
1 - Regeneration Link N	0.24	2.20	0.19	A	0.25	2.24	0.20	A
2 - Phase 2 Access E	0.04	3.49	0.04	A	0.02	3.43	0.02	A
3 - Regeneration Link S	0.08	1.94	0.07	A	0.10	1.97	0.09	A
4 - Phase 2 Access W	0.01	3.02	0.01	A	0.04	3.16	0.04	A
	A1 - 2021 Base Reg Link 50%							
1 - Regeneration Link N	0.24	2.20	0.20	A	0.21	2.14	0.17	A
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	A
3 - Regeneration Link S	0.10	1.93	0.09	A	0.13	2.00	0.12	A
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	A
	A1 - 2021 Base Reg Link 50% with Dev							
1 - Regeneration Link N	0.30	2.30	0.23	A	0.27	2.28	0.21	A
2 - Phase 2 Access E	0.04	3.63	0.04	A	0.02	3.48	0.02	A
3 - Regeneration Link S	0.13	2.03	0.12	A	0.18	2.11	0.15	A
4 - Phase 2 Access W	0.01	3.15	0.01	A	0.04	3.35	0.04	A
	A1 - 2024 Base Reg Link 25%							
1 - Regeneration Link N	0.20	2.12	0.17	A	0.20	2.12	0.17	A
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	A
3 - Regeneration Link S	0.05	1.85	0.05	A	0.06	1.88	0.06	A
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	A
	A1 - 2024 Base Reg Link 25% with Dev							
1 - Regeneration Link N	0.25	2.22	0.20	A	0.26	2.26	0.21	A
2 - Phase 2 Access E	0.04	3.52	0.04	A	0.02	3.46	0.02	A
3 - Regeneration Link S	0.08	1.94	0.08	A	0.11	1.98	0.10	A
4 - Phase 2 Access W	0.01	3.03	0.01	A	0.04	3.17	0.04	A
	A1 - 2024 Base Reg Link 50%							
1 - Regeneration Link N	0.26	2.22	0.21	A	0.22	2.16	0.18	A
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	A
3 - Regeneration Link S	0.10	1.94	0.09	A	0.14	2.01	0.12	A
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	A
	A1 - 2024 Base Reg Link 50% with Dev							
1 - Regeneration Link N	0.31	2.33	0.24	A	0.29	2.30	0.22	A
2 - Phase 2 Access E	0.04	3.67	0.04	A	0.02	3.51	0.02	A
3 - Regeneration Link S	0.14	2.04	0.12	A	0.19	2.12	0.16	A
4 - Phase 2 Access W	0.01	3.16	0.01	A	0.04	3.36	0.04	A

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

"D1 - 2021 Base Reg Link 25%, AM " model duration: 07:15 - 08:45
"D2 - 2021 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D3 - 2021 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D4 - 2021 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D5 - 2021 Base Reg Link 50%, AM" model duration: 07:15 - 08:45

"D6 - 2021 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D7 - 2021 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D8 - 2021 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15
"D9 - 2024 Base Reg Link 25%, AM" model duration: 07:15 - 08:45
"D10 - 2024 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D11 - 2024 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D12 - 2024 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D13 - 2024 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D14 - 2024 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D15 - 2024 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D16 - 2024 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 24/07/2019 11:26:09

File summary

Title	(untitled)
Location	
Site Number	
Date	12/06/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	RodriguezMartin_d
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) - 2021 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, AM	2021 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.05	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	298.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	81.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	298.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	81.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.16	2.11	0.19	A	273.45	410.18	13.97	2.04	0.16	13.97	2.04
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.04	1.85	0.05	A	74.33	111.49	3.40	1.83	0.04	3.40	1.83
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Regeneration Link N	224.35	56.09	223.86	60.86	0.00	0.00	2037.37	1895.73	0.110	0.00	0.12	1.985	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	223.86	0.00	1164.03	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	60.98	15.25	60.86	223.86	0.00	0.00	2037.37	1895.74	0.030	0.00	0.03	1.820	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	60.86	0.00	1252.89	198.49	0.000	0.00	0.00	0.000	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	267.90	66.97	267.79	72.79	0.00	0.00	2037.37	1895.73	0.131	0.12	0.15	2.034	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	267.79	0.00	1140.08	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	72.82	18.20	72.79	267.79	0.00	0.00	2037.37	1895.74	0.036	0.03	0.04	1.831	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	72.79	0.00	1246.39	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	328.10	82.03	327.94	89.15	0.00	0.00	2037.37	1895.73	0.161	0.15	0.19	2.105	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	327.94	0.00	1107.29	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	89.18	22.30	89.15	327.94	0.00	0.00	2037.37	1895.74	0.044	0.04	0.05	1.846	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	89.15	0.00	1237.47	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	328.10	82.03	328.10	89.18	0.00	0.00	2037.37	1895.73	0.161	0.19	0.19	2.105	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	328.10	0.00	1107.20	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	89.18	22.30	89.18	328.10	0.00	0.00	2037.37	1895.74	0.044	0.05	0.05	1.846	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	89.18	0.00	1237.45	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	267.90	66.97	268.06	72.85	0.00	0.00	2037.37	1895.73	0.131	0.19	0.15	2.036	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	268.06	0.00	1139.94	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	72.82	18.20	72.85	268.06	0.00	0.00	2037.37	1895.74	0.036	0.05	0.04	1.831	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	72.85	0.00	1246.35	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	224.35	56.09	224.46	61.01	0.00	0.00	2037.37	1895.73	0.110	0.15	0.12	1.987	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	224.46	0.00	1163.70	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	60.98	15.25	61.01	224.46	0.00	0.00	2037.37	1895.74	0.030	0.04	0.03	1.820	A

4 - Phase 2 Access W	0.00	0.00	0.00	0.00	61.01	0.00	1252.81	198.49	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	1.83	0.12	1.985	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.46	0.03	1.820	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.25	0.15	2.034	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.55	0.04	1.831	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.84	0.19	2.105	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.68	0.05	1.846	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.87	0.19	2.105	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.69	0.05	1.846	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.30	0.15	2.036	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.56	0.04	1.831	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	1.88	0.13	1.987	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.47	0.03	1.820	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2021 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, PM	2021 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.04	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access	3.10	5.00	15.00	22.50	40.00	45.00	

W							

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	296.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	107.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	296.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	107.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.16	2.10	0.19	A	271.61	407.42	13.86	2.04	0.15	13.86	2.04
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.06	1.87	0.06	A	98.19	147.28	4.55	1.85	0.05	4.55	1.85
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	222.84	55.71	222.35	80.39	0.00	0.00	2037.37	1895.73	0.109	0.00	0.12	1.983	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	222.35	0.00	1164.85	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	80.56	20.14	80.39	222.35	0.00	0.00	2037.37	1895.74	0.040	0.00	0.04	1.838	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	80.39	0.00	1242.24	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	266.10	66.52	265.99	96.16	0.00	0.00	2037.37	1895.73	0.131	0.12	0.15	2.032	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	265.99	0.00	1141.06	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	96.19	24.05	96.16	265.99	0.00	0.00	2037.37	1895.74	0.047	0.04	0.05	1.853	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	96.16	0.00	1233.65	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	325.90	81.48	325.74	117.76	0.00	0.00	2037.37	1895.73	0.160	0.15	0.19	2.103	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	325.74	0.00	1108.49	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	117.81	29.45	117.76	325.74	0.00	0.00	2037.37	1895.74	0.058	0.05	0.06	1.874	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	117.76	0.00	1221.87	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	325.90	81.48	325.90	117.81	0.00	0.00	2037.37	1895.73	0.160	0.19	0.19	2.103	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	325.90	0.00	1108.40	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	117.81	29.45	117.81	325.90	0.00	0.00	2037.37	1895.74	0.058	0.06	0.06	1.874	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	117.81	0.00	1221.85	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	266.10	66.52	266.26	96.24	0.00	0.00	2037.37	1895.73	0.131	0.19	0.15	2.034	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	266.26	0.00	1140.92	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	96.19	24.05	96.24	266.26	0.00	0.00	2037.37	1895.74	0.047	0.06	0.05	1.856	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	96.24	0.00	1233.61	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	222.84	55.71	222.95	80.59	0.00	0.00	2037.37	1895.73	0.109	0.15	0.12	1.985	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	222.95	0.00	1164.52	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	80.56	20.14	80.59	222.95	0.00	0.00	2037.37	1895.74	0.040	0.05	0.04	1.841	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	80.59	0.00	1242.14	198.49	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	1.82	0.12	1.983	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.61	0.04	1.838	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.23	0.15	2.032	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.74	0.05	1.853	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.82	0.19	2.103	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.91	0.06	1.874	A	A

4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.85	0.19	2.103	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.92	0.06	1.874	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.28	0.15	2.034	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.75	0.05	1.856	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	1.86	0.12	1.985	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.62	0.04	1.841	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, AM	2021 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS

1	(untitled)	Roundabout	1,2,3,4				2.25	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	353.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	40.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	136.00	100.000

4 - Phase 2 Access W	ONE HOUR	✓	12.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	6.000	327.000	20.000
	2 - Phase 2 Access E	17.000	0.000	23.000	0.000
	3 - Regeneration Link S	113.000	8.000	0.000	15.000
	4 - Phase 2 Access W	7.000	0.000	5.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.02	0.93	0.06
	2 - Phase 2 Access E	0.43	0.00	0.58	0.00
	3 - Regeneration Link S	0.83	0.06	0.00	0.11
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.19	2.20	0.24	A	323.92	485.88	17.14	2.12	0.19	17.14	2.12
2 - Phase 2 Access E	0.04	3.49	0.04	A	36.70	55.06	3.08	3.36	0.03	3.08	3.36
3 - Regeneration Link S	0.07	1.94	0.08	A	124.80	187.19	5.94	1.91	0.07	5.94	1.91
4 - Phase 2 Access W	0.01	3.02	0.01	A	11.01	16.52	0.82	2.98	0.01	0.82	2.98

Main Results for each time segment

Main results: (07:15-07:30)

	Total	Junction	Entry		Circulating	Pedestrian		Saturation		Start	End		

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	Exit Flow (PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	Capacity (PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	265.76	66.44	265.16	102.90	9.76	0.00	2030.40	1863.75	0.131	0.00	0.15	2.039	A
2 - Phase 2 Access E	30.11	7.53	30.01	10.52	264.40	0.00	1141.93	215.47	0.026	0.00	0.03	3.237	A
3 - Regeneration Link S	102.39	25.60	102.17	266.63	27.78	0.00	2017.55	1896.68	0.051	0.00	0.05	1.878	A
4 - Phase 2 Access W	9.03	2.26	9.00	26.29	103.66	0.00	1229.56	316.20	0.007	0.00	0.01	2.948	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	317.34	79.33	317.20	123.11	11.68	0.00	2029.03	1863.75	0.156	0.15	0.18	2.102	A
2 - Phase 2 Access E	35.96	8.99	35.93	12.58	316.30	0.00	1113.63	215.47	0.032	0.03	0.03	3.339	A
3 - Regeneration Link S	122.26	30.57	122.22	318.99	33.24	0.00	2013.65	1896.68	0.061	0.05	0.06	1.902	A
4 - Phase 2 Access W	10.79	2.70	10.78	31.45	124.01	0.00	1218.47	316.20	0.009	0.01	0.01	2.980	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	388.66	97.17	388.45	150.77	14.31	0.00	2027.16	1863.75	0.192	0.18	0.24	2.196	A
2 - Phase 2 Access E	44.04	11.01	44.00	15.41	387.35	0.00	1074.90	215.47	0.041	0.03	0.04	3.491	A
3 - Regeneration Link S	149.74	37.43	149.68	390.65	40.71	0.00	2008.32	1896.68	0.075	0.06	0.08	1.936	A
4 - Phase 2 Access W	13.21	3.30	13.20	38.52	151.87	0.00	1203.28	316.20	0.011	0.01	0.01	3.024	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	388.66	97.17	388.66	150.84	14.31	0.00	2027.15	1863.75	0.192	0.24	0.24	2.196	A
2 - Phase 2 Access E	44.04	11.01	44.04	15.41	387.56	0.00	1074.79	215.47	0.041	0.04	0.04	3.491	A
3 - Regeneration Link S	149.74	37.43	149.74	390.86	40.74	0.00	2008.30	1896.68	0.075	0.08	0.08	1.936	A
4 - Phase 2 Access W	13.21	3.30	13.21	38.54	151.94	0.00	1203.24	316.20	0.011	0.01	0.01	3.024	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	317.34	79.33	317.54	123.23	11.69	0.00	2029.02	1863.75	0.156	0.24	0.19	2.105	A
2 - Phase 2 Access E	35.96	8.99	36.00	12.59	316.64	0.00	1113.45	215.47	0.032	0.04	0.03	3.343	A
3 - Regeneration Link S	122.26	30.57	122.32	319.35	33.29	0.00	2013.61	1896.68	0.061	0.08	0.06	1.902	A
4 - Phase 2 Access W	10.79	2.70	10.80	31.48	124.13	0.00	1218.40	316.20	0.009	0.01	0.01	2.982	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	265.76	66.44	265.90	103.19	9.79	0.00	2030.38	1863.75	0.131	0.19	0.15	2.041	A
2 - Phase 2 Access E	30.11	7.53	30.14	10.54	265.14	0.00	1141.52	215.47	0.026	0.03	0.03	3.238	A
3 -													

Regeneration Link S	102.39	25.60	102.43	267.41	27.87	0.00	2017.48	1896.68	0.051	0.06	0.05	1.878	A
4 - Phase 2 Access W	9.03	2.26	9.04	26.36	103.94	0.00	1229.40	316.20	0.007	0.01	0.01	2.951	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.22	0.15	2.039	A	A
2 - Phase 2 Access E	0.40	0.03	3.237	A	A
3 - Regeneration Link S	0.79	0.05	1.878	A	A
4 - Phase 2 Access W	0.11	0.01	2.948	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.75	0.18	2.102	A	A
2 - Phase 2 Access E	0.49	0.03	3.339	A	A
3 - Regeneration Link S	0.96	0.06	1.902	A	A
4 - Phase 2 Access W	0.13	0.01	2.980	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.51	0.23	2.196	A	A
2 - Phase 2 Access E	0.63	0.04	3.491	A	A
3 - Regeneration Link S	1.20	0.08	1.936	A	A
4 - Phase 2 Access W	0.16	0.01	3.024	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.55	0.24	2.196	A	A
2 - Phase 2 Access E	0.64	0.04	3.491	A	A
3 - Regeneration Link S	1.21	0.08	1.936	A	A
4 - Phase 2 Access W	0.17	0.01	3.024	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.82	0.19	2.105	A	A
2 - Phase 2 Access E	0.51	0.03	3.343	A	A
3 - Regeneration Link S	0.98	0.07	1.902	A	A
4 - Phase 2 Access W	0.14	0.01	2.982	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.29	0.15	2.041	A	A
2 - Phase 2 Access E	0.41	0.03	3.238	A	A
3 - Regeneration Link S	0.81	0.05	1.878	A	A
4 - Phase 2 Access W	0.11	0.01	2.951	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, PM	2021 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.26	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	

4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	366.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	15.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	174.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	43.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	15.000	331.000	20.000
	2 - Phase 2 Access E	6.000	0.000	9.000	0.000
	3 - Regeneration Link S	139.000	20.000	0.000	15.000
	4 - Phase 2 Access W	25.000	0.000	18.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.04	0.90	0.05
	2 - Phase 2 Access E	0.40	0.00	0.60	0.00
	3 - Regeneration Link S	0.80	0.11	0.00	0.09
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.20	2.24	0.25	A	335.85	503.77	18.08	2.15	0.20	18.08	2.15
2 - Phase 2 Access E	0.02	3.43	0.02	A	13.76	20.65	1.14	3.31	0.01	1.14	3.31
3 - Regeneration Link S	0.09	1.97	0.10	A	159.67	239.50	7.72	1.93	0.09	7.72	1.93
4 - Phase 2 Access W	0.04	3.16	0.04	A	39.46	59.19	3.05	3.09	0.03	3.05	3.09

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	275.54	68.89	274.91	127.68	28.53	0.00	2017.01	1797.57	0.137	0.00	0.16	2.066	A
2 - Phase 2 Access E	11.29	2.82	11.25	26.29	277.15	0.00	1134.98	281.30	0.010	0.00	0.01	3.202	A
3 - Regeneration Link S	131.00	32.75	130.72	268.88	19.52	0.00	2023.43	1886.99	0.065	0.00	0.07	1.901	A
4 - Phase 2 Access W	32.37	8.09	32.26	26.29	123.95	0.00	1218.50	284.70	0.027	0.00	0.03	3.034	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	329.03	82.26	328.88	152.76	34.14	0.00	2013.00	1797.57	0.163	0.16	0.19	2.137	A
2 - Phase 2 Access E	13.48	3.37	13.48	31.45	331.57	0.00	1105.31	281.30	0.012	0.01	0.01	3.296	A
3 - Regeneration Link S	156.42	39.11	156.36	321.69	23.36	0.00	2020.70	1886.99	0.077	0.07	0.08	1.930	A
4 - Phase 2 Access W	38.66	9.66	38.63	31.45	148.27	0.00	1205.24	284.70	0.032	0.03	0.03	3.085	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	402.97	100.74	402.75	187.08	41.82	0.00	2007.53	1797.57	0.201	0.19	0.25	2.243	A
2 - Phase 2 Access E	16.52	4.13	16.50	38.52	406.05	0.00	1064.71	281.30	0.016	0.01	0.02	3.433	A
3 - Regeneration Link S	191.58	47.89	191.49	393.94	28.61	0.00	2016.95	1886.99	0.095	0.08	0.10	1.971	A
4 - Phase 2 Access W	47.34	11.84	47.31	38.52	181.59	0.00	1187.08	284.70	0.040	0.03	0.04	3.157	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	402.97	100.74	402.97	187.17	41.84	0.00	2007.51	1797.57	0.201	0.25	0.25	2.243	A
2 - Phase 2 Access E	16.52	4.13	16.52	38.54	406.27	0.00	1064.59	281.30	0.016	0.02	0.02	3.434	A
3 - Regeneration Link S	191.58	47.89	191.58	394.16	28.63	0.00	2016.94	1886.99	0.095	0.10	0.10	1.971	A
4 - Phase 2 Access W	47.34	11.84	47.34	38.54	181.67	0.00	1187.03	284.70	0.040	0.04	0.04	3.158	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	329.03	82.26	329.25	152.92	34.18	0.00	2012.97	1797.57	0.163	0.25	0.20	2.139	A
2 - Phase 2 Access E	13.48	3.37	13.50	31.48	331.95	0.00	1105.11	281.30	0.012	0.02	0.01	3.299	A
3 - Regeneration Link S	156.42	39.11	156.51	322.05	23.39	0.00	2020.68	1886.99	0.077	0.10	0.08	1.930	A
4 - Phase 2 Access W	38.66	9.66	38.69	31.48	148.41	0.00	1205.16	284.70	0.032	0.04	0.03	3.085	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	275.54	68.89	275.69	128.05	28.62	0.00	2016.94	1797.57	0.137	0.20	0.16	2.067	A
2 - Phase 2 Access E	11.29	2.82	11.30	26.36	277.96	0.00	1134.54	281.30	0.010	0.01	0.01	3.204	A
3 - Regeneration Link S	131.00	32.75	131.06	269.67	19.59	0.00	2023.39	1886.99	0.065	0.08	0.07	1.904	A
4 - Phase 2 Access W	32.37	8.09	32.40	26.36	124.28	0.00	1218.32	284.70	0.027	0.03	0.03	3.037	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.34	0.16	2.066	A	A
2 - Phase 2 Access E	0.15	0.01	3.202	A	A
3 - Regeneration Link S	1.02	0.07	1.901	A	A
4 - Phase 2 Access W	0.40	0.03	3.034	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.90	0.19	2.137	A	A
2 - Phase 2 Access E	0.18	0.01	3.296	A	A
3 - Regeneration Link S	1.25	0.08	1.930	A	A
4 - Phase 2 Access W	0.49	0.03	3.085	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.72	0.25	2.243	A	A
2 - Phase 2 Access E	0.23	0.02	3.433	A	A
3 - Regeneration Link S	1.56	0.10	1.971	A	A

4 - Phase 2 Access W	0.61	0.04	3.157	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.76	0.25	2.243	A	A
2 - Phase 2 Access E	0.24	0.02	3.434	A	A
3 - Regeneration Link S	1.57	0.10	1.971	A	A
4 - Phase 2 Access W	0.62	0.04	3.158	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.97	0.20	2.139	A	A
2 - Phase 2 Access E	0.19	0.01	3.299	A	A
3 - Regeneration Link S	1.27	0.08	1.930	A	A
4 - Phase 2 Access W	0.50	0.03	3.085	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.40	0.16	2.067	A	A
2 - Phase 2 Access E	0.15	0.01	3.204	A	A
3 - Regeneration Link S	1.05	0.07	1.904	A	A
4 - Phase 2 Access W	0.42	0.03	3.037	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, AM	2021 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.12	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	364.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	161.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	364.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	161.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.20	2.20	0.24	A	334.01	501.02	17.69	2.12	0.20	17.69	2.12
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.09	1.93	0.10	A	147.74	221.60	7.03	1.90	0.08	7.03	1.90
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Regeneration Link N	274.04	68.51	273.42	120.96	0.00	0.00	2037.37	1895.73	0.135	0.00	0.16	2.041	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	273.42	0.00	1137.01	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	121.21	30.30	120.96	273.42	0.00	0.00	2037.37	1895.74	0.059	0.00	0.06	1.877	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	120.96	0.00	1220.13	198.49	0.000	0.00	0.00	0.000	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	327.23	81.81	327.09	144.68	0.00	0.00	2037.37	1895.73	0.161	0.16	0.19	2.104	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	327.09	0.00	1107.76	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	144.74	36.18	144.68	327.09	0.00	0.00	2037.37	1895.74	0.071	0.06	0.08	1.901	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	144.68	0.00	1207.19	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	400.77	100.19	400.56	177.19	0.00	0.00	2037.37	1895.74	0.197	0.19	0.24	2.199	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	400.56	0.00	1067.70	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	177.26	44.32	177.19	400.56	0.00	0.00	2037.37	1895.74	0.087	0.08	0.10	1.935	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	177.19	0.00	1189.47	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	400.77	100.19	400.77	177.26	0.00	0.00	2037.37	1895.74	0.197	0.24	0.24	2.199	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	400.77	0.00	1067.59	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	177.26	44.32	177.26	400.77	0.00	0.00	2037.37	1895.74	0.087	0.10	0.10	1.935	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	177.26	0.00	1189.43	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	327.23	81.81	327.44	144.81	0.00	0.00	2037.37	1895.73	0.161	0.24	0.19	2.106	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	327.44	0.00	1107.56	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	144.74	36.18	144.81	327.44	0.00	0.00	2037.37	1895.74	0.071	0.10	0.08	1.904	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	144.81	0.00	1207.13	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	274.04	68.51	274.18	121.26	0.00	0.00	2037.37	1895.73	0.135	0.19	0.16	2.043	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	274.18	0.00	1136.60	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	121.21	30.30	121.26	274.18	0.00	0.00	2037.37	1895.74	0.059	0.08	0.06	1.877	A

4 - Phase 2 Access W	0.00	0.00	0.00	0.00	121.26	0.00	1219.96	198.49	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.30	0.15	2.041	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.94	0.06	1.877	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.84	0.19	2.104	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.14	0.08	1.901	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.63	0.24	2.199	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.41	0.09	1.935	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.67	0.24	2.199	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.43	0.10	1.935	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.91	0.19	2.106	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.16	0.08	1.904	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.36	0.16	2.043	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.96	0.06	1.877	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, PM	2021 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.08	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access	3.10	5.00	15.00	22.50	40.00	45.00	

W							

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	320.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	215.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	320.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	215.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.17	2.14	0.21	A	293.64	440.46	15.18	2.07	0.17	15.18	2.07
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.12	2.00	0.13	A	197.29	295.93	9.65	1.96	0.11	9.65	1.96
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	240.91	60.23	240.38	161.52	0.00	0.00	2037.37	1895.73	0.118	0.00	0.13	2.003	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	240.38	0.00	1155.03	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	161.86	40.47	161.52	240.38	0.00	0.00	2037.37	1895.74	0.079	0.00	0.09	1.918	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	161.52	0.00	1198.02	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	287.67	71.92	287.55	193.21	0.00	0.00	2037.37	1895.73	0.141	0.13	0.16	2.057	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	287.55	0.00	1129.31	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	193.28	48.32	193.21	287.55	0.00	0.00	2037.37	1895.74	0.095	0.09	0.10	1.951	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	193.21	0.00	1180.74	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	352.33	88.08	352.15	236.61	0.00	0.00	2037.37	1895.74	0.173	0.16	0.21	2.136	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	352.15	0.00	1094.09	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	236.72	59.18	236.61	352.15	0.00	0.00	2037.37	1895.74	0.116	0.10	0.13	1.999	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	236.61	0.00	1157.08	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	352.33	88.08	352.33	236.72	0.00	0.00	2037.37	1895.74	0.173	0.21	0.21	2.136	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	352.33	0.00	1094.00	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	236.72	59.18	236.72	352.33	0.00	0.00	2037.37	1895.74	0.116	0.13	0.13	1.999	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	236.72	0.00	1157.02	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	287.67	71.92	287.85	193.39	0.00	0.00	2037.37	1895.73	0.141	0.21	0.16	2.057	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	287.85	0.00	1129.15	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	193.28	48.32	193.39	287.85	0.00	0.00	2037.37	1895.74	0.095	0.13	0.11	1.953	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	193.39	0.00	1180.64	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	240.91	60.23	241.03	161.94	0.00	0.00	2037.37	1895.73	0.118	0.16	0.13	2.005	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	241.03	0.00	1154.67	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	161.86	40.47	161.94	241.03	0.00	0.00	2037.37	1895.74	0.079	0.11	0.09	1.921	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	161.94	0.00	1197.79	198.49	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	1.98	0.13	2.003	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.28	0.09	1.918	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.44	0.16	2.057	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.56	0.10	1.951	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.10	0.21	2.136	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.95	0.13	1.999	A	A

4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.13	0.21	2.136	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.97	0.13	1.999	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.50	0.17	2.057	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.59	0.11	1.953	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.03	0.14	2.005	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.31	0.09	1.921	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, AM	2021 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS

1	(untitled)	Roundabout	1,2,3,4				2.31	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	420.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	40.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	217.00	100.000

4 - Phase 2 Access W	ONE HOUR	✓	12.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	6.000	394.000	20.000
	2 - Phase 2 Access E	17.000	0.000	23.000	0.000
	3 - Regeneration Link S	194.000	8.000	0.000	15.000
	4 - Phase 2 Access W	7.000	0.000	5.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.01	0.94	0.05
	2 - Phase 2 Access E	0.43	0.00	0.58	0.00
	3 - Regeneration Link S	0.89	0.04	0.00	0.07
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.23	2.30	0.30	A	385.40	578.10	21.18	2.20	0.24	21.18	2.20
2 - Phase 2 Access E	0.04	3.63	0.04	A	36.70	55.06	3.18	3.47	0.04	3.19	3.47
3 - Regeneration Link S	0.12	2.03	0.13	A	199.12	298.68	9.88	1.99	0.11	9.88	1.99
4 - Phase 2 Access W	0.01	3.15	0.01	A	11.01	16.52	0.85	3.09	0.01	0.85	3.09

Main Results for each time segment

Main results: (07:15-07:30)

	Total	Junction	Entry		Circulating	Pedestrian		Saturation		Start	End		

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	Exit Flow (PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	Capacity (PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	316.20	79.05	315.46	163.74	9.76	0.00	2030.40	1906.96	0.156	0.00	0.18	2.098	A
2 - Phase 2 Access E	30.11	7.53	30.00	10.52	314.71	0.00	1114.50	200.11	0.027	0.00	0.03	3.319	A
3 - Regeneration Link S	163.37	40.84	163.02	316.94	27.77	0.00	2017.55	1911.89	0.081	0.00	0.09	1.941	A
4 - Phase 2 Access W	9.03	2.26	9.00	26.29	164.50	0.00	1196.39	269.47	0.008	0.00	0.01	3.031	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	377.57	94.39	377.40	195.89	11.68	0.00	2029.03	1906.96	0.186	0.18	0.23	2.179	A
2 - Phase 2 Access E	35.96	8.99	35.93	12.58	376.50	0.00	1080.82	200.11	0.033	0.03	0.03	3.444	A
3 - Regeneration Link S	195.08	48.77	195.00	379.19	33.24	0.00	2013.65	1911.89	0.097	0.09	0.11	1.979	A
4 - Phase 2 Access W	10.79	2.70	10.78	31.45	196.79	0.00	1178.79	269.47	0.009	0.01	0.01	3.081	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	462.43	115.61	462.16	239.90	14.31	0.00	2027.16	1906.96	0.228	0.23	0.29	2.300	A
2 - Phase 2 Access E	44.04	11.01	44.00	15.41	461.06	0.00	1034.72	200.11	0.043	0.03	0.04	3.632	A
3 - Regeneration Link S	238.92	59.73	238.81	464.35	40.71	0.00	2008.32	1911.89	0.119	0.11	0.13	2.034	A
4 - Phase 2 Access W	13.21	3.30	13.20	38.52	241.00	0.00	1154.68	269.47	0.011	0.01	0.01	3.153	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	462.43	115.61	462.43	240.02	14.31	0.00	2027.15	1906.96	0.228	0.29	0.30	2.300	A
2 - Phase 2 Access E	44.04	11.01	44.04	15.41	461.33	0.00	1034.57	200.11	0.043	0.04	0.04	3.633	A
3 - Regeneration Link S	238.92	59.73	238.92	464.63	40.74	0.00	2008.30	1911.89	0.119	0.13	0.13	2.034	A
4 - Phase 2 Access W	13.21	3.30	13.21	38.54	241.12	0.00	1154.62	269.47	0.011	0.01	0.01	3.153	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	377.57	94.39	377.83	196.10	11.69	0.00	2029.02	1906.96	0.186	0.30	0.23	2.180	A
2 - Phase 2 Access E	35.96	8.99	36.00	12.59	376.94	0.00	1080.58	200.11	0.033	0.04	0.03	3.445	A
3 - Regeneration Link S	195.08	48.77	195.19	379.64	33.29	0.00	2013.61	1911.89	0.097	0.13	0.11	1.981	A
4 - Phase 2 Access W	10.79	2.70	10.80	31.48	196.99	0.00	1178.68	269.47	0.009	0.01	0.01	3.081	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	316.20	79.05	316.38	164.21	9.79	0.00	2030.38	1906.96	0.156	0.23	0.18	2.100	A
2 - Phase 2 Access E	30.11	7.53	30.14	10.55	315.62	0.00	1114.01	200.11	0.027	0.03	0.03	3.320	A
3 -													

Regeneration Link S	163.37	40.84	163.45	317.89	27.88	0.00	2017.48	1911.89	0.081	0.11	0.09	1.943	A
4 - Phase 2 Access W	9.03	2.26	9.04	26.36	164.96	0.00	1196.14	269.47	0.008	0.01	0.01	3.034	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.72	0.18	2.098	A	A
2 - Phase 2 Access E	0.41	0.03	3.319	A	A
3 - Regeneration Link S	1.30	0.09	1.941	A	A
4 - Phase 2 Access W	0.11	0.01	3.031	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.39	0.23	2.179	A	A
2 - Phase 2 Access E	0.51	0.03	3.444	A	A
3 - Regeneration Link S	1.59	0.11	1.979	A	A
4 - Phase 2 Access W	0.14	0.01	3.081	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.37	0.29	2.300	A	A
2 - Phase 2 Access E	0.66	0.04	3.632	A	A
3 - Regeneration Link S	2.00	0.13	2.034	A	A
4 - Phase 2 Access W	0.17	0.01	3.153	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.42	0.29	2.300	A	A
2 - Phase 2 Access E	0.66	0.04	3.633	A	A
3 - Regeneration Link S	2.02	0.13	2.034	A	A
4 - Phase 2 Access W	0.17	0.01	3.153	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.48	0.23	2.180	A	A
2 - Phase 2 Access E	0.53	0.04	3.445	A	A
3 - Regeneration Link S	1.63	0.11	1.981	A	A
4 - Phase 2 Access W	0.14	0.01	3.081	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.80	0.19	2.100	A	A
2 - Phase 2 Access E	0.42	0.03	3.320	A	A
3 - Regeneration Link S	1.34	0.09	1.943	A	A
4 - Phase 2 Access W	0.12	0.01	3.034	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, PM	2021 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.30	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	

4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	390.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	15.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	282.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	43.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	15.000	355.000	20.000
	2 - Phase 2 Access E	6.000	0.000	9.000	0.000
	3 - Regeneration Link S	247.000	20.000	0.000	15.000
	4 - Phase 2 Access W	25.000	0.000	18.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.04	0.91	0.05
	2 - Phase 2 Access E	0.40	0.00	0.60	0.00
	3 - Regeneration Link S	0.88	0.07	0.00	0.05
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.21	2.28	0.27	A	357.87	536.81	19.53	2.18	0.22	19.53	2.18
2 - Phase 2 Access E	0.02	3.48	0.02	A	13.76	20.65	1.15	3.35	0.01	1.15	3.35
3 - Regeneration Link S	0.15	2.11	0.18	A	258.77	388.15	13.24	2.05	0.15	13.24	2.05
4 - Phase 2 Access W	0.04	3.35	0.04	A	39.46	59.19	3.20	3.24	0.04	3.20	3.24

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	293.61	73.40	292.93	208.80	28.53	0.00	2017.01	1866.07	0.146	0.00	0.17	2.086	A
2 - Phase 2 Access E	11.29	2.82	11.25	26.29	295.17	0.00	1125.15	250.38	0.010	0.00	0.01	3.231	A
3 - Regeneration Link S	212.30	53.08	211.84	286.90	19.52	0.00	2023.44	1897.62	0.105	0.00	0.12	1.987	A
4 - Phase 2 Access W	32.37	8.09	32.26	26.29	205.07	0.00	1174.27	251.99	0.028	0.00	0.03	3.151	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	350.60	87.65	350.44	249.81	34.14	0.00	2013.00	1866.07	0.174	0.17	0.21	2.165	A
2 - Phase 2 Access E	13.48	3.37	13.48	31.45	353.13	0.00	1093.56	250.38	0.012	0.01	0.01	3.332	A
3 - Regeneration Link S	253.51	63.38	253.41	343.25	23.36	0.00	2020.70	1897.62	0.125	0.12	0.14	2.036	A
4 - Phase 2 Access W	38.66	9.66	38.63	31.45	245.32	0.00	1152.33	251.99	0.034	0.03	0.03	3.231	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	429.40	107.35	429.15	305.92	41.81	0.00	2007.53	1866.07	0.214	0.21	0.27	2.280	A
2 - Phase 2 Access E	16.52	4.13	16.50	38.52	432.45	0.00	1050.31	250.38	0.016	0.01	0.02	3.481	A
3 - Regeneration Link S	310.49	77.62	310.33	420.34	28.61	0.00	2016.95	1897.62	0.154	0.14	0.18	2.109	A
4 - Phase 2 Access W	47.34	11.84	47.31	38.52	300.43	0.00	1122.29	251.99	0.042	0.03	0.04	3.348	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	429.40	107.35	429.40	306.08	41.84	0.00	2007.51	1866.07	0.214	0.27	0.27	2.280	A
2 - Phase 2 Access E	16.52	4.13	16.52	38.54	432.70	0.00	1050.18	250.38	0.016	0.02	0.02	3.481	A
3 - Regeneration Link S	310.49	77.62	310.49	420.59	28.63	0.00	2016.94	1897.62	0.154	0.18	0.18	2.109	A
4 - Phase 2 Access W	47.34	11.84	47.34	38.54	300.58	0.00	1122.21	251.99	0.042	0.04	0.04	3.348	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	350.60	87.65	350.84	250.08	34.19	0.00	2012.97	1866.07	0.174	0.27	0.21	2.167	A
2 - Phase 2 Access E	13.48	3.37	13.50	31.48	353.55	0.00	1093.33	250.38	0.012	0.02	0.01	3.335	A
3 - Regeneration Link S	253.51	63.38	253.66	343.65	23.39	0.00	2020.68	1897.62	0.125	0.18	0.14	2.038	A
4 - Phase 2 Access W	38.66	9.66	38.69	31.48	245.57	0.00	1152.19	251.99	0.034	0.04	0.03	3.232	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	293.61	73.40	293.78	209.40	28.63	0.00	2016.94	1866.07	0.146	0.21	0.17	2.090	A
2 - Phase 2 Access E	11.29	2.82	11.30	26.36	296.04	0.00	1124.68	250.38	0.010	0.01	0.01	3.235	A
3 - Regeneration Link S	212.30	53.08	212.41	287.75	19.59	0.00	2023.39	1897.62	0.105	0.14	0.12	1.989	A
4 - Phase 2 Access W	32.37	8.09	32.40	26.36	205.63	0.00	1173.97	251.99	0.028	0.03	0.03	3.155	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.51	0.17	2.086	A	A
2 - Phase 2 Access E	0.15	0.01	3.231	A	A
3 - Regeneration Link S	1.73	0.12	1.987	A	A
4 - Phase 2 Access W	0.42	0.03	3.151	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.12	0.21	2.165	A	A
2 - Phase 2 Access E	0.18	0.01	3.332	A	A
3 - Regeneration Link S	2.13	0.14	2.036	A	A
4 - Phase 2 Access W	0.51	0.03	3.231	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.03	0.27	2.280	A	A
2 - Phase 2 Access E	0.24	0.02	3.481	A	A
3 - Regeneration Link S	2.70	0.18	2.109	A	A

4 - Phase 2 Access W	0.65	0.04	3.348	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.07	0.27	2.280	A	A
2 - Phase 2 Access E	0.24	0.02	3.481	A	A
3 - Regeneration Link S	2.72	0.18	2.109	A	A
4 - Phase 2 Access W	0.66	0.04	3.348	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.21	0.21	2.167	A	A
2 - Phase 2 Access E	0.19	0.01	3.335	A	A
3 - Regeneration Link S	2.18	0.15	2.038	A	A
4 - Phase 2 Access W	0.53	0.04	3.232	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.59	0.17	2.090	A	A
2 - Phase 2 Access E	0.15	0.01	3.235	A	A
3 - Regeneration Link S	1.78	0.12	1.989	A	A
4 - Phase 2 Access W	0.43	0.03	3.155	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, AM	2024 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.07	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	312.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	84.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	312.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	84.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.17	2.12	0.20	A	286.30	429.44	14.73	2.06	0.16	14.74	2.06
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.05	1.85	0.05	A	77.08	115.62	3.53	1.83	0.04	3.53	1.83
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Regeneration Link N	234.89	58.72	234.37	63.11	0.00	0.00	2037.37	1895.73	0.115	0.00	0.13	1.996	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	234.37	0.00	1158.30	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	63.24	15.81	63.11	234.37	0.00	0.00	2037.37	1895.74	0.031	0.00	0.03	1.822	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	63.11	0.00	1251.66	198.49	0.000	0.00	0.00	0.000	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	280.48	70.12	280.36	75.49	0.00	0.00	2037.37	1895.73	0.138	0.13	0.16	2.048	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	280.36	0.00	1133.23	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	75.51	18.88	75.49	280.36	0.00	0.00	2037.37	1895.74	0.037	0.03	0.04	1.834	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	75.49	0.00	1244.92	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	343.52	85.88	343.35	92.45	0.00	0.00	2037.37	1895.73	0.169	0.16	0.20	2.125	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	343.35	0.00	1098.89	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	92.49	23.12	92.45	343.35	0.00	0.00	2037.37	1895.74	0.045	0.04	0.05	1.850	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	92.45	0.00	1235.67	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	343.52	85.88	343.52	92.49	0.00	0.00	2037.37	1895.73	0.169	0.20	0.20	2.125	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	343.52	0.00	1098.80	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	92.49	23.12	92.49	343.52	0.00	0.00	2037.37	1895.74	0.045	0.05	0.05	1.850	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	92.49	0.00	1235.65	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	280.48	70.12	280.65	75.55	0.00	0.00	2037.37	1895.73	0.138	0.20	0.16	2.049	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	280.65	0.00	1133.07	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	75.51	18.88	75.55	280.65	0.00	0.00	2037.37	1895.74	0.037	0.05	0.04	1.837	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	75.55	0.00	1244.88	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	234.89	58.72	235.01	63.27	0.00	0.00	2037.37	1895.73	0.115	0.16	0.13	1.998	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	235.01	0.00	1157.95	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	63.24	15.81	63.27	235.01	0.00	0.00	2037.37	1895.74	0.031	0.04	0.03	1.822	A

4 - Phase 2 Access W	0.00	0.00	0.00	0.00	63.27	0.00	1251.58	198.49	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	1.93	0.13	1.996	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.47	0.03	1.822	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.37	0.16	2.048	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.57	0.04	1.834	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.00	0.20	2.125	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.71	0.05	1.850	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.04	0.20	2.125	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.71	0.05	1.850	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.42	0.16	2.049	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.58	0.04	1.837	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	1.98	0.13	1.998	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.49	0.03	1.822	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, PM	2024 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.06	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access	3.10	5.00	15.00	22.50	40.00	45.00	

W							

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	310.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	112.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	310.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	112.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.17	2.12	0.20	A	284.46	426.69	14.62	2.06	0.16	14.62	2.06
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.06	1.88	0.06	A	102.77	154.16	4.77	1.86	0.05	4.77	1.86
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	233.38	58.35	232.87	84.15	0.00	0.00	2037.37	1895.73	0.115	0.00	0.13	1.995	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	232.87	0.00	1159.12	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	84.32	21.08	84.15	232.87	0.00	0.00	2037.37	1895.74	0.041	0.00	0.04	1.842	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	84.15	0.00	1240.20	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	278.68	69.67	278.57	100.65	0.00	0.00	2037.37	1895.73	0.137	0.13	0.16	2.046	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	278.57	0.00	1134.21	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	100.69	25.17	100.65	278.57	0.00	0.00	2037.37	1895.74	0.049	0.04	0.05	1.857	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	100.65	0.00	1231.20	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	341.32	85.33	341.15	123.26	0.00	0.00	2037.37	1895.73	0.168	0.16	0.20	2.122	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	341.15	0.00	1100.09	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	123.31	30.83	123.26	341.15	0.00	0.00	2037.37	1895.74	0.061	0.05	0.06	1.879	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	123.26	0.00	1218.87	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	341.32	85.33	341.32	123.31	0.00	0.00	2037.37	1895.73	0.168	0.20	0.20	2.122	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	341.32	0.00	1100.00	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	123.31	30.83	123.31	341.32	0.00	0.00	2037.37	1895.74	0.061	0.06	0.06	1.879	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	123.31	0.00	1218.84	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	278.68	69.67	278.85	100.73	0.00	0.00	2037.37	1895.73	0.137	0.20	0.16	2.047	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	278.85	0.00	1134.05	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	100.69	25.17	100.73	278.85	0.00	0.00	2037.37	1895.74	0.049	0.06	0.05	1.857	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	100.73	0.00	1231.15	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	233.38	58.35	233.50	84.35	0.00	0.00	2037.37	1895.73	0.115	0.16	0.13	1.997	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	233.50	0.00	1158.77	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	84.32	21.08	84.35	233.50	0.00	0.00	2037.37	1895.74	0.041	0.05	0.04	1.845	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	84.35	0.00	1240.08	198.49	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	1.91	0.13	1.995	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.64	0.04	1.842	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.35	0.16	2.046	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.77	0.05	1.857	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.98	0.20	2.122	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.96	0.06	1.879	A	A

4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.01	0.20	2.122	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.96	0.06	1.879	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.41	0.16	2.047	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.79	0.05	1.857	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	1.96	0.13	1.997	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.65	0.04	1.845	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, AM	2024 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS

1	(untitled)	Roundabout	1,2,3,4				2.26	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	367.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	40.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	140.00	100.000

4 - Phase 2 Access W	ONE HOUR	✓	12.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	6.000	341.000	20.000
	2 - Phase 2 Access E	17.000	0.000	23.000	0.000
	3 - Regeneration Link S	117.000	8.000	0.000	15.000
	4 - Phase 2 Access W	7.000	0.000	5.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.02	0.93	0.05
	2 - Phase 2 Access E	0.43	0.00	0.58	0.00
	3 - Regeneration Link S	0.84	0.06	0.00	0.11
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.20	2.22	0.25	A	336.77	505.15	17.96	2.13	0.20	17.96	2.13
2 - Phase 2 Access E	0.04	3.52	0.04	A	36.70	55.06	3.10	3.38	0.03	3.10	3.38
3 - Regeneration Link S	0.08	1.94	0.08	A	128.47	192.70	6.13	1.91	0.07	6.13	1.91
4 - Phase 2 Access W	0.01	3.03	0.01	A	11.01	16.52	0.82	2.99	0.01	0.82	2.99

Main Results for each time segment

Main results: (07:15-07:30)

	Total	Junction	Entry		Circulating	Pedestrian		Saturation		Start	End		

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	Exit Flow (PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	Capacity (PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	276.30	69.07	275.67	105.90	9.76	0.00	2030.40	1867.22	0.136	0.00	0.16	2.052	A
2 - Phase 2 Access E	30.11	7.53	30.01	10.52	274.91	0.00	1136.20	213.97	0.027	0.00	0.03	3.253	A
3 - Regeneration Link S	105.40	26.35	105.18	277.14	27.78	0.00	2017.55	1899.87	0.052	0.00	0.06	1.881	A
4 - Phase 2 Access W	9.03	2.26	9.00	26.29	106.66	0.00	1227.92	311.73	0.007	0.00	0.01	2.952	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	329.93	82.48	329.78	126.70	11.68	0.00	2029.03	1867.22	0.163	0.16	0.19	2.118	A
2 - Phase 2 Access E	35.96	8.99	35.93	12.58	328.88	0.00	1106.78	213.97	0.032	0.03	0.03	3.361	A
3 - Regeneration Link S	125.86	31.46	125.81	331.57	33.24	0.00	2013.65	1899.87	0.063	0.06	0.07	1.906	A
4 - Phase 2 Access W	10.79	2.70	10.78	31.45	127.60	0.00	1216.51	311.73	0.009	0.01	0.01	2.985	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	404.07	101.02	403.86	155.17	14.31	0.00	2027.16	1867.22	0.199	0.19	0.25	2.217	A
2 - Phase 2 Access E	44.04	11.01	44.00	15.41	402.76	0.00	1066.50	213.97	0.041	0.03	0.04	3.520	A
3 - Regeneration Link S	154.14	38.54	154.08	406.05	40.71	0.00	2008.32	1899.87	0.077	0.07	0.08	1.941	A
4 - Phase 2 Access W	13.21	3.30	13.20	38.52	156.27	0.00	1200.88	311.73	0.011	0.01	0.01	3.030	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	404.07	101.02	404.07	155.24	14.31	0.00	2027.15	1867.22	0.199	0.25	0.25	2.217	A
2 - Phase 2 Access E	44.04	11.01	44.04	15.41	402.97	0.00	1066.39	213.97	0.041	0.04	0.04	3.520	A
3 - Regeneration Link S	154.14	38.54	154.14	406.27	40.74	0.00	2008.30	1899.87	0.077	0.08	0.08	1.941	A
4 - Phase 2 Access W	13.21	3.30	13.21	38.54	156.34	0.00	1200.84	311.73	0.011	0.01	0.01	3.030	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	329.93	82.48	330.14	126.83	11.69	0.00	2029.02	1867.22	0.163	0.25	0.19	2.118	A
2 - Phase 2 Access E	35.96	8.99	36.00	12.59	329.24	0.00	1106.58	213.97	0.033	0.04	0.03	3.364	A
3 - Regeneration Link S	125.86	31.46	125.92	331.95	33.29	0.00	2013.61	1899.87	0.063	0.08	0.07	1.909	A
4 - Phase 2 Access W	10.79	2.70	10.80	31.48	127.73	0.00	1216.44	311.73	0.009	0.01	0.01	2.987	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	276.30	69.07	276.44	106.21	9.79	0.00	2030.38	1867.22	0.136	0.19	0.16	2.052	A
2 - Phase 2 Access E	30.11	7.53	30.14	10.54	275.69	0.00	1135.77	213.97	0.027	0.03	0.03	3.257	A
3 -													

Regeneration Link S	105.40	26.35	105.45	277.96	27.87	0.00	2017.48	1899.87	0.052	0.07	0.06	1.881	A
4 - Phase 2 Access W	9.03	2.26	9.04	26.36	106.96	0.00	1227.76	311.73	0.007	0.01	0.01	2.955	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.33	0.16	2.052	A	A
2 - Phase 2 Access E	0.40	0.03	3.253	A	A
3 - Regeneration Link S	0.82	0.05	1.881	A	A
4 - Phase 2 Access W	0.11	0.01	2.952	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.88	0.19	2.118	A	A
2 - Phase 2 Access E	0.50	0.03	3.361	A	A
3 - Regeneration Link S	0.99	0.07	1.906	A	A
4 - Phase 2 Access W	0.13	0.01	2.985	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.69	0.25	2.217	A	A
2 - Phase 2 Access E	0.64	0.04	3.520	A	A
3 - Regeneration Link S	1.23	0.08	1.941	A	A
4 - Phase 2 Access W	0.16	0.01	3.030	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.73	0.25	2.217	A	A
2 - Phase 2 Access E	0.64	0.04	3.520	A	A
3 - Regeneration Link S	1.25	0.08	1.941	A	A
4 - Phase 2 Access W	0.17	0.01	3.030	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.95	0.20	2.118	A	A
2 - Phase 2 Access E	0.51	0.03	3.364	A	A
3 - Regeneration Link S	1.01	0.07	1.909	A	A
4 - Phase 2 Access W	0.14	0.01	2.987	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.39	0.16	2.052	A	A
2 - Phase 2 Access E	0.41	0.03	3.257	A	A
3 - Regeneration Link S	0.84	0.06	1.881	A	A
4 - Phase 2 Access W	0.11	0.01	2.955	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, PM	2024 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.27	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	

4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	380.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	15.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	179.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	43.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	15.000	345.000	20.000
	2 - Phase 2 Access E	6.000	0.000	9.000	0.000
	3 - Regeneration Link S	144.000	20.000	0.000	15.000
	4 - Phase 2 Access W	25.000	0.000	18.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.04	0.91	0.05
	2 - Phase 2 Access E	0.40	0.00	0.60	0.00
	3 - Regeneration Link S	0.80	0.11	0.00	0.08
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.21	2.26	0.26	A	348.69	523.04	18.92	2.17	0.21	18.92	2.17
2 - Phase 2 Access E	0.02	3.46	0.02	A	13.76	20.65	1.15	3.34	0.01	1.15	3.34
3 - Regeneration Link S	0.10	1.98	0.11	A	164.25	246.38	7.96	1.94	0.09	7.96	1.94
4 - Phase 2 Access W	0.04	3.17	0.04	A	39.46	59.19	3.05	3.10	0.03	3.05	3.10

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	286.08	71.52	285.42	131.44	28.53	0.00	2017.01	1802.65	0.142	0.00	0.16	2.079	A
2 - Phase 2 Access E	11.29	2.82	11.25	26.29	287.66	0.00	1129.25	277.94	0.010	0.00	0.01	3.219	A
3 - Regeneration Link S	134.76	33.69	134.48	279.39	19.52	0.00	2023.44	1890.34	0.067	0.00	0.07	1.905	A
4 - Phase 2 Access W	32.37	8.09	32.26	26.29	127.71	0.00	1216.45	281.28	0.027	0.00	0.03	3.039	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	341.61	85.40	341.46	157.26	34.14	0.00	2013.00	1802.65	0.170	0.16	0.20	2.153	A
2 - Phase 2 Access E	13.48	3.37	13.48	31.45	344.15	0.00	1098.45	277.94	0.012	0.01	0.01	3.317	A
3 - Regeneration Link S	160.92	40.23	160.86	334.26	23.36	0.00	2020.70	1890.34	0.080	0.07	0.09	1.935	A
4 - Phase 2 Access W	38.66	9.66	38.63	31.45	152.77	0.00	1202.79	281.28	0.032	0.03	0.03	3.091	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	418.39	104.60	418.15	192.58	41.82	0.00	2007.53	1802.65	0.208	0.20	0.26	2.264	A
2 - Phase 2 Access E	16.52	4.13	16.50	38.52	421.45	0.00	1056.31	277.94	0.016	0.01	0.02	3.461	A
3 - Regeneration Link S	197.08	49.27	197.00	409.34	28.61	0.00	2016.95	1890.34	0.098	0.09	0.11	1.977	A
4 - Phase 2 Access W	47.34	11.84	47.31	38.52	187.09	0.00	1184.08	281.28	0.040	0.03	0.04	3.166	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	418.39	104.60	418.39	192.68	41.84	0.00	2007.51	1802.65	0.208	0.26	0.26	2.265	A
2 - Phase 2 Access E	16.52	4.13	16.52	38.54	421.69	0.00	1056.18	277.94	0.016	0.02	0.02	3.461	A
3 - Regeneration Link S	197.08	49.27	197.08	409.58	28.63	0.00	2016.94	1890.34	0.098	0.11	0.11	1.977	A
4 - Phase 2 Access W	47.34	11.84	47.34	38.54	187.17	0.00	1184.03	281.28	0.040	0.04	0.04	3.166	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	341.61	85.40	341.84	157.42	34.18	0.00	2012.97	1802.65	0.170	0.26	0.20	2.154	A
2 - Phase 2 Access E	13.48	3.37	13.50	31.48	344.55	0.00	1098.24	277.94	0.012	0.02	0.01	3.320	A
3 - Regeneration Link S	160.92	40.23	161.00	334.65	23.39	0.00	2020.68	1890.34	0.080	0.11	0.09	1.935	A
4 - Phase 2 Access W	38.66	9.66	38.69	31.48	152.91	0.00	1202.71	281.28	0.032	0.04	0.03	3.092	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	286.08	71.52	286.24	131.82	28.63	0.00	2016.94	1802.65	0.142	0.20	0.17	2.079	A
2 - Phase 2 Access E	11.29	2.82	11.30	26.36	288.50	0.00	1128.79	277.94	0.010	0.01	0.01	3.220	A
3 - Regeneration Link S	134.76	33.69	134.82	280.22	19.59	0.00	2023.39	1890.34	0.067	0.09	0.07	1.908	A
4 - Phase 2 Access W	32.37	8.09	32.40	26.36	128.04	0.00	1216.27	281.28	0.027	0.03	0.03	3.042	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.44	0.16	2.079	A	A
2 - Phase 2 Access E	0.15	0.01	3.219	A	A
3 - Regeneration Link S	1.06	0.07	1.905	A	A
4 - Phase 2 Access W	0.40	0.03	3.039	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.03	0.20	2.153	A	A
2 - Phase 2 Access E	0.18	0.01	3.317	A	A
3 - Regeneration Link S	1.28	0.09	1.935	A	A
4 - Phase 2 Access W	0.49	0.03	3.091	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.90	0.26	2.264	A	A
2 - Phase 2 Access E	0.23	0.02	3.461	A	A
3 - Regeneration Link S	1.61	0.11	1.977	A	A

4 - Phase 2 Access W	0.62	0.04	3.166	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.94	0.26	2.265	A	A
2 - Phase 2 Access E	0.24	0.02	3.461	A	A
3 - Regeneration Link S	1.62	0.11	1.977	A	A
4 - Phase 2 Access W	0.62	0.04	3.166	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.11	0.21	2.154	A	A
2 - Phase 2 Access E	0.19	0.01	3.320	A	A
3 - Regeneration Link S	1.31	0.09	1.935	A	A
4 - Phase 2 Access W	0.51	0.03	3.092	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.51	0.17	2.079	A	A
2 - Phase 2 Access E	0.15	0.01	3.220	A	A
3 - Regeneration Link S	1.08	0.07	1.908	A	A
4 - Phase 2 Access W	0.42	0.03	3.042	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, AM	2024 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.14	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	381.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	168.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	381.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	168.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.21	2.22	0.26	A	349.61	524.42	18.69	2.14	0.21	18.69	2.14
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.09	1.94	0.10	A	154.16	231.24	7.36	1.91	0.08	7.36	1.91
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Regeneration Link N	286.84	71.71	286.18	126.22	0.00	0.00	2037.37	1895.73	0.141	0.00	0.16	2.056	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	286.18	0.00	1130.05	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	126.48	31.62	126.22	286.18	0.00	0.00	2037.37	1895.74	0.062	0.00	0.07	1.882	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	126.22	0.00	1217.26	198.49	0.000	0.00	0.00	0.000	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	342.51	85.63	342.36	150.97	0.00	0.00	2037.37	1895.73	0.168	0.16	0.20	2.123	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	342.36	0.00	1099.43	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	151.03	37.76	150.97	342.36	0.00	0.00	2037.37	1895.74	0.074	0.07	0.08	1.907	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	150.97	0.00	1203.77	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	419.49	104.87	419.26	184.89	0.00	0.00	2037.37	1895.74	0.206	0.20	0.26	2.224	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	419.26	0.00	1057.51	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	184.97	46.24	184.89	419.26	0.00	0.00	2037.37	1895.74	0.091	0.08	0.10	1.943	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	184.89	0.00	1185.27	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	419.49	104.87	419.49	184.97	0.00	0.00	2037.37	1895.74	0.206	0.26	0.26	2.224	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	419.49	0.00	1057.38	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	184.97	46.24	184.97	419.49	0.00	0.00	2037.37	1895.74	0.091	0.10	0.10	1.943	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	184.97	0.00	1185.23	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	342.51	85.63	342.74	151.11	0.00	0.00	2037.37	1895.73	0.168	0.26	0.20	2.125	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	342.74	0.00	1099.22	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	151.03	37.76	151.11	342.74	0.00	0.00	2037.37	1895.74	0.074	0.10	0.08	1.910	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	151.11	0.00	1203.69	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	286.84	71.71	286.99	126.53	0.00	0.00	2037.37	1895.73	0.141	0.20	0.16	2.058	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	286.99	0.00	1129.61	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	126.48	31.62	126.53	286.99	0.00	0.00	2037.37	1895.74	0.062	0.08	0.07	1.886	A

4 - Phase 2 Access W	0.00	0.00	0.00	0.00	126.53	0.00	1217.09	198.49	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.42	0.16	2.056	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.98	0.07	1.882	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.00	0.20	2.123	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.19	0.08	1.907	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.84	0.26	2.224	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.48	0.10	1.943	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.88	0.26	2.224	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.50	0.10	1.943	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.07	0.20	2.125	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.21	0.08	1.910	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.49	0.17	2.058	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.00	0.07	1.886	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, PM	2024 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.10	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access	3.10	5.00	15.00	22.50	40.00	45.00	

W							

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	335.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	225.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	335.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	225.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.18	2.16	0.22	A	307.40	461.10	16.02	2.08	0.18	16.02	2.08
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.12	2.01	0.14	A	206.46	309.70	10.15	1.97	0.11	10.15	1.97
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	252.21	63.05	251.64	169.03	0.00	0.00	2037.37	1895.73	0.124	0.00	0.14	2.016	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	251.64	0.00	1148.88	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	169.39	42.35	169.03	251.64	0.00	0.00	2037.37	1895.74	0.083	0.00	0.09	1.926	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	169.03	0.00	1193.92	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	301.16	75.29	301.03	202.19	0.00	0.00	2037.37	1895.73	0.148	0.14	0.17	2.073	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	301.03	0.00	1121.96	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	202.27	50.57	202.19	301.03	0.00	0.00	2037.37	1895.74	0.099	0.09	0.11	1.961	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	202.19	0.00	1175.84	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	368.84	92.21	368.65	247.62	0.00	0.00	2037.37	1895.74	0.181	0.17	0.22	2.157	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	368.65	0.00	1085.10	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	247.73	61.93	247.62	368.65	0.00	0.00	2037.37	1895.74	0.122	0.11	0.14	2.011	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	247.62	0.00	1151.08	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	368.84	92.21	368.84	247.73	0.00	0.00	2037.37	1895.74	0.181	0.22	0.22	2.157	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	368.84	0.00	1084.99	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	247.73	61.93	247.73	368.84	0.00	0.00	2037.37	1895.74	0.122	0.14	0.14	2.011	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	247.73	0.00	1151.02	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	301.16	75.29	301.35	202.38	0.00	0.00	2037.37	1895.73	0.148	0.22	0.17	2.075	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	301.35	0.00	1121.79	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	202.27	50.57	202.38	301.35	0.00	0.00	2037.37	1895.74	0.099	0.14	0.11	1.963	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	202.38	0.00	1175.74	198.49	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	252.21	63.05	252.33	169.47	0.00	0.00	2037.37	1895.73	0.124	0.17	0.14	2.018	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	252.33	0.00	1148.51	198.49	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	169.39	42.35	169.47	252.33	0.00	0.00	2037.37	1895.74	0.083	0.11	0.09	1.928	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	169.47	0.00	1193.68	198.49	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.09	0.14	2.016	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.34	0.09	1.926	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.57	0.17	2.073	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.64	0.11	1.961	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.27	0.22	2.157	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	2.05	0.14	2.011	A	A

4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.31	0.22	2.157	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	2.07	0.14	2.011	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.63	0.18	2.075	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.67	0.11	1.963	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.14	0.14	2.018	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.37	0.09	1.928	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, AM	2024 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS

1	(untitled)	Roundabout	1,2,3,4				2.33	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	436.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	40.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	224.00	100.000

4 - Phase 2 Access W	ONE HOUR	✓	12.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	6.000	410.000	20.000
	2 - Phase 2 Access E	17.000	0.000	23.000	0.000
	3 - Regeneration Link S	201.000	8.000	0.000	15.000
	4 - Phase 2 Access W	7.000	0.000	5.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.01	0.94	0.05
	2 - Phase 2 Access E	0.43	0.00	0.58	0.00
	3 - Regeneration Link S	0.90	0.04	0.00	0.07
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.24	2.33	0.31	A	400.08	600.12	22.19	2.22	0.25	22.19	2.22
2 - Phase 2 Access E	0.04	3.67	0.04	A	36.70	55.06	3.21	3.50	0.04	3.21	3.50
3 - Regeneration Link S	0.12	2.04	0.14	A	205.55	308.32	10.24	1.99	0.11	10.24	1.99
4 - Phase 2 Access W	0.01	3.16	0.01	A	11.01	16.52	0.85	3.10	0.01	0.85	3.10

Main Results for each time segment

Main results: (07:15-07:30)

	Total	Junction	Entry		Circulating	Pedestrian		Saturation		Start	End		

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	Exit Flow (PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	Capacity (PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	328.24	82.06	327.47	169.00	9.76	0.00	2030.40	1909.45	0.162	0.00	0.19	2.112	A
2 - Phase 2 Access E	30.11	7.53	30.00	10.52	326.72	0.00	1107.96	198.98	0.027	0.00	0.03	3.339	A
3 - Regeneration Link S	168.64	42.16	168.27	328.95	27.77	0.00	2017.55	1914.53	0.084	0.00	0.09	1.946	A
4 - Phase 2 Access W	9.03	2.26	9.00	26.29	169.76	0.00	1193.52	266.14	0.008	0.00	0.01	3.038	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	391.96	97.99	391.77	202.18	11.68	0.00	2029.03	1909.45	0.193	0.19	0.24	2.198	A
2 - Phase 2 Access E	35.96	8.99	35.93	12.58	390.87	0.00	1072.98	198.98	0.034	0.03	0.03	3.470	A
3 - Regeneration Link S	201.37	50.34	201.29	393.56	33.24	0.00	2013.65	1914.53	0.100	0.09	0.11	1.986	A
4 - Phase 2 Access W	10.79	2.70	10.78	31.45	203.08	0.00	1175.36	266.14	0.009	0.01	0.01	3.090	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	480.04	120.01	479.76	247.60	14.31	0.00	2027.16	1909.45	0.237	0.24	0.31	2.326	A
2 - Phase 2 Access E	44.04	11.01	44.00	15.41	478.66	0.00	1025.12	198.98	0.043	0.03	0.04	3.668	A
3 - Regeneration Link S	246.63	61.66	246.51	481.95	40.71	0.00	2008.32	1914.53	0.123	0.11	0.14	2.043	A
4 - Phase 2 Access W	13.21	3.30	13.20	38.52	248.71	0.00	1150.49	266.14	0.011	0.01	0.01	3.164	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	480.04	120.01	480.04	247.73	14.31	0.00	2027.15	1909.45	0.237	0.31	0.31	2.326	A
2 - Phase 2 Access E	44.04	11.01	44.04	15.41	478.94	0.00	1024.97	198.98	0.043	0.04	0.04	3.669	A
3 - Regeneration Link S	246.63	61.66	246.63	482.24	40.74	0.00	2008.30	1914.53	0.123	0.14	0.14	2.043	A
4 - Phase 2 Access W	13.21	3.30	13.21	38.54	248.83	0.00	1150.42	266.14	0.011	0.01	0.01	3.164	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	391.96	97.99	392.23	202.39	11.69	0.00	2029.02	1909.45	0.193	0.31	0.24	2.201	A
2 - Phase 2 Access E	35.96	8.99	36.00	12.59	391.33	0.00	1072.73	198.98	0.034	0.04	0.03	3.474	A
3 - Regeneration Link S	201.37	50.34	201.49	394.04	33.29	0.00	2013.61	1914.53	0.100	0.14	0.11	1.986	A
4 - Phase 2 Access W	10.79	2.70	10.80	31.48	203.29	0.00	1175.24	266.14	0.009	0.01	0.01	3.090	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	328.24	82.06	328.43	169.48	9.79	0.00	2030.38	1909.45	0.162	0.24	0.19	2.115	A
2 - Phase 2 Access E	30.11	7.53	30.14	10.55	327.68	0.00	1107.43	198.98	0.027	0.03	0.03	3.340	A
3 -													

Regeneration Link S	168.64	42.16	168.72	329.94	27.88	0.00	2017.48	1914.53	0.084	0.11	0.09	1.947	A
4 - Phase 2 Access W	9.03	2.26	9.04	26.36	170.23	0.00	1193.27	266.14	0.008	0.01	0.01	3.041	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.85	0.19	2.112	A	A
2 - Phase 2 Access E	0.41	0.03	3.339	A	A
3 - Regeneration Link S	1.35	0.09	1.946	A	A
4 - Phase 2 Access W	0.11	0.01	3.038	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.55	0.24	2.198	A	A
2 - Phase 2 Access E	0.51	0.03	3.470	A	A
3 - Regeneration Link S	1.65	0.11	1.986	A	A
4 - Phase 2 Access W	0.14	0.01	3.090	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.59	0.31	2.326	A	A
2 - Phase 2 Access E	0.66	0.04	3.668	A	A
3 - Regeneration Link S	2.08	0.14	2.043	A	A
4 - Phase 2 Access W	0.17	0.01	3.164	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.64	0.31	2.326	A	A
2 - Phase 2 Access E	0.67	0.04	3.669	A	A
3 - Regeneration Link S	2.10	0.14	2.043	A	A
4 - Phase 2 Access W	0.17	0.01	3.164	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.64	0.24	2.201	A	A
2 - Phase 2 Access E	0.53	0.04	3.474	A	A
3 - Regeneration Link S	1.69	0.11	1.986	A	A
4 - Phase 2 Access W	0.14	0.01	3.090	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.93	0.20	2.115	A	A
2 - Phase 2 Access E	0.43	0.03	3.340	A	A
3 - Regeneration Link S	1.38	0.09	1.947	A	A
4 - Phase 2 Access W	0.12	0.01	3.041	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, PM	2024 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.32	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	27.50	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	45.00	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	27.50	

4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.714	2037.366
2 - Phase 2 Access E		(calculated)	(calculated)	0.545	1286.070
3 - Regeneration Link S		(calculated)	(calculated)	0.714	2037.366
4 - Phase 2 Access W		(calculated)	(calculated)	0.545	1286.070

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	405.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	15.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	291.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	43.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	15.000	370.000	20.000
	2 - Phase 2 Access E	6.000	0.000	9.000	0.000
	3 - Regeneration Link S	256.000	20.000	0.000	15.000
	4 - Phase 2 Access W	25.000	0.000	18.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.04	0.91	0.05
	2 - Phase 2 Access E	0.40	0.00	0.60	0.00
	3 - Regeneration Link S	0.88	0.07	0.00	0.05
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.22	2.30	0.29	A	371.64	557.45	20.46	2.20	0.23	20.46	2.20
2 - Phase 2 Access E	0.02	3.51	0.02	A	13.76	20.65	1.16	3.38	0.01	1.16	3.38
3 - Regeneration Link S	0.16	2.12	0.19	A	267.03	400.54	13.73	2.06	0.15	13.73	2.06
4 - Phase 2 Access W	0.04	3.36	0.04	A	39.46	59.19	3.21	3.26	0.04	3.21	3.26

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	304.91	76.23	304.19	215.56	28.53	0.00	2017.01	1869.71	0.151	0.00	0.18	2.100	A
2 - Phase 2 Access E	11.29	2.82	11.25	26.29	306.43	0.00	1119.02	247.65	0.010	0.00	0.01	3.249	A
3 - Regeneration Link S	219.08	54.77	218.60	298.16	19.52	0.00	2023.44	1900.80	0.108	0.00	0.12	1.994	A
4 - Phase 2 Access W	32.37	8.09	32.26	26.29	211.83	0.00	1170.59	249.24	0.028	0.00	0.03	3.162	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	364.09	91.02	363.92	257.89	34.14	0.00	2013.00	1869.71	0.181	0.18	0.22	2.182	A
2 - Phase 2 Access E	13.48	3.37	13.48	31.45	366.61	0.00	1086.21	247.65	0.012	0.01	0.01	3.355	A
3 - Regeneration Link S	261.60	65.40	261.49	356.72	23.36	0.00	2020.70	1900.80	0.129	0.12	0.15	2.046	A
4 - Phase 2 Access W	38.66	9.66	38.63	31.45	253.41	0.00	1147.92	249.24	0.034	0.03	0.03	3.244	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	445.91	111.48	445.66	315.82	41.81	0.00	2007.53	1869.71	0.222	0.22	0.28	2.304	A
2 - Phase 2 Access E	16.52	4.13	16.50	38.52	448.95	0.00	1041.32	247.65	0.016	0.01	0.02	3.512	A
3 - Regeneration Link S	320.40	80.10	320.24	436.85	28.61	0.00	2016.95	1900.80	0.159	0.15	0.19	2.121	A
4 - Phase 2 Access W	47.34	11.84	47.31	38.51	310.33	0.00	1116.89	249.24	0.042	0.03	0.04	3.365	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	445.91	111.48	445.91	315.99	41.84	0.00	2007.51	1869.71	0.222	0.28	0.29	2.304	A
2 - Phase 2 Access E	16.52	4.13	16.52	38.54	449.21	0.00	1041.18	247.65	0.016	0.02	0.02	3.512	A
3 - Regeneration Link S	320.40	80.10	320.40	437.10	28.63	0.00	2016.94	1900.80	0.159	0.19	0.19	2.121	A
4 - Phase 2 Access W	47.34	11.84	47.34	38.54	310.49	0.00	1116.81	249.24	0.042	0.04	0.04	3.365	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	364.09	91.02	364.34	258.17	34.19	0.00	2012.97	1869.71	0.181	0.29	0.22	2.185	A
2 - Phase 2 Access E	13.48	3.37	13.50	31.48	367.04	0.00	1085.97	247.65	0.012	0.02	0.01	3.358	A
3 - Regeneration Link S	261.60	65.40	261.76	357.15	23.39	0.00	2020.68	1900.80	0.129	0.19	0.15	2.046	A
4 - Phase 2 Access W	38.66	9.66	38.69	31.48	253.67	0.00	1147.78	249.24	0.034	0.04	0.03	3.247	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	304.91	76.23	305.08	216.18	28.63	0.00	2016.94	1869.71	0.151	0.22	0.18	2.104	A
2 - Phase 2 Access E	11.29	2.82	11.30	26.36	307.34	0.00	1118.52	247.65	0.010	0.01	0.01	3.250	A
3 - Regeneration Link S	219.08	54.77	219.19	299.06	19.59	0.00	2023.39	1900.80	0.108	0.15	0.12	1.996	A
4 - Phase 2 Access W	32.37	8.09	32.40	26.36	212.41	0.00	1170.27	249.24	0.028	0.03	0.03	3.165	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.63	0.18	2.100	A	A
2 - Phase 2 Access E	0.15	0.01	3.249	A	A
3 - Regeneration Link S	1.79	0.12	1.994	A	A
4 - Phase 2 Access W	0.42	0.03	3.162	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.27	0.22	2.182	A	A
2 - Phase 2 Access E	0.19	0.01	3.355	A	A
3 - Regeneration Link S	2.21	0.15	2.046	A	A
4 - Phase 2 Access W	0.52	0.03	3.244	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.22	0.28	2.304	A	A
2 - Phase 2 Access E	0.24	0.02	3.512	A	A
3 - Regeneration Link S	2.80	0.19	2.121	A	A

4 - Phase 2 Access W	0.65	0.04	3.365	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.27	0.28	2.304	A	A
2 - Phase 2 Access E	0.24	0.02	3.512	A	A
3 - Regeneration Link S	2.83	0.19	2.121	A	A
4 - Phase 2 Access W	0.66	0.04	3.365	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.36	0.22	2.185	A	A
2 - Phase 2 Access E	0.19	0.01	3.358	A	A
3 - Regeneration Link S	2.26	0.15	2.046	A	A
4 - Phase 2 Access W	0.53	0.04	3.247	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.70	0.18	2.104	A	A
2 - Phase 2 Access E	0.16	0.01	3.250	A	A
3 - Regeneration Link S	1.84	0.12	1.996	A	A
4 - Phase 2 Access W	0.43	0.03	3.165	A	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]
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Filename: RegenerationLink-Phase2Accesses South Roundabout_v01.arc8
Path: \\lefs02\Projects\067895.100 TPLE Woodville\Q3-Design\3A-Calculations\TP\Junction Modelling\Junction Models for 24.07.2019 Submission
Report generation date: 24/07/2019 11:27:35

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2021 Base Reg Link 25%							
1 - Regeneration Link N	0.21	2.27	0.17	A	0.20	2.26	0.17	A
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	A
3 - Regeneration Link S	0.05	1.97	0.05	A	0.07	2.00	0.06	A
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	A
	A1 - 2021 Base Reg Link 25% with Dev							
1 - Regeneration Link N	0.26	2.38	0.21	A	0.26	2.41	0.21	A
2 - Phase 2 Access E	0.04	3.28	0.04	A	0.01	3.21	0.01	A
3 - Regeneration Link S	0.09	2.07	0.08	A	0.11	2.12	0.10	A
4 - Phase 2 Access W	0.01	2.84	0.01	A	0.04	2.97	0.04	A
	A1 - 2021 Base Reg Link 50%							
1 - Regeneration Link N	0.26	2.38	0.21	A	0.23	2.30	0.18	A
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	A
3 - Regeneration Link S	0.10	2.07	0.09	A	0.14	2.14	0.12	A
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	A
	A1 - 2021 Base Reg Link 50% with Dev							
1 - Regeneration Link N	0.32	2.50	0.24	A	0.29	2.45	0.22	A
2 - Phase 2 Access E	0.04	3.41	0.04	A	0.01	3.25	0.01	A
3 - Regeneration Link S	0.14	2.18	0.13	A	0.20	2.27	0.17	A
4 - Phase 2 Access W	0.01	2.96	0.01	A	0.04	3.14	0.04	A
	A1 - 2024 Base Reg Link 25%							
1 - Regeneration Link N	0.22	2.29	0.18	A	0.22	2.29	0.18	A
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	A
3 - Regeneration Link S	0.05	1.97	0.05	A	0.07	2.01	0.06	A
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	A
	A1 - 2024 Base Reg Link 25% with Dev							
1 - Regeneration Link N	0.27	2.40	0.21	A	0.28	2.44	0.22	A
2 - Phase 2 Access E	0.04	3.30	0.04	A	0.01	3.24	0.01	A
3 - Regeneration Link S	0.09	2.08	0.08	A	0.12	2.12	0.11	A
4 - Phase 2 Access W	0.01	2.85	0.01	A	0.04	2.97	0.04	A
	A1 - 2024 Base Reg Link 50%							
1 - Regeneration Link N	0.28	2.41	0.22	A	0.24	2.33	0.19	A
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	A
3 - Regeneration Link S	0.11	2.08	0.10	A	0.15	2.16	0.13	A
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	A
	A1 - 2024 Base Reg Link 50% with Dev							
1 - Regeneration Link N	0.34	2.53	0.25	A	0.30	2.48	0.23	A
2 - Phase 2 Access E	0.04	3.44	0.04	A	0.02	3.28	0.01	A
3 - Regeneration Link S	0.15	2.19	0.13	A	0.21	2.29	0.17	A
4 - Phase 2 Access W	0.01	2.97	0.01	A	0.04	3.16	0.04	A

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

"D1 - 2021 Base Reg Link 25%, AM " model duration: 07:15 - 08:45
"D2 - 2021 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D3 - 2021 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D4 - 2021 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D5 - 2021 Base Reg Link 50%, AM" model duration: 07:15 - 08:45

"D6 - 2021 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D7 - 2021 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D8 - 2021 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15
"D9 - 2024 Base Reg Link 25%, AM" model duration: 07:15 - 08:45
"D10 - 2024 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D11 - 2024 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D12 - 2024 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D13 - 2024 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D14 - 2024 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D15 - 2024 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D16 - 2024 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 24/07/2019 11:27:19

File summary

Title	(untitled)
Location	
Site Number	
Date	12/06/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	RodriguezMartin_d
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) - 2021 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, AM	2021 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.20	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	298.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	81.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	298.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	81.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.17	2.27	0.21	A	273.45	410.18	15.01	2.20	0.17	15.01	2.20
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.05	1.97	0.05	A	74.33	111.49	3.63	1.95	0.04	3.63	1.95
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Regeneration Link N	224.35	56.09	223.82	60.85	0.00	0.00	1915.37	1723.79	0.117	0.00	0.13	2.128	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	223.82	0.00	1238.20	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	60.98	15.25	60.85	223.82	0.00	0.00	1915.37	1723.79	0.032	0.00	0.03	1.941	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	60.85	0.00	1332.70	285.59	0.000	0.00	0.00	0.000	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	267.90	66.97	267.78	72.79	0.00	0.00	1915.37	1723.79	0.140	0.13	0.16	2.184	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	267.78	0.00	1212.71	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	72.82	18.20	72.79	267.78	0.00	0.00	1915.37	1723.79	0.038	0.03	0.04	1.953	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	72.79	0.00	1325.78	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	328.10	82.03	327.93	89.15	0.00	0.00	1915.37	1723.79	0.171	0.16	0.21	2.267	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	327.93	0.00	1177.83	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	89.18	22.30	89.15	327.93	0.00	0.00	1915.37	1723.79	0.047	0.04	0.05	1.971	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	89.15	0.00	1316.29	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	328.10	82.03	328.10	89.18	0.00	0.00	1915.37	1723.79	0.171	0.21	0.21	2.267	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	328.10	0.00	1177.72	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	89.18	22.30	89.18	328.10	0.00	0.00	1915.37	1723.79	0.047	0.05	0.05	1.971	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	89.18	0.00	1316.27	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	267.90	66.97	268.07	72.85	0.00	0.00	1915.37	1723.79	0.140	0.21	0.16	2.185	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	268.07	0.00	1212.54	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	72.82	18.20	72.85	268.07	0.00	0.00	1915.37	1723.79	0.038	0.05	0.04	1.953	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	72.85	0.00	1325.74	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	224.35	56.09	224.47	61.01	0.00	0.00	1915.37	1723.79	0.117	0.16	0.13	2.130	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	224.47	0.00	1237.82	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	60.98	15.25	61.01	224.47	0.00	0.00	1915.37	1723.79	0.032	0.04	0.03	1.941	A

4 - Phase 2 Access W	0.00	0.00	0.00	0.00	61.01	0.00	1332.61	285.59	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	1.96	0.13	2.128	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.49	0.03	1.941	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.41	0.16	2.184	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.59	0.04	1.953	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.06	0.20	2.267	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.73	0.05	1.971	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.09	0.21	2.267	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.73	0.05	1.971	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.47	0.16	2.185	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.60	0.04	1.953	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.01	0.13	2.130	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.50	0.03	1.941	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2021 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, PM	2021 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.19	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access	3.10	5.00	15.00	22.50	40.00	27.50	

W							

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	296.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	107.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	296.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	107.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.17	2.26	0.20	A	271.61	407.42	14.89	2.19	0.17	14.89	2.19
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.06	2.00	0.07	A	98.19	147.28	4.86	1.98	0.05	4.86	1.98
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	222.84	55.71	222.32	80.38	0.00	0.00	1915.37	1723.79	0.116	0.00	0.13	2.126	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	222.32	0.00	1239.07	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	80.56	20.14	80.38	222.32	0.00	0.00	1915.37	1723.79	0.042	0.00	0.04	1.961	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	80.38	0.00	1321.37	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	266.10	66.52	265.98	96.16	0.00	0.00	1915.37	1723.79	0.139	0.13	0.16	2.182	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	265.98	0.00	1213.75	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	96.19	24.05	96.16	265.98	0.00	0.00	1915.37	1723.79	0.050	0.04	0.05	1.978	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	96.16	0.00	1312.23	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	325.90	81.48	325.73	117.76	0.00	0.00	1915.37	1723.79	0.170	0.16	0.20	2.264	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	325.73	0.00	1179.10	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	117.81	29.45	117.76	325.73	0.00	0.00	1915.37	1723.79	0.062	0.05	0.07	2.002	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	117.76	0.00	1299.70	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	325.90	81.48	325.90	117.81	0.00	0.00	1915.37	1723.79	0.170	0.20	0.20	2.264	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	325.90	0.00	1179.00	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	117.81	29.45	117.81	325.90	0.00	0.00	1915.37	1723.79	0.062	0.07	0.07	2.002	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	117.81	0.00	1299.67	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	266.10	66.52	266.27	96.24	0.00	0.00	1915.37	1723.79	0.139	0.20	0.16	2.182	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	266.27	0.00	1213.58	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	96.19	24.05	96.24	266.27	0.00	0.00	1915.37	1723.79	0.050	0.07	0.05	1.978	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	96.24	0.00	1312.18	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	222.84	55.71	222.96	80.59	0.00	0.00	1915.37	1723.79	0.116	0.16	0.13	2.126	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	222.96	0.00	1238.69	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	80.56	20.14	80.59	222.96	0.00	0.00	1915.37	1723.79	0.042	0.05	0.04	1.963	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	80.59	0.00	1321.25	285.59	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	1.94	0.13	2.126	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.65	0.04	1.961	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.39	0.16	2.182	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.79	0.05	1.978	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.04	0.20	2.264	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.97	0.06	2.002	A	A

4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.07	0.20	2.264	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.98	0.07	2.002	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.45	0.16	2.182	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.80	0.05	1.978	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.00	0.13	2.126	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.67	0.04	1.963	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, AM	2021 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS

1	(untitled)	Roundabout	1,2,3,4				2.38	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	355.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	40.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	135.00	100.000

4 - Phase 2 Access W	ONE HOUR	✓	12.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	6.000	329.000	20.000
	2 - Phase 2 Access E	17.000	0.000	23.000	0.000
	3 - Regeneration Link S	112.000	8.000	0.000	15.000
	4 - Phase 2 Access W	7.000	0.000	5.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.02	0.93	0.06
	2 - Phase 2 Access E	0.43	0.00	0.58	0.00
	3 - Regeneration Link S	0.83	0.06	0.00	0.11
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.21	2.38	0.26	A	325.75	488.63	18.58	2.28	0.21	18.58	2.28
2 - Phase 2 Access E	0.04	3.28	0.04	A	36.70	55.06	2.89	3.15	0.03	2.89	3.15
3 - Regeneration Link S	0.08	2.07	0.09	A	123.88	185.82	6.30	2.03	0.07	6.30	2.03
4 - Phase 2 Access W	0.01	2.84	0.01	A	11.01	16.52	0.77	2.80	0.01	0.77	2.80

Main Results for each time segment

Main results: (07:15-07:30)

	Total	Junction	Entry		Circulating	Pedestrian		Saturation		Start	End		

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	Exit Flow (PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	Capacity (PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	267.26	66.82	266.61	102.14	9.76	0.00	1908.82	1737.10	0.140	0.00	0.16	2.190	A
2 - Phase 2 Access E	30.11	7.53	30.01	10.52	265.86	0.00	1213.82	284.37	0.025	0.00	0.03	3.040	A
3 - Regeneration Link S	101.64	25.41	101.41	268.10	27.78	0.00	1896.74	1768.65	0.054	0.00	0.06	2.005	A
4 - Phase 2 Access W	9.03	2.26	9.01	26.29	102.90	0.00	1308.32	386.25	0.007	0.00	0.01	2.770	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	319.14	79.78	318.99	122.21	11.68	0.00	1907.53	1737.10	0.167	0.16	0.20	2.266	A
2 - Phase 2 Access E	35.96	8.99	35.94	12.58	318.09	0.00	1183.53	284.37	0.030	0.03	0.03	3.136	A
3 - Regeneration Link S	121.36	30.34	121.31	320.78	33.24	0.00	1893.07	1768.65	0.064	0.06	0.07	2.031	A
4 - Phase 2 Access W	10.79	2.70	10.78	31.45	123.11	0.00	1296.60	386.25	0.008	0.01	0.01	2.799	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	390.86	97.72	390.63	149.66	14.31	0.00	1905.77	1737.10	0.205	0.20	0.26	2.375	A
2 - Phase 2 Access E	44.04	11.01	44.01	15.41	389.53	0.00	1142.10	284.37	0.039	0.03	0.04	3.277	A
3 - Regeneration Link S	148.64	37.16	148.57	392.83	40.71	0.00	1888.06	1768.65	0.079	0.07	0.09	2.069	A
4 - Phase 2 Access W	13.21	3.30	13.20	38.52	150.76	0.00	1280.56	386.25	0.010	0.01	0.01	2.839	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	390.86	97.72	390.86	149.74	14.31	0.00	1905.77	1737.10	0.205	0.26	0.26	2.375	A
2 - Phase 2 Access E	44.04	11.01	44.04	15.41	389.76	0.00	1141.97	284.37	0.039	0.04	0.04	3.278	A
3 - Regeneration Link S	148.64	37.16	148.64	393.06	40.74	0.00	1888.04	1768.65	0.079	0.09	0.09	2.069	A
4 - Phase 2 Access W	13.21	3.30	13.21	38.54	150.84	0.00	1280.52	386.25	0.010	0.01	0.01	2.840	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	319.14	79.78	319.36	122.34	11.69	0.00	1907.52	1737.10	0.167	0.26	0.20	2.266	A
2 - Phase 2 Access E	35.96	8.99	35.99	12.59	318.46	0.00	1183.32	284.37	0.030	0.04	0.03	3.137	A
3 - Regeneration Link S	121.36	30.34	121.43	321.17	33.29	0.00	1893.04	1768.65	0.064	0.09	0.07	2.033	A
4 - Phase 2 Access W	10.79	2.70	10.80	31.48	123.23	0.00	1296.52	386.25	0.008	0.01	0.01	2.799	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	267.26	66.82	267.42	102.44	9.79	0.00	1908.80	1737.10	0.140	0.20	0.16	2.194	A
2 - Phase 2 Access E	30.11	7.53	30.14	10.55	266.66	0.00	1213.35	284.37	0.025	0.03	0.03	3.044	A
3 -													

Regeneration Link S	101.64	25.41	101.68	268.93	27.87	0.00	1896.67	1768.65	0.054	0.07	0.06	2.006	A
4 - Phase 2 Access W	9.03	2.26	9.04	26.36	103.19	0.00	1308.15	386.25	0.007	0.01	0.01	2.770	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.40	0.16	2.190	A	A
2 - Phase 2 Access E	0.37	0.02	3.040	A	A
3 - Regeneration Link S	0.84	0.06	2.005	A	A
4 - Phase 2 Access W	0.10	0.01	2.770	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.98	0.20	2.266	A	A
2 - Phase 2 Access E	0.46	0.03	3.136	A	A
3 - Regeneration Link S	1.02	0.07	2.031	A	A
4 - Phase 2 Access W	0.12	0.01	2.799	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.82	0.25	2.375	A	A
2 - Phase 2 Access E	0.59	0.04	3.277	A	A
3 - Regeneration Link S	1.27	0.08	2.069	A	A
4 - Phase 2 Access W	0.15	0.01	2.839	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.86	0.26	2.375	A	A
2 - Phase 2 Access E	0.60	0.04	3.278	A	A
3 - Regeneration Link S	1.28	0.09	2.069	A	A
4 - Phase 2 Access W	0.16	0.01	2.840	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.06	0.20	2.266	A	A
2 - Phase 2 Access E	0.48	0.03	3.137	A	A
3 - Regeneration Link S	1.04	0.07	2.033	A	A
4 - Phase 2 Access W	0.13	0.01	2.799	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.47	0.16	2.194	A	A
2 - Phase 2 Access E	0.39	0.03	3.044	A	A
3 - Regeneration Link S	0.86	0.06	2.006	A	A
4 - Phase 2 Access W	0.11	0.01	2.770	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, PM	2021 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.38	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	

4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	358.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	15.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	177.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	43.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	15.000	323.000	20.000
	2 - Phase 2 Access E	6.000	0.000	9.000	0.000
	3 - Regeneration Link S	142.000	20.000	0.000	15.000
	4 - Phase 2 Access W	25.000	0.000	18.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.04	0.90	0.06
	2 - Phase 2 Access E	0.40	0.00	0.60	0.00
	3 - Regeneration Link S	0.80	0.11	0.00	0.08
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.21	2.41	0.26	A	328.51	492.76	18.97	2.31	0.21	18.97	2.31
2 - Phase 2 Access E	0.01	3.21	0.01	A	13.76	20.65	1.07	3.10	0.01	1.07	3.10
3 - Regeneration Link S	0.10	2.12	0.11	A	162.42	243.63	8.41	2.07	0.09	8.41	2.07
4 - Phase 2 Access W	0.04	2.97	0.04	A	39.46	59.19	2.86	2.90	0.03	2.86	2.90

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	269.52	67.38	268.86	129.93	28.53	0.00	1896.23	1682.68	0.142	0.00	0.17	2.210	A
2 - Phase 2 Access E	11.29	2.82	11.26	26.29	271.10	0.00	1210.78	347.23	0.009	0.00	0.01	3.000	A
3 - Regeneration Link S	133.25	33.31	132.95	262.84	19.52	0.00	1902.27	1759.14	0.070	0.00	0.08	2.034	A
4 - Phase 2 Access W	32.37	8.09	32.27	26.29	126.19	0.00	1294.81	353.80	0.025	0.00	0.03	2.851	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	321.83	80.46	321.68	155.46	34.14	0.00	1892.46	1682.68	0.170	0.17	0.20	2.291	A
2 - Phase 2 Access E	13.48	3.37	13.48	31.45	324.37	0.00	1179.89	347.23	0.011	0.01	0.01	3.085	A
3 - Regeneration Link S	159.12	39.78	159.06	314.49	23.36	0.00	1899.70	1759.14	0.084	0.08	0.09	2.067	A
4 - Phase 2 Access W	38.66	9.66	38.63	31.45	150.97	0.00	1280.44	353.80	0.030	0.03	0.03	2.898	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	394.17	98.54	393.93	190.38	41.82	0.00	1887.32	1682.68	0.209	0.20	0.26	2.410	A
2 - Phase 2 Access E	16.52	4.13	16.50	38.52	397.23	0.00	1137.64	347.23	0.015	0.01	0.01	3.210	A
3 - Regeneration Link S	194.88	48.72	194.79	385.12	28.61	0.00	1896.18	1759.14	0.103	0.09	0.11	2.115	A
4 - Phase 2 Access W	47.34	11.84	47.31	38.51	184.88	0.00	1260.78	353.80	0.038	0.03	0.04	2.966	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	394.17	98.54	394.16	190.48	41.84	0.00	1887.30	1682.68	0.209	0.26	0.26	2.410	A
2 - Phase 2 Access E	16.52	4.13	16.52	38.54	397.47	0.00	1137.50	347.23	0.015	0.01	0.01	3.210	A
3 - Regeneration Link S	194.88	48.72	194.88	385.36	28.63	0.00	1896.17	1759.14	0.103	0.11	0.11	2.115	A
4 - Phase 2 Access W	47.34	11.84	47.34	38.54	184.97	0.00	1260.72	353.80	0.038	0.04	0.04	2.966	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	321.83	80.46	322.07	155.62	34.18	0.00	1892.44	1682.68	0.170	0.26	0.21	2.294	A
2 - Phase 2 Access E	13.48	3.37	13.50	31.48	324.77	0.00	1179.66	347.23	0.011	0.01	0.01	3.086	A
3 - Regeneration Link S	159.12	39.78	159.21	314.87	23.39	0.00	1899.68	1759.14	0.084	0.11	0.09	2.069	A
4 - Phase 2 Access W	38.66	9.66	38.69	31.48	151.12	0.00	1280.36	353.80	0.030	0.04	0.03	2.898	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	269.52	67.38	269.68	130.31	28.62	0.00	1896.17	1682.68	0.142	0.21	0.17	2.214	A
2 - Phase 2 Access E	11.29	2.82	11.30	26.36	271.94	0.00	1210.29	347.23	0.009	0.01	0.01	3.004	A
3 - Regeneration Link S	133.25	33.31	133.32	263.65	19.59	0.00	1902.23	1759.14	0.070	0.09	0.08	2.036	A
4 - Phase 2 Access W	32.37	8.09	32.39	26.36	126.54	0.00	1294.61	353.80	0.025	0.03	0.03	2.853	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.44	0.16	2.210	A	A
2 - Phase 2 Access E	0.14	0.01	3.000	A	A
3 - Regeneration Link S	1.11	0.07	2.034	A	A
4 - Phase 2 Access W	0.38	0.03	2.851	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.03	0.20	2.291	A	A
2 - Phase 2 Access E	0.17	0.01	3.085	A	A
3 - Regeneration Link S	1.36	0.09	2.067	A	A
4 - Phase 2 Access W	0.46	0.03	2.898	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.90	0.26	2.410	A	A
2 - Phase 2 Access E	0.22	0.01	3.210	A	A
3 - Regeneration Link S	1.70	0.11	2.115	A	A

4 - Phase 2 Access W	0.58	0.04	2.966	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.95	0.26	2.410	A	A
2 - Phase 2 Access E	0.22	0.01	3.210	A	A
3 - Regeneration Link S	1.72	0.11	2.115	A	A
4 - Phase 2 Access W	0.58	0.04	2.966	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.12	0.21	2.294	A	A
2 - Phase 2 Access E	0.18	0.01	3.086	A	A
3 - Regeneration Link S	1.39	0.09	2.069	A	A
4 - Phase 2 Access W	0.47	0.03	2.898	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.52	0.17	2.214	A	A
2 - Phase 2 Access E	0.14	0.01	3.004	A	A
3 - Regeneration Link S	1.14	0.08	2.036	A	A
4 - Phase 2 Access W	0.39	0.03	2.853	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, AM	2021 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.28	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	364.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	161.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	364.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	161.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.21	2.38	0.26	A	334.01	501.02	19.06	2.28	0.21	19.06	2.28
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.09	2.07	0.10	A	147.74	221.60	7.52	2.04	0.08	7.52	2.04
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Regeneration Link N	274.04	68.51	273.37	120.94	0.00	0.00	1915.37	1723.79	0.143	0.00	0.17	2.191	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	273.37	0.00	1209.46	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	121.21	30.30	120.94	273.37	0.00	0.00	1915.37	1723.79	0.063	0.00	0.07	2.006	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	120.94	0.00	1297.85	285.59	0.000	0.00	0.00	0.000	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	327.23	81.81	327.07	144.68	0.00	0.00	1915.37	1723.79	0.171	0.17	0.21	2.266	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	327.07	0.00	1178.32	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	144.74	36.18	144.68	327.07	0.00	0.00	1915.37	1723.79	0.076	0.07	0.08	2.032	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	144.68	0.00	1284.09	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	400.77	100.19	400.54	177.18	0.00	0.00	1915.37	1723.78	0.209	0.21	0.26	2.376	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	400.54	0.00	1135.72	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	177.26	44.32	177.18	400.54	0.00	0.00	1915.37	1723.79	0.093	0.08	0.10	2.070	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	177.18	0.00	1265.24	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	400.77	100.19	400.77	177.26	0.00	0.00	1915.37	1723.78	0.209	0.26	0.26	2.376	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	400.77	0.00	1135.59	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	177.26	44.32	177.26	400.77	0.00	0.00	1915.37	1723.79	0.093	0.10	0.10	2.070	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	177.26	0.00	1265.19	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	327.23	81.81	327.46	144.82	0.00	0.00	1915.37	1723.79	0.171	0.26	0.21	2.268	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	327.46	0.00	1178.10	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	144.74	36.18	144.82	327.46	0.00	0.00	1915.37	1723.79	0.076	0.10	0.08	2.034	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	144.82	0.00	1284.01	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	274.04	68.51	274.20	121.27	0.00	0.00	1915.37	1723.79	0.143	0.21	0.17	2.193	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	274.20	0.00	1208.98	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	121.21	30.30	121.27	274.20	0.00	0.00	1915.37	1723.79	0.063	0.08	0.07	2.007	A

4 - Phase 2 Access W	0.00	0.00	0.00	0.00	121.27	0.00	1297.67	285.59	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.46	0.16	2.191	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.00	0.07	2.006	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.05	0.20	2.266	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.21	0.08	2.032	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.91	0.26	2.376	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.51	0.10	2.070	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.96	0.26	2.376	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.53	0.10	2.070	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.13	0.21	2.268	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.24	0.08	2.034	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.54	0.17	2.193	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.02	0.07	2.007	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, PM	2021 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.24	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access	3.10	5.00	15.00	22.50	40.00	27.50	

W							

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	320.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	215.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	320.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	215.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.18	2.30	0.23	A	293.64	440.46	16.32	2.22	0.18	16.32	2.22
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.12	2.14	0.14	A	197.29	295.93	10.33	2.10	0.11	10.33	2.10
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	240.91	60.23	240.34	161.49	0.00	0.00	1915.37	1723.79	0.126	0.00	0.14	2.149	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	240.34	0.00	1228.62	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	161.86	40.47	161.49	240.34	0.00	0.00	1915.37	1723.79	0.085	0.00	0.09	2.052	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	161.49	0.00	1274.34	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	287.67	71.92	287.54	193.20	0.00	0.00	1915.37	1723.79	0.150	0.14	0.18	2.211	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	287.54	0.00	1201.25	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	193.28	48.32	193.20	287.54	0.00	0.00	1915.37	1723.79	0.101	0.09	0.11	2.090	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	193.20	0.00	1255.95	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	352.33	88.08	352.13	236.60	0.00	0.00	1915.37	1723.78	0.184	0.18	0.22	2.302	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	352.13	0.00	1163.79	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	236.72	59.18	236.60	352.13	0.00	0.00	1915.37	1723.79	0.124	0.11	0.14	2.144	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	236.60	0.00	1230.78	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	352.33	88.08	352.33	236.72	0.00	0.00	1915.37	1723.78	0.184	0.22	0.23	2.302	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	352.33	0.00	1163.68	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	236.72	59.18	236.72	352.33	0.00	0.00	1915.37	1723.79	0.124	0.14	0.14	2.144	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	236.72	0.00	1230.72	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	287.67	71.92	287.86	193.39	0.00	0.00	1915.37	1723.79	0.150	0.23	0.18	2.213	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	287.86	0.00	1201.06	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	193.28	48.32	193.39	287.86	0.00	0.00	1915.37	1723.79	0.101	0.14	0.11	2.092	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	193.39	0.00	1255.84	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	240.91	60.23	241.04	161.94	0.00	0.00	1915.37	1723.79	0.126	0.18	0.14	2.151	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	241.04	0.00	1228.21	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	161.86	40.47	161.94	241.04	0.00	0.00	1915.37	1723.79	0.085	0.11	0.09	2.052	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	161.94	0.00	1274.08	285.59	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.12	0.14	2.149	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.36	0.09	2.052	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.62	0.17	2.211	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.67	0.11	2.090	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.34	0.22	2.302	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	2.09	0.14	2.144	A	A

4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.37	0.22	2.302	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	2.11	0.14	2.144	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.69	0.18	2.213	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.70	0.11	2.092	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.18	0.15	2.151	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.40	0.09	2.052	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, AM	2021 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS

1	(untitled)	Roundabout	1,2,3,4				2.46	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	422.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	40.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	216.00	100.000

4 - Phase 2 Access W	ONE HOUR	✓	12.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	6.000	396.000	20.000
	2 - Phase 2 Access E	17.000	0.000	23.000	0.000
	3 - Regeneration Link S	193.000	8.000	0.000	15.000
	4 - Phase 2 Access W	7.000	0.000	5.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.01	0.94	0.05
	2 - Phase 2 Access E	0.43	0.00	0.58	0.00
	3 - Regeneration Link S	0.89	0.04	0.00	0.07
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.24	2.50	0.32	A	387.23	580.85	23.02	2.38	0.26	23.02	2.38
2 - Phase 2 Access E	0.04	3.41	0.04	A	36.70	55.06	2.99	3.26	0.03	2.99	3.26
3 - Regeneration Link S	0.13	2.18	0.14	A	198.21	297.31	10.53	2.13	0.12	10.53	2.13
4 - Phase 2 Access W	0.01	2.96	0.01	A	11.01	16.52	0.80	2.90	0.01	0.80	2.90

Main Results for each time segment

Main results: (07:15-07:30)

	Total	Junction	Entry		Circulating	Pedestrian		Saturation		Start	End		

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	Exit Flow (PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	Capacity (PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	317.70	79.43	316.91	162.97	9.76	0.00	1908.82	1776.12	0.166	0.00	0.20	2.260	A
2 - Phase 2 Access E	30.11	7.53	30.01	10.51	316.15	0.00	1184.65	270.58	0.025	0.00	0.03	3.117	A
3 - Regeneration Link S	162.62	40.65	162.24	318.39	27.77	0.00	1896.74	1781.76	0.086	0.00	0.09	2.075	A
4 - Phase 2 Access W	9.03	2.26	9.01	26.29	163.73	0.00	1273.04	339.84	0.007	0.00	0.01	2.847	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	379.37	94.84	379.18	194.99	11.68	0.00	1907.53	1776.12	0.199	0.20	0.25	2.355	A
2 - Phase 2 Access E	35.96	8.99	35.93	12.58	378.28	0.00	1148.63	270.58	0.031	0.03	0.03	3.234	A
3 - Regeneration Link S	194.18	48.54	194.10	380.97	33.24	0.00	1893.07	1781.76	0.103	0.09	0.11	2.118	A
4 - Phase 2 Access W	10.79	2.70	10.78	31.45	195.89	0.00	1254.39	339.84	0.009	0.01	0.01	2.894	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	464.63	116.16	464.34	238.79	14.31	0.00	1905.77	1776.12	0.244	0.25	0.32	2.497	A
2 - Phase 2 Access E	44.04	11.01	44.00	15.41	463.24	0.00	1099.36	270.58	0.040	0.03	0.04	3.410	A
3 - Regeneration Link S	237.82	59.46	237.70	466.53	40.71	0.00	1888.06	1781.76	0.126	0.11	0.14	2.181	A
4 - Phase 2 Access W	13.21	3.30	13.20	38.51	239.90	0.00	1228.87	339.84	0.011	0.01	0.01	2.960	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	464.63	116.16	464.63	238.92	14.31	0.00	1905.77	1776.12	0.244	0.32	0.32	2.497	A
2 - Phase 2 Access E	44.04	11.01	44.04	15.41	463.53	0.00	1099.19	270.58	0.040	0.04	0.04	3.410	A
3 - Regeneration Link S	237.82	59.46	237.82	466.83	40.74	0.00	1888.04	1781.76	0.126	0.14	0.14	2.181	A
4 - Phase 2 Access W	13.21	3.30	13.21	38.54	240.02	0.00	1228.80	339.84	0.011	0.01	0.01	2.960	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	379.37	94.84	379.66	195.20	11.69	0.00	1907.52	1776.12	0.199	0.32	0.25	2.358	A
2 - Phase 2 Access E	35.96	8.99	36.00	12.59	378.76	0.00	1148.35	270.58	0.031	0.04	0.03	3.238	A
3 - Regeneration Link S	194.18	48.54	194.30	381.47	33.29	0.00	1893.04	1781.76	0.103	0.14	0.11	2.120	A
4 - Phase 2 Access W	10.79	2.70	10.80	31.49	196.10	0.00	1254.27	339.84	0.009	0.01	0.01	2.894	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	317.70	79.43	317.90	163.46	9.79	0.00	1908.80	1776.12	0.166	0.25	0.20	2.262	A
2 - Phase 2 Access E	30.11	7.53	30.14	10.55	317.15	0.00	1184.08	270.58	0.025	0.03	0.03	3.119	A
3 -													

Regeneration Link S	162.62	40.65	162.70	319.41	27.88	0.00	1896.67	1781.76	0.086	0.11	0.09	2.077	A
4 - Phase 2 Access W	9.03	2.26	9.04	26.36	164.21	0.00	1272.76	339.84	0.007	0.01	0.01	2.848	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.94	0.20	2.260	A	A
2 - Phase 2 Access E	0.38	0.03	3.117	A	A
3 - Regeneration Link S	1.39	0.09	2.075	A	A
4 - Phase 2 Access W	0.11	0.01	2.847	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.67	0.24	2.355	A	A
2 - Phase 2 Access E	0.48	0.03	3.234	A	A
3 - Regeneration Link S	1.70	0.11	2.118	A	A
4 - Phase 2 Access W	0.13	0.01	2.894	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.76	0.32	2.497	A	A
2 - Phase 2 Access E	0.62	0.04	3.410	A	A
3 - Regeneration Link S	2.14	0.14	2.181	A	A
4 - Phase 2 Access W	0.16	0.01	2.960	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.82	0.32	2.497	A	A
2 - Phase 2 Access E	0.62	0.04	3.410	A	A
3 - Regeneration Link S	2.16	0.14	2.181	A	A
4 - Phase 2 Access W	0.16	0.01	2.960	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.78	0.25	2.358	A	A
2 - Phase 2 Access E	0.49	0.03	3.238	A	A
3 - Regeneration Link S	1.74	0.12	2.120	A	A
4 - Phase 2 Access W	0.13	0.01	2.894	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.04	0.20	2.262	A	A
2 - Phase 2 Access E	0.40	0.03	3.119	A	A
3 - Regeneration Link S	1.42	0.09	2.077	A	A
4 - Phase 2 Access W	0.11	0.01	2.848	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, PM	2021 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.44	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	

4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	382.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	15.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	285.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	43.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	15.000	347.000	20.000
	2 - Phase 2 Access E	6.000	0.000	9.000	0.000
	3 - Regeneration Link S	250.000	20.000	0.000	15.000
	4 - Phase 2 Access W	25.000	0.000	18.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.04	0.91	0.05
	2 - Phase 2 Access E	0.40	0.00	0.60	0.00
	3 - Regeneration Link S	0.88	0.07	0.00	0.05
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.22	2.45	0.29	A	350.53	525.79	20.54	2.34	0.23	20.54	2.34
2 - Phase 2 Access E	0.01	3.25	0.01	A	13.76	20.65	1.08	3.14	0.01	1.08	3.14
3 - Regeneration Link S	0.17	2.27	0.20	A	261.52	392.28	14.39	2.20	0.16	14.39	2.20
4 - Phase 2 Access W	0.04	3.14	0.04	A	39.46	59.19	3.01	3.05	0.03	3.01	3.05

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	287.59	71.90	286.88	211.03	28.53	0.00	1896.23	1741.60	0.152	0.00	0.18	2.235	A
2 - Phase 2 Access E	11.29	2.82	11.25	26.29	289.12	0.00	1200.33	319.47	0.009	0.00	0.01	3.026	A
3 - Regeneration Link S	214.56	53.64	214.06	280.85	19.52	0.00	1902.27	1768.48	0.113	0.00	0.13	2.132	A
4 - Phase 2 Access W	32.37	8.09	32.27	26.29	207.29	0.00	1247.78	322.35	0.026	0.00	0.03	2.961	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	343.41	85.85	343.24	252.50	34.14	0.00	1892.46	1741.60	0.181	0.18	0.22	2.323	A
2 - Phase 2 Access E	13.48	3.37	13.48	31.45	345.93	0.00	1167.39	319.47	0.012	0.01	0.01	3.119	A
3 - Regeneration Link S	256.21	64.05	256.09	336.05	23.36	0.00	1899.70	1768.48	0.135	0.13	0.16	2.190	A
4 - Phase 2 Access W	38.66	9.66	38.63	31.45	248.01	0.00	1224.17	322.35	0.032	0.03	0.03	3.035	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	420.59	105.15	420.33	309.21	41.81	0.00	1887.32	1741.60	0.223	0.22	0.29	2.453	A
2 - Phase 2 Access E	16.52	4.13	16.50	38.51	423.63	0.00	1122.33	319.47	0.015	0.01	0.01	3.254	A
3 - Regeneration Link S	313.79	78.45	313.62	411.52	28.61	0.00	1896.18	1768.48	0.165	0.16	0.20	2.274	A
4 - Phase 2 Access W	47.34	11.84	47.31	38.51	303.72	0.00	1191.87	322.35	0.040	0.03	0.04	3.144	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	420.59	105.15	420.59	309.39	41.84	0.00	1887.30	1741.60	0.223	0.29	0.29	2.454	A
2 - Phase 2 Access E	16.52	4.13	16.52	38.54	423.89	0.00	1122.18	319.47	0.015	0.01	0.01	3.255	A
3 - Regeneration Link S	313.79	78.45	313.79	411.78	28.63	0.00	1896.17	1768.48	0.165	0.20	0.20	2.274	A
4 - Phase 2 Access W	47.34	11.84	47.34	38.54	303.88	0.00	1191.77	322.35	0.040	0.04	0.04	3.144	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	343.41	85.85	343.67	252.78	34.19	0.00	1892.44	1741.60	0.181	0.29	0.22	2.326	A
2 - Phase 2 Access E	13.48	3.37	13.50	31.49	346.37	0.00	1167.13	319.47	0.012	0.01	0.01	3.122	A
3 - Regeneration Link S	256.21	64.05	256.38	336.47	23.39	0.00	1899.68	1768.48	0.135	0.20	0.16	2.190	A
4 - Phase 2 Access W	38.66	9.66	38.69	31.49	248.28	0.00	1224.01	322.35	0.032	0.04	0.03	3.038	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	287.59	71.90	287.76	211.67	28.63	0.00	1896.17	1741.60	0.152	0.22	0.18	2.238	A
2 - Phase 2 Access E	11.29	2.82	11.30	26.36	290.02	0.00	1199.81	319.47	0.009	0.01	0.01	3.030	A
3 - Regeneration Link S	214.56	53.64	214.68	281.74	19.59	0.00	1902.23	1768.48	0.113	0.16	0.13	2.134	A
4 - Phase 2 Access W	32.37	8.09	32.40	26.36	207.90	0.00	1247.43	322.35	0.026	0.03	0.03	2.962	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.64	0.18	2.235	A	A
2 - Phase 2 Access E	0.14	0.01	3.026	A	A
3 - Regeneration Link S	1.88	0.13	2.132	A	A
4 - Phase 2 Access W	0.39	0.03	2.961	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.28	0.22	2.323	A	A
2 - Phase 2 Access E	0.17	0.01	3.119	A	A
3 - Regeneration Link S	2.31	0.15	2.190	A	A
4 - Phase 2 Access W	0.48	0.03	3.035	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.24	0.28	2.453	A	A
2 - Phase 2 Access E	0.22	0.01	3.254	A	A
3 - Regeneration Link S	2.94	0.20	2.274	A	A

4 - Phase 2 Access W	0.61	0.04	3.144	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.29	0.29	2.454	A	A
2 - Phase 2 Access E	0.22	0.01	3.255	A	A
3 - Regeneration Link S	2.97	0.20	2.274	A	A
4 - Phase 2 Access W	0.62	0.04	3.144	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.37	0.22	2.326	A	A
2 - Phase 2 Access E	0.18	0.01	3.122	A	A
3 - Regeneration Link S	2.37	0.16	2.190	A	A
4 - Phase 2 Access W	0.50	0.03	3.038	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.72	0.18	2.238	A	A
2 - Phase 2 Access E	0.14	0.01	3.030	A	A
3 - Regeneration Link S	1.93	0.13	2.134	A	A
4 - Phase 2 Access W	0.41	0.03	2.962	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, AM	2024 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.22	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	312.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	84.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	312.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	84.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.18	2.29	0.22	A	286.30	429.44	15.84	2.21	0.18	15.84	2.21
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.05	1.97	0.05	A	77.08	115.62	3.77	1.96	0.04	3.77	1.96
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Regeneration Link N	234.89	58.72	234.33	63.10	0.00	0.00	1915.37	1723.79	0.123	0.00	0.14	2.141	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	234.33	0.00	1232.10	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	63.24	15.81	63.10	234.33	0.00	0.00	1915.37	1723.79	0.033	0.00	0.03	1.943	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	63.10	0.00	1331.39	285.59	0.000	0.00	0.00	0.000	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	280.48	70.12	280.35	75.49	0.00	0.00	1915.37	1723.79	0.146	0.14	0.17	2.201	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	280.35	0.00	1205.41	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	75.51	18.88	75.49	280.35	0.00	0.00	1915.37	1723.79	0.039	0.03	0.04	1.956	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	75.49	0.00	1324.21	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	343.52	85.88	343.33	92.45	0.00	0.00	1915.37	1723.79	0.179	0.17	0.22	2.289	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	343.33	0.00	1168.89	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	92.49	23.12	92.45	343.33	0.00	0.00	1915.37	1723.79	0.048	0.04	0.05	1.974	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	92.45	0.00	1314.38	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	343.52	85.88	343.52	92.49	0.00	0.00	1915.37	1723.79	0.179	0.22	0.22	2.289	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	343.52	0.00	1168.79	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	92.49	23.12	92.49	343.52	0.00	0.00	1915.37	1723.79	0.048	0.05	0.05	1.974	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	92.49	0.00	1314.35	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	280.48	70.12	280.67	75.55	0.00	0.00	1915.37	1723.79	0.146	0.22	0.17	2.202	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	280.67	0.00	1205.23	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	75.51	18.88	75.55	280.67	0.00	0.00	1915.37	1723.79	0.039	0.05	0.04	1.956	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	75.55	0.00	1324.17	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	234.89	58.72	235.02	63.27	0.00	0.00	1915.37	1723.79	0.123	0.17	0.14	2.142	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	235.02	0.00	1231.70	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	63.24	15.81	63.27	235.02	0.00	0.00	1915.37	1723.79	0.033	0.04	0.03	1.945	A

4 - Phase 2 Access W	0.00	0.00	0.00	0.00	63.27	0.00	1331.30	285.59	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.06	0.14	2.141	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.51	0.03	1.943	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.54	0.17	2.201	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.61	0.04	1.956	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.23	0.22	2.289	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.75	0.05	1.974	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.27	0.22	2.289	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.76	0.05	1.974	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.61	0.17	2.202	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.62	0.04	1.956	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.12	0.14	2.142	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.52	0.03	1.945	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, PM	2024 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.21	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access	3.10	5.00	15.00	22.50	40.00	27.50	

W							

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	310.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	112.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	310.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	112.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.18	2.29	0.22	A	284.46	426.69	15.72	2.21	0.17	15.72	2.21
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.06	2.01	0.07	A	102.77	154.16	5.10	1.98	0.06	5.10	1.98
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	233.38	58.35	232.83	84.14	0.00	0.00	1915.37	1723.79	0.122	0.00	0.14	2.139	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	232.83	0.00	1232.97	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	84.32	21.08	84.14	232.83	0.00	0.00	1915.37	1723.79	0.044	0.00	0.05	1.965	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	84.14	0.00	1319.20	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	278.68	69.67	278.56	100.65	0.00	0.00	1915.37	1723.79	0.146	0.14	0.17	2.199	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	278.56	0.00	1206.45	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	100.69	25.17	100.65	278.56	0.00	0.00	1915.37	1723.79	0.053	0.05	0.06	1.983	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	100.65	0.00	1309.62	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	341.32	85.33	341.13	123.26	0.00	0.00	1915.37	1723.79	0.178	0.17	0.22	2.286	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	341.13	0.00	1170.17	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	123.31	30.83	123.26	341.13	0.00	0.00	1915.37	1723.79	0.064	0.06	0.07	2.008	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	123.26	0.00	1296.51	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	341.32	85.33	341.32	123.31	0.00	0.00	1915.37	1723.79	0.178	0.22	0.22	2.286	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	341.32	0.00	1170.06	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	123.31	30.83	123.31	341.32	0.00	0.00	1915.37	1723.79	0.064	0.07	0.07	2.008	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	123.31	0.00	1296.48	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	278.68	69.67	278.87	100.74	0.00	0.00	1915.37	1723.79	0.146	0.22	0.17	2.201	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	278.87	0.00	1206.28	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	100.69	25.17	100.74	278.87	0.00	0.00	1915.37	1723.79	0.053	0.07	0.06	1.983	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	100.74	0.00	1309.57	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	233.38	58.35	233.51	84.36	0.00	0.00	1915.37	1723.79	0.122	0.17	0.14	2.140	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	233.51	0.00	1232.58	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	84.32	21.08	84.36	233.51	0.00	0.00	1915.37	1723.79	0.044	0.06	0.05	1.967	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	84.36	0.00	1319.07	285.59	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.05	0.14	2.139	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.68	0.05	1.965	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.52	0.17	2.199	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.82	0.05	1.983	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.21	0.21	2.286	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.02	0.07	2.008	A	A

4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.25	0.22	2.286	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.03	0.07	2.008	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.59	0.17	2.201	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.84	0.06	1.983	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.11	0.14	2.140	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	0.70	0.05	1.967	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, AM	2024 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS

1	(untitled)	Roundabout	1,2,3,4				2.39	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	369.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	40.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	139.00	100.000

4 - Phase 2 Access W	ONE HOUR	✓	12.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	6.000	343.000	20.000
	2 - Phase 2 Access E	23.000	0.000	17.000	0.000
	3 - Regeneration Link S	115.000	8.000	0.000	16.000
	4 - Phase 2 Access W	7.000	0.000	5.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.02	0.93	0.05
	2 - Phase 2 Access E	0.58	0.00	0.43	0.00
	3 - Regeneration Link S	0.83	0.06	0.00	0.12
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.21	2.40	0.27	A	338.60	507.90	19.48	2.30	0.22	19.48	2.30
2 - Phase 2 Access E	0.04	3.30	0.04	A	36.70	55.06	2.91	3.18	0.03	2.91	3.18
3 - Regeneration Link S	0.08	2.08	0.09	A	127.55	191.32	6.51	2.04	0.07	6.51	2.04
4 - Phase 2 Access W	0.01	2.85	0.01	A	11.01	16.52	0.77	2.81	0.01	0.77	2.81

Main Results for each time segment

Main results: (07:15-07:30)

	Total	Junction	Entry		Circulating	Pedestrian		Saturation		Start	End		

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	Exit Flow (PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	Capacity (PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	277.80	69.45	277.12	108.90	9.76	0.00	1908.82	1742.04	0.146	0.00	0.17	2.205	A
2 - Phase 2 Access E	30.11	7.53	30.01	10.52	276.37	0.00	1207.72	282.58	0.025	0.00	0.03	3.056	A
3 - Regeneration Link S	104.65	26.16	104.41	274.10	32.28	0.00	1893.72	1743.04	0.055	0.00	0.06	2.011	A
4 - Phase 2 Access W	9.03	2.26	9.01	27.04	109.65	0.00	1304.40	379.36	0.007	0.00	0.01	2.778	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	331.72	82.93	331.56	130.29	11.68	0.00	1907.53	1742.04	0.174	0.17	0.21	2.284	A
2 - Phase 2 Access E	35.96	8.99	35.94	12.58	330.66	0.00	1176.24	282.58	0.031	0.03	0.03	3.156	A
3 - Regeneration Link S	124.96	31.24	124.91	327.97	38.63	0.00	1889.45	1743.04	0.066	0.06	0.07	2.039	A
4 - Phase 2 Access W	10.79	2.70	10.78	32.35	131.19	0.00	1291.91	379.36	0.008	0.01	0.01	2.809	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	406.28	101.57	406.04	159.56	14.31	0.00	1905.77	1742.04	0.213	0.21	0.27	2.400	A
2 - Phase 2 Access E	44.04	11.01	44.01	15.41	404.94	0.00	1133.17	282.58	0.039	0.03	0.04	3.304	A
3 - Regeneration Link S	153.04	38.26	152.97	401.63	47.31	0.00	1883.63	1743.04	0.081	0.07	0.09	2.079	A
4 - Phase 2 Access W	13.21	3.30	13.20	39.62	160.67	0.00	1274.82	379.36	0.010	0.01	0.01	2.852	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	406.28	101.57	406.27	159.65	14.31	0.00	1905.77	1742.04	0.213	0.27	0.27	2.400	A
2 - Phase 2 Access E	44.04	11.01	44.04	15.41	405.17	0.00	1133.03	282.58	0.039	0.04	0.04	3.305	A
3 - Regeneration Link S	153.04	38.26	153.04	401.87	47.34	0.00	1883.61	1743.04	0.081	0.09	0.09	2.079	A
4 - Phase 2 Access W	13.21	3.30	13.21	39.64	160.75	0.00	1274.77	379.36	0.010	0.01	0.01	2.853	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	331.72	82.93	331.96	130.43	11.69	0.00	1907.52	1742.04	0.174	0.27	0.21	2.284	A
2 - Phase 2 Access E	35.96	8.99	35.99	12.59	331.06	0.00	1176.01	282.58	0.031	0.04	0.03	3.159	A
3 - Regeneration Link S	124.96	31.24	125.03	328.37	38.69	0.00	1889.42	1743.04	0.066	0.09	0.07	2.041	A
4 - Phase 2 Access W	10.79	2.70	10.80	32.38	131.33	0.00	1291.83	379.36	0.008	0.01	0.01	2.811	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	277.80	69.45	277.96	109.22	9.79	0.00	1908.80	1742.04	0.146	0.21	0.17	2.207	A
2 - Phase 2 Access E	30.11	7.53	30.14	10.55	277.21	0.00	1207.24	282.58	0.025	0.03	0.03	3.057	A
3 -													

Regeneration Link S	104.65	26.16	104.70	274.95	32.40	0.00	1893.64	1743.04	0.055	0.07	0.06	2.012	A
4 - Phase 2 Access W	9.03	2.26	9.04	27.12	109.97	0.00	1304.21	379.36	0.007	0.01	0.01	2.781	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.51	0.17	2.205	A	A
2 - Phase 2 Access E	0.38	0.03	3.056	A	A
3 - Regeneration Link S	0.86	0.06	2.011	A	A
4 - Phase 2 Access W	0.10	0.01	2.778	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.12	0.21	2.284	A	A
2 - Phase 2 Access E	0.47	0.03	3.156	A	A
3 - Regeneration Link S	1.05	0.07	2.039	A	A
4 - Phase 2 Access W	0.12	0.01	2.809	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.01	0.27	2.400	A	A
2 - Phase 2 Access E	0.60	0.04	3.304	A	A
3 - Regeneration Link S	1.31	0.09	2.079	A	A
4 - Phase 2 Access W	0.16	0.01	2.852	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.05	0.27	2.400	A	A
2 - Phase 2 Access E	0.61	0.04	3.305	A	A
3 - Regeneration Link S	1.32	0.09	2.079	A	A
4 - Phase 2 Access W	0.16	0.01	2.853	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.20	0.21	2.284	A	A
2 - Phase 2 Access E	0.48	0.03	3.159	A	A
3 - Regeneration Link S	1.07	0.07	2.041	A	A
4 - Phase 2 Access W	0.13	0.01	2.811	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.59	0.17	2.207	A	A
2 - Phase 2 Access E	0.39	0.03	3.057	A	A
3 - Regeneration Link S	0.89	0.06	2.012	A	A
4 - Phase 2 Access W	0.11	0.01	2.781	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, PM	2024 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.40	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	

4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	372.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	15.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	182.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	43.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	15.000	337.000	20.000
	2 - Phase 2 Access E	6.000	0.000	9.000	0.000
	3 - Regeneration Link S	147.000	20.000	0.000	15.000
	4 - Phase 2 Access W	25.000	0.000	18.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.04	0.91	0.05
	2 - Phase 2 Access E	0.40	0.00	0.60	0.00
	3 - Regeneration Link S	0.81	0.11	0.00	0.08
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.22	2.44	0.28	A	341.35	512.03	19.88	2.33	0.22	19.88	2.33
2 - Phase 2 Access E	0.01	3.24	0.01	A	13.76	20.65	1.07	3.12	0.01	1.07	3.12
3 - Regeneration Link S	0.11	2.12	0.12	A	167.01	250.51	8.67	2.08	0.10	8.67	2.08
4 - Phase 2 Access W	0.04	2.97	0.04	A	39.46	59.19	2.87	2.91	0.03	2.87	2.91

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	280.06	70.02	279.37	133.68	28.53	0.00	1896.23	1687.03	0.148	0.00	0.17	2.225	A
2 - Phase 2 Access E	11.29	2.82	11.26	26.29	281.61	0.00	1204.68	344.06	0.009	0.00	0.01	3.015	A
3 - Regeneration Link S	137.02	34.25	136.71	273.35	19.52	0.00	1902.27	1762.21	0.072	0.00	0.08	2.039	A
4 - Phase 2 Access W	32.37	8.09	32.27	26.29	129.94	0.00	1292.63	350.53	0.025	0.00	0.03	2.855	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	334.42	83.61	334.26	159.95	34.14	0.00	1892.46	1687.03	0.177	0.17	0.21	2.310	A
2 - Phase 2 Access E	13.48	3.37	13.48	31.45	336.95	0.00	1172.59	344.06	0.012	0.01	0.01	3.105	A
3 - Regeneration Link S	163.61	40.90	163.55	327.06	23.36	0.00	1899.70	1762.21	0.086	0.08	0.09	2.073	A
4 - Phase 2 Access W	38.66	9.66	38.63	31.45	155.46	0.00	1277.84	350.53	0.030	0.03	0.03	2.904	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	409.58	102.39	409.33	195.88	41.82	0.00	1887.32	1687.04	0.217	0.21	0.28	2.435	A
2 - Phase 2 Access E	16.52	4.13	16.50	38.52	412.63	0.00	1128.71	344.06	0.015	0.01	0.01	3.236	A
3 - Regeneration Link S	200.39	50.10	200.29	400.53	28.61	0.00	1896.18	1762.21	0.106	0.09	0.12	2.122	A
4 - Phase 2 Access W	47.34	11.84	47.31	38.51	190.38	0.00	1257.59	350.53	0.038	0.03	0.04	2.973	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	409.58	102.39	409.58	195.98	41.84	0.00	1887.30	1687.04	0.217	0.28	0.28	2.435	A
2 - Phase 2 Access E	16.52	4.13	16.52	38.54	412.88	0.00	1128.56	344.06	0.015	0.01	0.01	3.236	A
3 - Regeneration Link S	200.39	50.10	200.39	400.77	28.63	0.00	1896.17	1762.21	0.106	0.12	0.12	2.122	A
4 - Phase 2 Access W	47.34	11.84	47.34	38.54	190.48	0.00	1257.53	350.53	0.038	0.04	0.04	2.974	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	334.42	83.61	334.67	160.12	34.18	0.00	1892.44	1687.03	0.177	0.28	0.22	2.310	A
2 - Phase 2 Access E	13.48	3.37	13.50	31.48	337.37	0.00	1172.35	344.06	0.012	0.01	0.01	3.105	A
3 - Regeneration Link S	163.61	40.90	163.71	327.47	23.39	0.00	1899.68	1762.21	0.086	0.12	0.09	2.075	A
4 - Phase 2 Access W	38.66	9.66	38.69	31.49	155.61	0.00	1277.75	350.53	0.030	0.04	0.03	2.907	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	280.06	70.02	280.23	134.08	28.62	0.00	1896.17	1687.03	0.148	0.22	0.17	2.227	A
2 - Phase 2 Access E	11.29	2.82	11.30	26.36	282.49	0.00	1204.18	344.06	0.009	0.01	0.01	3.019	A
3 - Regeneration Link S	137.02	34.25	137.09	274.20	19.59	0.00	1902.23	1762.21	0.072	0.09	0.08	2.040	A
4 - Phase 2 Access W	32.37	8.09	32.39	26.36	130.31	0.00	1292.42	350.53	0.025	0.03	0.03	2.856	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.56	0.17	2.225	A	A
2 - Phase 2 Access E	0.14	0.01	3.015	A	A
3 - Regeneration Link S	1.15	0.08	2.039	A	A
4 - Phase 2 Access W	0.38	0.03	2.855	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.18	0.21	2.310	A	A
2 - Phase 2 Access E	0.17	0.01	3.105	A	A
3 - Regeneration Link S	1.40	0.09	2.073	A	A
4 - Phase 2 Access W	0.46	0.03	2.904	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.10	0.27	2.435	A	A
2 - Phase 2 Access E	0.22	0.01	3.236	A	A
3 - Regeneration Link S	1.75	0.12	2.122	A	A

4 - Phase 2 Access W	0.58	0.04	2.973	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.15	0.28	2.435	A	A
2 - Phase 2 Access E	0.22	0.01	3.236	A	A
3 - Regeneration Link S	1.77	0.12	2.122	A	A
4 - Phase 2 Access W	0.59	0.04	2.974	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.27	0.22	2.310	A	A
2 - Phase 2 Access E	0.18	0.01	3.105	A	A
3 - Regeneration Link S	1.43	0.10	2.075	A	A
4 - Phase 2 Access W	0.47	0.03	2.907	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.63	0.18	2.227	A	A
2 - Phase 2 Access E	0.14	0.01	3.019	A	A
3 - Regeneration Link S	1.18	0.08	2.040	A	A
4 - Phase 2 Access W	0.39	0.03	2.856	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, AM	2024 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.31	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	381.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	168.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	381.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	168.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.22	2.41	0.28	A	349.61	524.42	20.15	2.31	0.22	20.15	2.31
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.10	2.08	0.11	A	154.16	231.24	7.87	2.04	0.09	7.87	2.04
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Regeneration Link N	286.84	71.71	286.13	126.20	0.00	0.00	1915.37	1723.79	0.150	0.00	0.18	2.208	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	286.13	0.00	1202.06	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	126.48	31.62	126.20	286.13	0.00	0.00	1915.37	1723.79	0.066	0.00	0.07	2.012	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	126.20	0.00	1294.81	285.59	0.000	0.00	0.00	0.000	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	342.51	85.63	342.35	150.97	0.00	0.00	1915.37	1723.79	0.179	0.18	0.22	2.288	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	342.35	0.00	1169.47	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	151.03	37.76	150.97	342.35	0.00	0.00	1915.37	1723.79	0.079	0.07	0.09	2.040	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	150.97	0.00	1280.44	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	419.49	104.87	419.24	184.89	0.00	0.00	1915.37	1723.78	0.219	0.22	0.28	2.406	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	419.24	0.00	1124.88	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	184.97	46.24	184.89	419.24	0.00	0.00	1915.37	1723.79	0.097	0.09	0.11	2.080	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	184.89	0.00	1260.77	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	419.49	104.87	419.49	184.97	0.00	0.00	1915.37	1723.78	0.219	0.28	0.28	2.406	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	419.49	0.00	1124.73	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	184.97	46.24	184.97	419.49	0.00	0.00	1915.37	1723.79	0.097	0.11	0.11	2.080	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	184.97	0.00	1260.72	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	342.51	85.63	342.76	151.11	0.00	0.00	1915.37	1723.79	0.179	0.28	0.22	2.290	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	342.76	0.00	1169.23	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	151.03	37.76	151.11	342.76	0.00	0.00	1915.37	1723.79	0.079	0.11	0.09	2.041	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	151.11	0.00	1280.36	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	286.84	71.71	287.00	126.54	0.00	0.00	1915.37	1723.79	0.150	0.22	0.18	2.210	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	287.00	0.00	1201.56	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	126.48	31.62	126.54	287.00	0.00	0.00	1915.37	1723.79	0.066	0.09	0.07	2.013	A

4 - Phase 2 Access W	0.00	0.00	0.00	0.00	126.54	0.00	1294.61	285.59	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.60	0.17	2.208	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.05	0.07	2.012	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.22	0.21	2.288	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.27	0.08	2.040	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.15	0.28	2.406	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.59	0.11	2.080	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.20	0.28	2.406	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.60	0.11	2.080	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.31	0.22	2.290	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.30	0.09	2.041	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.68	0.18	2.210	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.07	0.07	2.013	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, PM	2024 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.26	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access	3.10	5.00	15.00	22.50	40.00	27.50	

W							

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	335.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	0.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	225.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	0.000	335.000	0.000
	2 - Phase 2 Access E	0.000	0.000	0.000	0.000
	3 - Regeneration Link S	225.000	0.000	0.000	0.000
	4 - Phase 2 Access W	0.000	0.000	0.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.00	1.00	0.00
	2 - Phase 2 Access E	0.25	0.25	0.25	0.25
	3 - Regeneration Link S	1.00	0.00	0.00	0.00
	4 - Phase 2 Access W	0.25	0.25	0.25	0.25

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.19	2.33	0.24	A	307.40	461.10	17.24	2.24	0.19	17.24	2.24
2 - Phase 2 Access E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 - Regeneration Link S	0.13	2.16	0.15	A	206.46	309.70	10.87	2.11	0.12	10.87	2.11
4 - Phase 2 Access W	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	252.21	63.05	251.60	169.00	0.00	0.00	1915.37	1723.79	0.132	0.00	0.15	2.164	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	251.60	0.00	1222.09	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	169.39	42.35	169.00	251.60	0.00	0.00	1915.37	1723.79	0.088	0.00	0.10	2.061	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	169.00	0.00	1269.98	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	301.16	75.29	301.02	202.19	0.00	0.00	1915.37	1723.79	0.157	0.15	0.19	2.229	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	301.02	0.00	1193.43	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	202.27	50.57	202.19	301.02	0.00	0.00	1915.37	1723.79	0.106	0.10	0.12	2.101	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	202.19	0.00	1250.74	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	368.84	92.21	368.64	247.61	0.00	0.00	1915.37	1723.78	0.193	0.19	0.24	2.327	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	368.64	0.00	1154.22	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	247.73	61.93	247.61	368.64	0.00	0.00	1915.37	1723.79	0.129	0.12	0.15	2.158	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	247.61	0.00	1224.40	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	368.84	92.21	368.84	247.73	0.00	0.00	1915.37	1723.78	0.193	0.24	0.24	2.327	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	368.84	0.00	1154.10	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	247.73	61.93	247.73	368.84	0.00	0.00	1915.37	1723.79	0.129	0.15	0.15	2.158	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	247.73	0.00	1224.33	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	301.16	75.29	301.36	202.39	0.00	0.00	1915.37	1723.79	0.157	0.24	0.19	2.232	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	301.36	0.00	1193.23	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	202.27	50.57	202.39	301.36	0.00	0.00	1915.37	1723.79	0.106	0.15	0.12	2.101	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	202.39	0.00	1250.62	285.59	0.000	0.00	0.00	0.000	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	252.21	63.05	252.35	169.48	0.00	0.00	1915.37	1723.79	0.132	0.19	0.15	2.166	A
2 - Phase 2 Access E	0.00	0.00	0.00	0.00	252.35	0.00	1221.65	285.59	0.000	0.00	0.00	0.000	A
3 - Regeneration Link S	169.39	42.35	169.48	252.35	0.00	0.00	1915.37	1723.79	0.088	0.12	0.10	2.063	A
4 - Phase 2 Access W	0.00	0.00	0.00	0.00	169.48	0.00	1269.71	285.59	0.000	0.00	0.00	0.000	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.24	0.15	2.164	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.43	0.10	2.061	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.76	0.18	2.229	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.75	0.12	2.101	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.53	0.24	2.327	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	2.20	0.15	2.158	A	A

4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.57	0.24	2.327	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	2.22	0.15	2.158	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.84	0.19	2.232	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.79	0.12	2.101	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.30	0.15	2.166	A	A
2 - Phase 2 Access E	0.00	0.00	0.000	A	A
3 - Regeneration Link S	1.47	0.10	2.063	A	A
4 - Phase 2 Access W	0.00	0.00	0.000	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, AM	2024 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS

1	(untitled)	Roundabout	1,2,3,4				2.48	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	
4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	438.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	40.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	223.00	100.000

4 - Phase 2 Access W	ONE HOUR	✓	12.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	6.000	412.000	20.000
	2 - Phase 2 Access E	17.000	0.000	23.000	0.000
	3 - Regeneration Link S	200.000	8.000	0.000	15.000
	4 - Phase 2 Access W	7.000	0.000	5.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.01	0.94	0.05
	2 - Phase 2 Access E	0.43	0.00	0.58	0.00
	3 - Regeneration Link S	0.90	0.04	0.00	0.07
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.25	2.53	0.34	A	401.92	602.87	24.13	2.40	0.27	24.13	2.40
2 - Phase 2 Access E	0.04	3.44	0.04	A	36.70	55.06	3.02	3.29	0.03	3.02	3.29
3 - Regeneration Link S	0.13	2.19	0.15	A	204.63	306.94	10.92	2.13	0.12	10.92	2.13
4 - Phase 2 Access W	0.01	2.97	0.01	A	11.01	16.52	0.80	2.91	0.01	0.80	2.91

Main Results for each time segment

Main results: (07:15-07:30)

	Total	Junction	Entry		Circulating	Pedestrian		Saturation		Start	End		

Name	Demand (PCU/hr)	Arrivals (PCU)	Flow (PCU/hr)	Exit Flow (PCU/hr)	Flow (PCU/hr)	Demand (Ped/hr)	Capacity (PCU/hr)	Capacity (PCU/hr)	RFC	Queue (PCU)	Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	329.75	82.44	328.92	168.23	9.76	0.00	1908.82	1778.35	0.173	0.00	0.21	2.277	A
2 - Phase 2 Access E	30.11	7.53	30.01	10.51	328.16	0.00	1177.69	269.55	0.026	0.00	0.03	3.136	A
3 - Regeneration Link S	167.89	41.97	167.50	330.40	27.77	0.00	1896.74	1784.05	0.089	0.00	0.10	2.081	A
4 - Phase 2 Access W	9.03	2.26	9.01	26.29	168.99	0.00	1269.99	336.61	0.007	0.00	0.01	2.854	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	393.75	98.44	393.55	201.28	11.68	0.00	1907.53	1778.35	0.206	0.21	0.26	2.377	A
2 - Phase 2 Access E	35.96	8.99	35.93	12.58	392.65	0.00	1140.30	269.55	0.032	0.03	0.03	3.259	A
3 - Regeneration Link S	200.47	50.12	200.39	395.34	33.24	0.00	1893.07	1784.05	0.106	0.10	0.12	2.126	A
4 - Phase 2 Access W	10.79	2.70	10.78	31.45	202.18	0.00	1250.74	336.61	0.009	0.01	0.01	2.902	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	482.25	120.56	481.93	246.50	14.31	0.00	1905.77	1778.35	0.253	0.26	0.34	2.528	A
2 - Phase 2 Access E	44.04	11.01	44.00	15.41	480.83	0.00	1089.16	269.55	0.040	0.03	0.04	3.443	A
3 - Regeneration Link S	245.53	61.38	245.40	484.13	40.71	0.00	1888.06	1784.05	0.130	0.12	0.15	2.191	A
4 - Phase 2 Access W	13.21	3.30	13.20	38.51	247.60	0.00	1224.41	336.61	0.011	0.01	0.01	2.971	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	482.25	120.56	482.24	246.63	14.31	0.00	1905.77	1778.35	0.253	0.34	0.34	2.528	A
2 - Phase 2 Access E	44.04	11.01	44.04	15.41	481.14	0.00	1088.98	269.55	0.040	0.04	0.04	3.444	A
3 - Regeneration Link S	245.53	61.38	245.53	484.45	40.74	0.00	1888.04	1784.05	0.130	0.15	0.15	2.191	A
4 - Phase 2 Access W	13.21	3.30	13.21	38.54	247.73	0.00	1224.33	336.61	0.011	0.01	0.01	2.971	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	393.75	98.44	394.06	201.50	11.69	0.00	1907.52	1778.35	0.206	0.34	0.26	2.380	A
2 - Phase 2 Access E	35.96	8.99	36.00	12.59	393.16	0.00	1140.00	269.55	0.032	0.04	0.03	3.260	A
3 - Regeneration Link S	200.47	50.12	200.59	395.87	33.29	0.00	1893.04	1784.05	0.106	0.15	0.12	2.128	A
4 - Phase 2 Access W	10.79	2.70	10.80	31.49	202.40	0.00	1250.62	336.61	0.009	0.01	0.01	2.905	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	329.75	82.44	329.96	168.73	9.79	0.00	1908.80	1778.35	0.173	0.26	0.21	2.281	A
2 - Phase 2 Access E	30.11	7.53	30.14	10.55	329.20	0.00	1177.09	269.55	0.026	0.03	0.03	3.138	A
3 -													

Regeneration Link S	167.89	41.97	167.97	331.47	27.88	0.00	1896.67	1784.05	0.089	0.12	0.10	2.083	A
4 - Phase 2 Access W	9.03	2.26	9.04	26.37	169.48	0.00	1269.71	336.61	0.007	0.01	0.01	2.855	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.08	0.21	2.277	A	A
2 - Phase 2 Access E	0.39	0.03	3.136	A	A
3 - Regeneration Link S	1.43	0.10	2.081	A	A
4 - Phase 2 Access W	0.11	0.01	2.854	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.85	0.26	2.377	A	A
2 - Phase 2 Access E	0.48	0.03	3.259	A	A
3 - Regeneration Link S	1.76	0.12	2.126	A	A
4 - Phase 2 Access W	0.13	0.01	2.902	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	5.00	0.33	2.528	A	A
2 - Phase 2 Access E	0.62	0.04	3.443	A	A
3 - Regeneration Link S	2.22	0.15	2.191	A	A
4 - Phase 2 Access W	0.16	0.01	2.971	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	5.07	0.34	2.528	A	A
2 - Phase 2 Access E	0.63	0.04	3.444	A	A
3 - Regeneration Link S	2.24	0.15	2.191	A	A
4 - Phase 2 Access W	0.16	0.01	2.971	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.96	0.26	2.380	A	A
2 - Phase 2 Access E	0.50	0.03	3.260	A	A
3 - Regeneration Link S	1.80	0.12	2.128	A	A
4 - Phase 2 Access W	0.13	0.01	2.905	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.17	0.21	2.281	A	A
2 - Phase 2 Access E	0.40	0.03	3.138	A	A
3 - Regeneration Link S	1.47	0.10	2.083	A	A
4 - Phase 2 Access W	0.11	0.01	2.855	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, PM	2024 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				2.46	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Regeneration Link N	1	1 - Regeneration Link N	
2 - Phase 2 Access E	2	2 - Phase 2 Access E	
3 - Regeneration Link S	3	3 - Regeneration Link S	
4 - Phase 2 Access W	4	4 - Phase 2 Access W	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Regeneration Link N	0.00	99999.00		0.00
2 - Phase 2 Access E	0.00	99999.00		0.00
3 - Regeneration Link S	0.00	99999.00		0.00
4 - Phase 2 Access W	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Regeneration Link N	5.00	7.50	15.00	22.50	40.00	45.00	
2 - Phase 2 Access E	3.10	5.00	15.00	22.50	40.00	27.50	
3 - Regeneration Link S	5.00	7.50	15.00	22.50	40.00	45.00	

4 - Phase 2 Access W	3.10	5.00	15.00	22.50	40.00	27.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Regeneration Link N		(calculated)	(calculated)	0.671	1915.368
2 - Phase 2 Access E		(calculated)	(calculated)	0.580	1367.985
3 - Regeneration Link S		(calculated)	(calculated)	0.671	1915.368
4 - Phase 2 Access W		(calculated)	(calculated)	0.580	1367.985

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Regeneration Link N	ONE HOUR	✓	397.00	100.000
2 - Phase 2 Access E	ONE HOUR	✓	15.00	100.000
3 - Regeneration Link S	ONE HOUR	✓	295.00	100.000
4 - Phase 2 Access W	ONE HOUR	✓	43.00	100.000

Turning Proportions

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

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.000	15.000	362.000	20.000
	2 - Phase 2 Access E	6.000	0.000	9.000	0.000
	3 - Regeneration Link S	260.000	20.000	0.000	15.000
	4 - Phase 2 Access W	25.000	0.000	18.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.00	0.04	0.91	0.05
	2 - Phase 2 Access E	0.40	0.00	0.60	0.00
	3 - Regeneration Link S	0.88	0.07	0.00	0.05
	4 - Phase 2 Access W	0.58	0.00	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	1.000	1.000	1.000	1.000
	2 - Phase 2 Access E	1.000	1.000	1.000	1.000
	3 - Regeneration Link S	1.000	1.000	1.000	1.000
	4 - Phase 2 Access W	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1 - Regeneration Link N	2 - Phase 2 Access E	3 - Regeneration Link S	4 - Phase 2 Access W
From	1 - Regeneration Link N	0.0	0.0	0.0	0.0
	2 - Phase 2 Access E	0.0	0.0	0.0	0.0
	3 - Regeneration Link S	0.0	0.0	0.0	0.0
	4 - Phase 2 Access W	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Regeneration Link N	0.23	2.48	0.30	A	364.29	546.44	21.54	2.37	0.24	21.54	2.37
2 - Phase 2 Access E	0.01	3.28	0.02	A	13.76	20.65	1.09	3.16	0.01	1.09	3.16
3 - Regeneration Link S	0.17	2.29	0.21	A	270.70	406.05	14.98	2.21	0.17	14.98	2.21
4 - Phase 2 Access W	0.04	3.16	0.04	A	39.46	59.19	3.02	3.06	0.03	3.02	3.06

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	298.88	74.72	298.14	218.54	28.53	0.00	1896.23	1745.08	0.158	0.00	0.19	2.251	A
2 - Phase 2 Access E	11.29	2.82	11.25	26.29	300.38	0.00	1193.80	316.72	0.009	0.00	0.01	3.043	A
3 - Regeneration Link S	222.09	55.52	221.56	292.11	19.52	0.00	1902.27	1771.41	0.117	0.00	0.13	2.142	A
4 - Phase 2 Access W	32.37	8.09	32.27	26.29	214.80	0.00	1243.43	319.55	0.026	0.00	0.03	2.971	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	356.89	89.22	356.71	261.48	34.14	0.00	1892.46	1745.08	0.189	0.19	0.23	2.343	A
2 - Phase 2 Access E	13.48	3.37	13.48	31.45	359.41	0.00	1159.57	316.72	0.012	0.01	0.01	3.140	A
3 - Regeneration Link S	265.20	66.30	265.08	349.52	23.36	0.00	1899.70	1771.41	0.140	0.13	0.16	2.202	A
4 - Phase 2 Access W	38.66	9.66	38.63	31.45	256.99	0.00	1218.96	319.55	0.032	0.03	0.03	3.049	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	437.11	109.28	436.83	320.22	41.81	0.00	1887.32	1745.08	0.232	0.23	0.30	2.481	A
2 - Phase 2 Access E	16.52	4.13	16.50	38.51	440.13	0.00	1112.76	316.72	0.015	0.01	0.02	3.283	A
3 - Regeneration Link S	324.80	81.20	324.62	428.02	28.61	0.00	1896.18	1771.41	0.171	0.16	0.21	2.290	A
4 - Phase 2 Access W	47.34	11.84	47.31	38.51	314.72	0.00	1185.49	319.55	0.040	0.03	0.04	3.162	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	437.11	109.28	437.10	320.40	41.84	0.00	1887.30	1745.08	0.232	0.30	0.30	2.481	A
2 - Phase 2 Access E	16.52	4.13	16.52	38.54	440.41	0.00	1112.60	316.72	0.015	0.02	0.02	3.283	A
3 - Regeneration Link S	324.80	81.20	324.80	428.29	28.63	0.00	1896.17	1771.41	0.171	0.21	0.21	2.290	A
4 - Phase 2 Access W	47.34	11.84	47.34	38.54	314.89	0.00	1185.39	319.55	0.040	0.04	0.04	3.162	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	356.89	89.22	357.17	261.78	34.19	0.00	1892.43	1745.08	0.189	0.30	0.23	2.346	A
2 - Phase 2 Access E	13.48	3.37	13.50	31.49	359.87	0.00	1159.31	316.72	0.012	0.02	0.01	3.143	A
3 - Regeneration Link S	265.20	66.30	265.37	349.97	23.39	0.00	1899.68	1771.41	0.140	0.21	0.16	2.202	A
4 - Phase 2 Access W	38.66	9.66	38.69	31.49	257.28	0.00	1218.79	319.55	0.032	0.04	0.03	3.049	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Regeneration Link N	298.88	74.72	299.06	219.20	28.63	0.00	1896.17	1745.08	0.158	0.23	0.19	2.255	A
2 - Phase 2 Access E	11.29	2.82	11.30	26.36	301.33	0.00	1193.25	316.72	0.009	0.01	0.01	3.045	A
3 - Regeneration Link S	222.09	55.52	222.21	293.04	19.59	0.00	1902.23	1771.41	0.117	0.16	0.13	2.144	A
4 - Phase 2 Access W	32.37	8.09	32.40	26.37	215.43	0.00	1243.06	319.55	0.026	0.03	0.03	2.975	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.76	0.18	2.251	A	A
2 - Phase 2 Access E	0.14	0.01	3.043	A	A
3 - Regeneration Link S	1.95	0.13	2.142	A	A
4 - Phase 2 Access W	0.39	0.03	2.971	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.44	0.23	2.343	A	A
2 - Phase 2 Access E	0.17	0.01	3.140	A	A
3 - Regeneration Link S	2.40	0.16	2.202	A	A
4 - Phase 2 Access W	0.48	0.03	3.049	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.45	0.30	2.481	A	A
2 - Phase 2 Access E	0.22	0.01	3.283	A	A
3 - Regeneration Link S	3.06	0.20	2.290	A	A

4 - Phase 2 Access W	0.61	0.04	3.162	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	4.51	0.30	2.481	A	A
2 - Phase 2 Access E	0.23	0.02	3.283	A	A
3 - Regeneration Link S	3.09	0.21	2.290	A	A
4 - Phase 2 Access W	0.62	0.04	3.162	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	3.54	0.24	2.346	A	A
2 - Phase 2 Access E	0.18	0.01	3.143	A	A
3 - Regeneration Link S	2.47	0.16	2.202	A	A
4 - Phase 2 Access W	0.50	0.03	3.049	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Regeneration Link N	2.84	0.19	2.255	A	A
2 - Phase 2 Access E	0.15	0.01	3.045	A	A
3 - Regeneration Link S	2.01	0.13	2.144	A	A
4 - Phase 2 Access W	0.41	0.03	2.975	A	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]
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Filename: SwadlincoteRd-RegenerationLink-DerbyRd Proposed Roundabout_v01.arc8
Path: \\lefs02\Projects\067895.100 TPLE Woodville\Q3-Design\3A-Calculations\TP\Junction Modelling\Junction Models for 24.07.2019 Submission
Report generation date: 24/07/2019 11:31:22

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2021 Base Reg Link 25%							
1 - Swadlincote Rd	0.93	5.24	0.48	A	1.09	5.54	0.52	A
2 - Regeneration Link	0.37	4.07	0.27	A	0.51	4.51	0.34	A
3 - Derby Rd	0.44	3.51	0.30	A	0.50	3.65	0.33	A
	A1 - 2021 Base Reg Link 25% with Dev							
1 - Swadlincote Rd	1.01	5.55	0.50	A	1.24	6.10	0.56	A
2 - Regeneration Link	0.44	4.28	0.31	A	0.64	4.91	0.39	A
3 - Derby Rd	0.49	3.68	0.33	A	0.59	3.94	0.37	A
	A1 - 2021 Base Reg Link 50%							
1 - Swadlincote Rd	0.77	4.99	0.43	A	0.81	4.92	0.45	A
2 - Regeneration Link	0.48	4.24	0.32	A	0.73	4.97	0.42	A
3 - Derby Rd	0.44	3.52	0.30	A	0.50	3.67	0.34	A
	A1 - 2021 Base Reg Link 50% with Dev							
1 - Swadlincote Rd	0.84	5.30	0.46	A	0.93	5.44	0.48	A
2 - Regeneration Link	0.56	4.47	0.36	A	0.89	5.44	0.47	A
3 - Derby Rd	0.49	3.70	0.33	A	0.63	4.03	0.39	A
	A1 - 2024 Base Reg Link 25%							
1 - Swadlincote Rd	1.02	5.50	0.51	A	1.21	5.86	0.55	A
2 - Regeneration Link	0.40	4.20	0.29	A	0.56	4.70	0.36	A
3 - Derby Rd	0.47	3.60	0.32	A	0.54	3.76	0.35	A
	A1 - 2024 Base Reg Link 25% with Dev							
1 - Swadlincote Rd	1.12	5.89	0.53	A	1.39	6.50	0.58	A
2 - Regeneration Link	0.48	4.43	0.32	A	0.70	5.14	0.41	A
3 - Derby Rd	0.52	3.78	0.34	A	0.64	4.07	0.39	A
	A1 - 2024 Base Reg Link 50%							
1 - Swadlincote Rd	0.84	5.22	0.46	A	0.89	5.14	0.47	A
2 - Regeneration Link	0.52	4.39	0.34	A	0.80	5.22	0.45	A
3 - Derby Rd	0.47	3.62	0.32	A	0.54	3.77	0.35	A
	A1 - 2024 Base Reg Link 50% with Dev							
1 - Swadlincote Rd	0.92	5.56	0.48	A	1.01	5.63	0.50	A
2 - Regeneration Link	0.60	4.64	0.38	A	0.99	5.77	0.50	A
3 - Derby Rd	0.53	3.80	0.35	A	0.64	4.08	0.39	A

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

"D1 - 2021 Base Reg Link 25%, AM " model duration: 07:15 - 08:45
"D2 - 2021 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D3 - 2021 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D4 - 2021 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D5 - 2021 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D6 - 2021 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D7 - 2021 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D8 - 2021 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15
"D9 - 2024 Base Reg Link 25%, AM" model duration: 07:15 - 08:45
"D10 - 2024 Base Reg Link 25%, PM" model duration: 16:45 - 18:15
"D11 - 2024 Base Reg Link 25% with Dev, AM" model duration: 07:15 - 08:45
"D12 - 2024 Base Reg Link 25% with Dev, PM" model duration: 16:45 - 18:15
"D13 - 2024 Base Reg Link 50%, AM" model duration: 07:15 - 08:45
"D14 - 2024 Base Reg Link 50%, PM" model duration: 16:45 - 18:15
"D15 - 2024 Base Reg Link 50% with Dev, AM" model duration: 07:15 - 08:45
"D16 - 2024 Base Reg Link 50% with Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 24/07/2019 11:31:12

File summary

Title	(untitled)
Location	
Site Number	
Date	12/06/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	RodriguezMartin_d
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) - 2021 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, AM	2021 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	585.00	100.000
2 - Regeneration Link	ONE HOUR	✓	301.00	100.000
3 - Derby Rd	ONE HOUR	✓	408.00	100.000

Turning Proportions

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

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	165.000	420.000
	2 - Regeneration Link	138.000	36.000	127.000
	3 - Derby Rd	310.000	98.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.28	0.72
	2 - Regeneration Link	0.46	0.12	0.42

	3 - Derby Rd	0.76	0.24	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.48	5.24	0.93	A	536.81	805.21	61.13	4.56	0.68	61.14	4.56
2 - Regeneration Link	0.27	4.07	0.37	A	276.20	414.30	25.54	3.70	0.28	25.54	3.70
3 - Derby Rd	0.30	3.51	0.44	A	374.39	561.58	30.33	3.24	0.34	30.33	3.24

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	440.42	110.10	438.51	336.12	100.54	0.00	1357.87	1175.96	0.324	0.00	0.48	3.908	A
2 - Regeneration Link	226.61	56.65	225.77	224.22	314.83	0.00	1304.31	985.49	0.174	0.00	0.21	3.338	A
3 - Derby Rd	307.16	76.79	306.15	410.09	130.51	0.00	1513.80	1235.60	0.203	0.00	0.25	2.978	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	525.90	131.48	525.27	402.42	120.37	0.00	1346.39	1175.96	0.391	0.48	0.64	4.377	A
2 - Regeneration Link	270.59	67.65	270.35	268.52	377.11	0.00	1266.80	985.49	0.214	0.21	0.27	3.612	A
3 - Derby Rd	366.78	91.70	366.51	491.18	156.28	0.00	1497.48	1235.60	0.245	0.25	0.32	3.183	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	644.10	161.02	642.93	492.73	147.38	0.00	1330.74	1175.96	0.484	0.64	0.93	5.225	A

2 - Regeneration Link	331.41	82.85	331.00	328.72	461.59	0.00	1215.93	985.49	0.273	0.27	0.37	4.066	A
3 - Derby Rd	449.22	112.30	448.77	601.25	191.34	0.00	1475.27	1235.60	0.305	0.32	0.44	3.504	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	644.10	161.02	644.08	493.25	147.53	0.00	1330.65	1175.96	0.484	0.93	0.93	5.243	A
2 - Regeneration Link	331.41	82.85	331.40	329.20	462.41	0.00	1215.44	985.49	0.273	0.37	0.37	4.071	A
3 - Derby Rd	449.22	112.30	449.21	602.24	191.57	0.00	1475.12	1235.60	0.305	0.44	0.44	3.508	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	525.90	131.48	527.05	403.26	120.62	0.00	1346.24	1175.96	0.391	0.93	0.65	4.400	A
2 - Regeneration Link	270.59	67.65	270.99	269.27	378.40	0.00	1266.03	985.49	0.214	0.37	0.27	3.618	A
3 - Derby Rd	366.78	91.70	367.23	492.74	156.65	0.00	1497.24	1235.60	0.245	0.44	0.33	3.188	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	440.42	110.10	441.07	337.60	100.98	0.00	1357.62	1175.96	0.324	0.65	0.48	3.931	A
2 - Regeneration Link	226.61	56.65	226.86	225.38	316.67	0.00	1303.20	985.49	0.174	0.27	0.21	3.344	A
3 - Derby Rd	307.16	76.79	307.44	412.38	131.14	0.00	1513.41	1235.60	0.203	0.33	0.26	2.987	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	6.97	0.46	3.908	A	A
2 - Regeneration Link	3.08	0.21	3.338	A	A
3 - Derby Rd	3.73	0.25	2.978	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	9.35	0.62	4.377	A	A
2 - Regeneration Link	3.99	0.27	3.612	A	A
3 - Derby Rd	4.78	0.32	3.183	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	13.54	0.90	5.225	A	A
2 - Regeneration Link	5.49	0.37	4.066	A	A
3 - Derby Rd	6.43	0.43	3.504	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	13.96	0.93	5.243	A	A
2 - Regeneration Link	5.60	0.37	4.071	A	A
3 - Derby Rd	6.54	0.44	3.508	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	9.93	0.66	4.400	A	A
2 - Regeneration Link	4.17	0.28	3.618	A	A
3 - Derby Rd	4.96	0.33	3.188	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.39	0.49	3.931	A	A
2 - Regeneration Link	3.22	0.21	3.344	A	A
3 - Derby Rd	3.89	0.26	2.987	A	A

(Default Analysis Set) - 2021 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25%, PM	2021 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.70	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00

3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	650.00	100.000
2 - Regeneration Link	ONE HOUR	✓	372.00	100.000
3 - Derby Rd	ONE HOUR	✓	449.00	100.000

Turning Proportions

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

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	217.000	433.000
	2 - Regeneration Link	156.000	11.000	205.000
	3 - Derby Rd	381.000	68.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.33	0.67
	2 - Regeneration Link	0.42	0.03	0.55
	3 - Derby Rd	0.85	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
	1 - Swadlincote Rd	1.000	1.000	1.000

From	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.52	5.54	1.09	A	596.45	894.68	70.81	4.75	0.79	70.82	4.75
2 - Regeneration Link	0.34	4.51	0.51	A	341.35	512.03	34.25	4.01	0.38	34.25	4.01
3 - Derby Rd	0.33	3.65	0.50	A	412.01	618.02	34.46	3.35	0.38	34.47	3.35

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	489.35	122.34	487.18	402.85	59.27	0.00	1381.77	1283.72	0.354	0.00	0.54	4.014	A
2 - Regeneration Link	280.06	70.02	278.97	221.91	324.53	0.00	1298.47	978.93	0.216	0.00	0.27	3.528	A
3 - Derby Rd	338.03	84.51	336.89	478.27	125.23	0.00	1517.15	1318.09	0.223	0.00	0.29	3.047	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	584.34	146.08	583.58	482.34	70.96	0.00	1375.00	1283.72	0.425	0.54	0.73	4.545	A
2 - Regeneration Link	334.42	83.61	334.08	265.79	388.76	0.00	1259.79	978.93	0.265	0.27	0.36	3.888	A
3 - Derby Rd	403.64	100.91	403.32	572.86	149.98	0.00	1501.47	1318.09	0.269	0.29	0.37	3.278	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	715.66	178.92	714.25	590.55	86.88	0.00	1365.78	1283.72	0.524	0.73	1.09	5.513	A
2 - Regeneration Link	409.58	102.39	408.98	325.33	475.80	0.00	1207.38	978.93	0.339	0.36	0.51	4.506	A
3 - Derby Rd	494.36	123.59	493.83	701.18	183.60	0.00	1480.17	1318.09	0.334	0.37	0.50	3.648	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	715.66	178.92	715.64	591.24	86.98	0.00	1365.72	1283.72	0.524	1.09	1.09	5.537	A
2 -													

Regeneration Link	409.58	102.39	409.57	325.89	476.72	0.00	1206.82	978.93	0.339	0.51	0.51	4.515	A
3 - Derby Rd	494.36	123.59	494.35	702.43	183.87	0.00	1480.01	1318.09	0.334	0.50	0.50	3.651	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	584.34	146.08	585.73	483.44	71.12	0.00	1374.91	1283.72	0.425	1.09	0.75	4.569	A
2 - Regeneration Link	334.42	83.61	335.01	266.66	390.19	0.00	1258.93	978.93	0.266	0.51	0.36	3.898	A
3 - Derby Rd	403.64	100.91	404.16	574.80	150.40	0.00	1501.21	1318.09	0.269	0.50	0.37	3.284	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	489.35	122.34	490.13	404.70	59.54	0.00	1381.62	1283.72	0.354	0.75	0.55	4.041	A
2 - Regeneration Link	280.06	70.02	280.41	223.16	326.50	0.00	1297.28	978.93	0.216	0.36	0.28	3.540	A
3 - Derby Rd	338.03	84.51	338.36	481.03	125.88	0.00	1516.74	1318.09	0.223	0.37	0.29	3.057	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.95	0.53	4.014	A	A
2 - Regeneration Link	4.02	0.27	3.528	A	A
3 - Derby Rd	4.20	0.28	3.047	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	10.75	0.72	4.545	A	A
2 - Regeneration Link	5.30	0.35	3.888	A	A
3 - Derby Rd	5.41	0.36	3.278	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	15.82	1.05	5.513	A	A
2 - Regeneration Link	7.49	0.50	4.506	A	A
3 - Derby Rd	7.35	0.49	3.648	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	16.37	1.09	5.537	A	A
2 - Regeneration Link	7.66	0.51	4.515	A	A
3 - Derby Rd	7.49	0.50	3.651	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	11.47	0.76	4.569	A	A
2 - Regeneration Link	5.56	0.37	3.898	A	A
3 - Derby Rd	5.63	0.38	3.284	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.45	0.56	4.041	A	A

2 - Regeneration Link	4.22	0.28	3.540	A	A
3 - Derby Rd	4.38	0.29	3.057	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, AM	2021 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.64	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	598.00	100.000
2 - Regeneration Link	ONE HOUR	✓	340.00	100.000
3 - Derby Rd	ONE HOUR	✓	437.00	100.000

Turning Proportions

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

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	178.000	420.000
	2 - Regeneration Link	153.000	45.000	142.000
	3 - Derby Rd	310.000	127.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.30	0.70
	2 - Regeneration Link	0.45	0.13	0.42
	3 - Derby Rd	0.71	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.50	5.55	1.01	A	548.74	823.10	65.33	4.76	0.73	65.33	4.76
2 - Regeneration Link	0.31	4.28	0.44	A	311.99	467.98	30.01	3.85	0.33	30.01	3.85
3 - Derby Rd	0.33	3.68	0.49	A	401.00	601.50	33.78	3.37	0.38	33.78	3.37

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	450.21	112.55	448.20	347.34	129.04	0.00	1341.37	1132.61	0.336	0.00	0.50	4.022	A
2 - Regeneration Link	255.97	63.99	255.00	262.45	314.79	0.00	1304.33	1014.87	0.196	0.00	0.24	3.427	A
3 - Derby Rd	329.00	82.25	327.88	421.29	148.50	0.00	1502.41	1222.09	0.219	0.00	0.28	3.062	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	537.59	134.40	536.89	415.87	154.49	0.00	1326.62	1132.61	0.405	0.50	0.68	4.555	A
2 - Regeneration Link	305.65	76.41	305.36	314.30	377.08	0.00	1266.82	1014.87	0.241	0.24	0.32	3.744	A
3 - Derby Rd	392.85	98.21	392.54	504.62	177.83	0.00	1483.83	1222.09	0.265	0.28	0.36	3.299	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	658.41	164.60	657.10	509.17	189.16	0.00	1306.55	1132.61	0.504	0.68	1.00	5.532	A
2 - Regeneration Link	374.35	93.59	373.84	384.75	461.51	0.00	1215.98	1014.87	0.308	0.32	0.44	4.272	A
3 - Derby Rd	481.15	120.29	480.62	617.64	217.71	0.00	1458.57	1222.09	0.330	0.36	0.49	3.679	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	658.41	164.60	658.39	509.77	189.37	0.00	1306.42	1132.61	0.504	1.00	1.01	5.554	A
2 - Regeneration Link	374.35	93.59	374.34	385.35	462.41	0.00	1215.44	1014.87	0.308	0.44	0.44	4.279	A
3 - Derby Rd	481.15	120.29	481.14	618.75	218.00	0.00	1458.38	1222.09	0.330	0.49	0.49	3.682	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	537.59	134.40	538.88	416.82	154.84	0.00	1326.42	1132.61	0.405	1.01	0.69	4.580	A

2 - Regeneration Link	305.65	76.41	306.15	315.24	378.48	0.00	1265.98	1014.87	0.241	0.44	0.32	3.754	A
3 - Derby Rd	392.85	98.21	393.37	506.34	178.29	0.00	1483.54	1222.09	0.265	0.49	0.36	3.303	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	450.21	112.55	450.92	348.93	129.62	0.00	1341.03	1132.61	0.336	0.69	0.51	4.049	A
2 - Regeneration Link	255.97	63.99	256.27	263.84	316.70	0.00	1303.18	1014.87	0.196	0.32	0.25	3.441	A
3 - Derby Rd	329.00	82.25	329.32	423.73	149.24	0.00	1501.94	1222.09	0.219	0.36	0.28	3.072	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.33	0.49	4.022	A	A
2 - Regeneration Link	3.57	0.24	3.427	A	A
3 - Derby Rd	4.11	0.27	3.062	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	9.92	0.66	4.555	A	A
2 - Regeneration Link	4.67	0.31	3.744	A	A
3 - Derby Rd	5.30	0.35	3.299	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	14.61	0.97	5.532	A	A
2 - Regeneration Link	6.50	0.43	4.272	A	A
3 - Derby Rd	7.21	0.48	3.679	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	15.11	1.01	5.554	A	A
2 - Regeneration Link	6.64	0.44	4.279	A	A
3 - Derby Rd	7.35	0.49	3.682	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	10.57	0.70	4.580	A	A
2 - Regeneration Link	4.89	0.33	3.754	A	A
3 - Derby Rd	5.52	0.37	3.303	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.78	0.52	4.049	A	A
2 - Regeneration Link	3.74	0.25	3.441	A	A
3 - Derby Rd	4.28	0.29	3.072	A	A

(Default Analysis Set) - 2021 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 25% with Dev, PM	2021 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				5.11	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	672.00	100.000
2 - Regeneration Link	ONE HOUR	✓	430.00	100.000
3 - Derby Rd	ONE HOUR	✓	494.00	100.000

Turning Proportions

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

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	239.000	433.000
	2 - Regeneration Link	176.000	22.000	232.000
	3 - Derby Rd	381.000	113.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.36	0.64
	2 - Regeneration Link	0.41	0.05	0.54
	3 - Derby Rd	0.77	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)

1 - Swadlincote Rd	0.56	6.10	1.24	A	616.64	924.96	78.79	5.11	0.88	78.80	5.11
2 - Regeneration Link	0.39	4.91	0.64	A	394.58	591.86	42.24	4.28	0.47	42.24	4.28
3 - Derby Rd	0.37	3.94	0.59	A	453.30	679.95	40.25	3.55	0.45	40.25	3.55

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	505.92	126.48	503.56	417.79	101.27	0.00	1357.45	1213.82	0.373	0.00	0.59	4.203	A
2 - Regeneration Link	323.73	80.93	322.41	280.36	324.47	0.00	1298.51	1022.92	0.249	0.00	0.33	3.683	A
3 - Derby Rd	371.91	92.98	370.60	498.41	148.46	0.00	1502.44	1298.10	0.248	0.00	0.33	3.178	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	604.11	151.03	603.25	500.25	121.25	0.00	1345.88	1213.82	0.449	0.59	0.81	4.841	A
2 - Regeneration Link	386.56	96.64	386.12	335.80	388.70	0.00	1259.83	1022.92	0.307	0.33	0.44	4.118	A
3 - Derby Rd	444.10	111.02	443.71	597.03	177.80	0.00	1483.85	1298.10	0.299	0.33	0.42	3.461	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	739.89	184.97	738.17	612.43	148.45	0.00	1330.13	1213.82	0.556	0.81	1.24	6.065	A
2 - Regeneration Link	473.44	118.36	472.64	410.98	475.64	0.00	1207.47	1022.92	0.392	0.44	0.64	4.894	A
3 - Derby Rd	543.90	135.98	543.24	730.64	217.63	0.00	1458.61	1298.10	0.373	0.42	0.59	3.930	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	739.89	184.97	739.85	613.26	148.64	0.00	1330.02	1213.82	0.556	1.24	1.24	6.099	A
2 - Regeneration Link	473.44	118.36	473.43	411.77	476.72	0.00	1206.82	1022.92	0.392	0.64	0.64	4.908	A
3 - Derby Rd	543.90	135.98	543.90	732.15	218.00	0.00	1458.39	1298.10	0.373	0.59	0.59	3.936	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	604.11	151.03	605.80	501.56	121.55	0.00	1345.70	1213.82	0.449	1.24	0.82	4.878	A
2 - Regeneration Link	386.56	96.64	387.35	337.01	390.35	0.00	1258.83	1022.92	0.307	0.64	0.45	4.135	A
3 - Derby Rd	444.10	111.02	444.75	599.33	178.36	0.00	1483.49	1298.10	0.299	0.59	0.43	3.467	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote	505.92	126.48	506.81	419.83	101.75	0.00	1357.17	1213.82	0.373	0.82	0.60	4.237	A

Rd													
2 - Regeneration Link	323.73	80.93	324.17	282.00	326.56	0.00	1297.24	1022.92	0.250	0.45	0.33	3.700	A
3 - Derby Rd	371.91	92.98	372.30	501.46	149.27	0.00	1501.92	1298.10	0.248	0.43	0.33	3.187	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.60	0.57	4.203	A	A
2 - Regeneration Link	4.84	0.32	3.683	A	A
3 - Derby Rd	4.81	0.32	3.178	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	11.82	0.79	4.841	A	A
2 - Regeneration Link	6.48	0.43	4.118	A	A
3 - Derby Rd	6.27	0.42	3.461	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	17.90	1.19	6.065	A	A
2 - Regeneration Link	9.36	0.62	4.894	A	A
3 - Derby Rd	8.69	0.58	3.930	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	18.61	1.24	6.099	A	A
2 - Regeneration Link	9.62	0.64	4.908	A	A
3 - Derby Rd	8.88	0.59	3.936	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	12.69	0.85	4.878	A	A
2 - Regeneration Link	6.83	0.46	4.135	A	A
3 - Derby Rd	6.56	0.44	3.467	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	9.18	0.61	4.237	A	A
2 - Regeneration Link	5.10	0.34	3.700	A	A
3 - Derby Rd	5.03	0.34	3.187	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, AM	2021 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.31	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	504.00	100.000
2 - Regeneration Link	ONE HOUR	✓	370.00	100.000
3 - Derby Rd	ONE HOUR	✓	407.00	100.000

Turning Proportions

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

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	145.000	359.000
	2 - Regeneration Link	138.000	44.000	188.000
	3 - Derby Rd	232.000	175.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.29	0.71
	2 - Regeneration Link	0.37	0.12	0.51
	3 - Derby Rd	0.57	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.43	4.99	0.77	A	462.48	693.72	50.70	4.39	0.56	50.70	4.39
2 - Regeneration Link	0.32	4.24	0.48	A	339.52	509.28	32.43	3.82	0.36	32.43	3.82
3 - Derby Rd	0.30	3.52	0.44	A	373.47	560.21	30.36	3.25	0.34	30.36	3.25

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	379.44	94.86	377.84	277.58	164.31	0.00	1320.94	1027.73	0.287	0.00	0.40	3.810	A
2 - Regeneration Link	278.56	69.64	277.50	273.02	269.13	0.00	1331.83	1053.06	0.209	0.00	0.26	3.411	A
3 - Derby Rd	306.41	76.60	305.40	410.13	136.50	0.00	1510.01	1268.35	0.203	0.00	0.25	2.985	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	453.09	113.27	452.57	332.35	196.72	0.00	1302.17	1027.73	0.348	0.40	0.53	4.234	A
2 - Regeneration Link	332.62	83.16	332.31	326.92	322.37	0.00	1299.77	1053.06	0.256	0.26	0.34	3.721	A
3 - Derby Rd	365.88	91.47	365.61	491.21	163.46	0.00	1492.93	1268.35	0.245	0.25	0.32	3.193	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	554.91	138.73	553.99	406.92	240.86	0.00	1276.60	1027.73	0.435	0.53	0.76	4.976	A
2 - Regeneration Link	407.38	101.84	406.84	400.25	394.61	0.00	1256.27	1053.06	0.324	0.34	0.48	4.235	A
3 - Derby Rd	448.12	112.03	447.66	601.32	200.12	0.00	1469.71	1268.35	0.305	0.32	0.44	3.520	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	554.91	138.73	554.90	407.37	241.12	0.00	1276.46	1027.73	0.435	0.76	0.77	4.988	A
2 - Regeneration Link	407.38	101.84	407.37	400.76	395.26	0.00	1255.88	1053.06	0.324	0.48	0.48	4.242	A
3 - Derby Rd	448.12	112.03	448.11	602.24	200.38	0.00	1469.54	1268.35	0.305	0.44	0.44	3.523	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	453.09	113.27	454.00	333.07	197.13	0.00	1301.93	1027.73	0.348	0.77	0.54	4.251	A
2 - Regeneration Link	332.62	83.16	333.15	327.74	323.38	0.00	1299.16	1053.06	0.256	0.48	0.35	3.727	A
3 - Derby Rd	365.88	91.47	366.33	492.66	163.87	0.00	1492.67	1268.35	0.245	0.44	0.33	3.199	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	379.44	94.86	379.97	278.84	165.03	0.00	1320.52	1027.73	0.287	0.54	0.41	3.828	A
2 - Regeneration Link	278.56	69.64	278.88	274.35	270.65	0.00	1330.91	1053.06	0.209	0.35	0.27	3.422	A
3 - Derby Rd	306.41	76.60	306.69	412.35	137.18	0.00	1509.58	1268.35	0.203	0.33	0.26	2.995	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	5.87	0.39	3.810	A	A
2 - Regeneration Link	3.87	0.26	3.411	A	A

3 - Derby Rd	3.73	0.25	2.985	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.80	0.52	4.234	A	A
2 - Regeneration Link	5.05	0.34	3.721	A	A
3 - Derby Rd	4.78	0.32	3.193	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	11.14	0.74	4.976	A	A
2 - Regeneration Link	7.01	0.47	4.235	A	A
3 - Derby Rd	6.44	0.43	3.520	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	11.46	0.76	4.988	A	A
2 - Regeneration Link	7.17	0.48	4.242	A	A
3 - Derby Rd	6.55	0.44	3.523	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.24	0.55	4.251	A	A
2 - Regeneration Link	5.28	0.35	3.727	A	A
3 - Derby Rd	4.97	0.33	3.199	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	6.19	0.41	3.828	A	A
2 - Regeneration Link	4.05	0.27	3.422	A	A
3 - Derby Rd	3.89	0.26	2.995	A	A

(Default Analysis Set) - 2021 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50%, PM	2021 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.55	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	542.00	100.000
2 - Regeneration Link	ONE HOUR	✓	483.00	100.000

3 - Derby Rd	ONE HOUR	✓	450.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	183.000	359.000
	2 - Regeneration Link	156.000	15.000	312.000
	3 - Derby Rd	327.000	123.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.34	0.66
	2 - Regeneration Link	0.32	0.03	0.65
	3 - Derby Rd	0.73	0.27	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.45	4.92	0.81	A	497.35	746.02	53.94	4.34	0.60	53.94	4.34
2 - Regeneration Link	0.42	4.97	0.73	A	443.21	664.81	47.91	4.32	0.53	47.91	4.32
3 - Derby Rd	0.34	3.67	0.50	A	412.93	619.39	34.65	3.36	0.39	34.65	3.36

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	408.05	102.01	406.33	362.31	103.53	0.00	1356.14	1181.29	0.301	0.00	0.43	3.784	A
2 - Regeneration Link	363.63	90.91	362.13	240.73	269.14	0.00	1331.82	1022.72	0.273	0.00	0.37	3.708	A

3 - Derby Rd	338.78	84.70	337.64	503.07	128.21	0.00	1515.26	1367.11	0.224	0.00	0.29	3.054	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	487.25	121.81	486.70	433.81	123.96	0.00	1344.31	1181.29	0.362	0.43	0.56	4.195	A
2 - Regeneration Link	434.21	108.55	433.71	288.28	322.37	0.00	1299.77	1022.72	0.334	0.37	0.50	4.155	A
3 - Derby Rd	404.54	101.14	404.22	602.53	153.55	0.00	1499.21	1367.11	0.270	0.29	0.37	3.287	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	596.75	149.19	595.78	531.11	151.77	0.00	1328.20	1181.29	0.449	0.56	0.81	4.909	A
2 - Regeneration Link	531.79	132.95	530.88	352.92	394.62	0.00	1256.26	1022.72	0.423	0.50	0.73	4.957	A
3 - Derby Rd	495.46	123.86	494.92	737.55	187.95	0.00	1477.42	1367.11	0.335	0.37	0.50	3.662	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	596.75	149.19	596.74	531.78	151.94	0.00	1328.10	1181.29	0.449	0.81	0.81	4.921	A
2 - Regeneration Link	531.79	132.95	531.78	353.42	395.26	0.00	1255.88	1022.72	0.423	0.73	0.73	4.971	A
3 - Derby Rd	495.46	123.86	495.45	738.76	188.27	0.00	1477.22	1367.11	0.335	0.50	0.50	3.665	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	487.25	121.81	488.20	434.88	124.23	0.00	1344.15	1181.29	0.362	0.81	0.57	4.210	A
2 - Regeneration Link	434.21	108.55	435.11	289.07	323.37	0.00	1299.17	1022.72	0.334	0.73	0.51	4.170	A
3 - Derby Rd	404.54	101.14	405.07	604.43	154.04	0.00	1498.90	1367.11	0.270	0.50	0.37	3.294	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	408.05	102.01	408.60	364.03	104.00	0.00	1355.87	1181.29	0.301	0.57	0.43	3.801	A
2 - Regeneration Link	363.63	90.91	364.14	241.96	270.64	0.00	1330.92	1022.72	0.273	0.51	0.38	3.727	A
3 - Derby Rd	338.78	84.70	339.11	505.86	128.92	0.00	1514.81	1367.11	0.224	0.37	0.29	3.064	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	6.26	0.42	3.784	A	A
2 - Regeneration Link	5.47	0.36	3.708	A	A
3 - Derby Rd	4.22	0.28	3.054	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.31	0.55	4.195	A	A
2 - Regeneration Link	7.34	0.49	4.155	A	A

3 - Derby Rd	5.44	0.36	3.287	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	11.82	0.79	4.909	A	A
2 - Regeneration Link	10.64	0.71	4.957	A	A
3 - Derby Rd	7.39	0.49	3.662	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	12.16	0.81	4.921	A	A
2 - Regeneration Link	10.94	0.73	4.971	A	A
3 - Derby Rd	7.54	0.50	3.665	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.78	0.59	4.210	A	A
2 - Regeneration Link	7.75	0.52	4.170	A	A
3 - Derby Rd	5.66	0.38	3.294	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	6.61	0.44	3.801	A	A
2 - Regeneration Link	5.77	0.38	3.727	A	A
3 - Derby Rd	4.40	0.29	3.064	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, AM	2021 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	521.00	100.000
2 - Regeneration Link	ONE HOUR	✓	409.00	100.000
3 - Derby Rd	ONE HOUR	✓	436.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

	To			
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd

From	1 - Swadlincote Rd	0.000	162.000	359.000
	2 - Regeneration Link	153.000	53.000	203.000
	3 - Derby Rd	232.000	204.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.31	0.69
	2 - Regeneration Link	0.37	0.13	0.50
	3 - Derby Rd	0.53	0.47	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.46	5.30	0.84	A	478.08	717.12	54.96	4.60	0.61	54.96	4.60
2 - Regeneration Link	0.36	4.47	0.56	A	375.31	562.96	37.34	3.98	0.41	37.34	3.98
3 - Derby Rd	0.33	3.70	0.49	A	400.08	600.12	33.82	3.38	0.38	33.82	3.38

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	392.24	98.06	390.53	288.81	192.81	0.00	1304.44	995.80	0.301	0.00	0.43	3.932	A
2 - Regeneration Link	307.92	76.98	306.72	314.24	269.10	0.00	1331.85	1080.70	0.231	0.00	0.30	3.509	A
3 - Derby Rd	328.24	82.06	327.13	421.33	154.48	0.00	1498.62	1251.67	0.219	0.00	0.28	3.070	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	468.37	117.09	467.79	345.80	230.84	0.00	1282.41	995.80	0.365	0.43	0.57	4.416	A
2 - Regeneration	367.68	91.92	367.31	376.30	322.34	0.00	1299.79	1080.70	0.283	0.30	0.39	3.858	A

Link													
3 - Derby Rd	391.96	97.99	391.64	504.65	185.00	0.00	1479.29	1251.67	0.265	0.28	0.36	3.310	A

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	573.63	143.41	572.57	423.37	282.63	0.00	1252.41	995.80	0.458	0.57	0.84	5.286	A
2 - Regeneration Link	450.32	112.58	449.67	460.67	394.54	0.00	1256.31	1080.70	0.358	0.39	0.55	4.459	A
3 - Derby Rd	480.04	120.01	479.52	617.72	226.48	0.00	1453.01	1251.67	0.330	0.36	0.49	3.696	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	573.63	143.41	573.61	423.89	282.96	0.00	1252.23	995.80	0.458	0.84	0.84	5.304	A
2 - Regeneration Link	450.32	112.58	450.31	461.32	395.25	0.00	1255.88	1080.70	0.359	0.55	0.56	4.468	A
3 - Derby Rd	480.04	120.01	480.04	618.76	226.81	0.00	1452.80	1251.67	0.330	0.49	0.49	3.699	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	468.37	117.09	469.41	346.62	231.36	0.00	1282.11	995.80	0.365	0.84	0.58	4.435	A
2 - Regeneration Link	367.68	91.92	368.32	377.32	323.45	0.00	1299.12	1080.70	0.283	0.56	0.40	3.871	A
3 - Derby Rd	391.96	97.99	392.47	506.26	185.51	0.00	1478.96	1251.67	0.265	0.49	0.36	3.316	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	392.24	98.06	392.82	290.16	193.68	0.00	1303.93	995.80	0.301	0.58	0.43	3.955	A
2 - Regeneration Link	307.92	76.98	308.29	315.83	270.68	0.00	1330.90	1080.70	0.231	0.40	0.30	3.523	A
3 - Derby Rd	328.24	82.06	328.57	423.70	155.28	0.00	1498.12	1251.67	0.219	0.36	0.28	3.078	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	6.25	0.42	3.932	A	A
2 - Regeneration Link	4.39	0.29	3.509	A	A
3 - Derby Rd	4.11	0.27	3.070	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.40	0.56	4.416	A	A
2 - Regeneration Link	5.79	0.39	3.858	A	A
3 - Derby Rd	5.30	0.35	3.310	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	12.21	0.81	5.286	A	A
2 - Regeneration Link	8.14	0.54	4.459	A	A
3 - Derby Rd	7.23	0.48	3.696	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	12.58	0.84	5.304	A	A
2 - Regeneration Link	8.34	0.56	4.468	A	A
3 - Derby Rd	7.37	0.49	3.699	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.91	0.59	4.435	A	A
2 - Regeneration Link	6.07	0.40	3.871	A	A
3 - Derby Rd	5.52	0.37	3.316	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	6.62	0.44	3.955	A	A
2 - Regeneration Link	4.61	0.31	3.523	A	A
3 - Derby Rd	4.29	0.29	3.078	A	A

(Default Analysis Set) - 2021 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base Reg Link 50% with Dev, PM	2021 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.99	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	564.00	100.000
2 - Regeneration Link	ONE HOUR	✓	540.00	100.000
3 - Derby Rd	ONE HOUR	✓	511.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	205.000	359.000
	2 - Regeneration Link	176.000	25.000	339.000
	3 - Derby Rd	327.000	184.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.36	0.64
	2 - Regeneration Link	0.33	0.05	0.63
	3 - Derby Rd	0.64	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.48	5.44	0.93	A	517.54	776.30	60.63	4.69	0.67	60.64	4.69
2 - Regeneration Link	0.47	5.44	0.89	A	495.51	743.27	57.41	4.63	0.64	57.42	4.63
3 - Derby Rd	0.39	4.03	0.63	A	468.90	703.35	42.39	3.62	0.47	42.40	3.62

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	424.61	106.15	422.74	377.24	156.77	0.00	1325.31	1107.09	0.320	0.00	0.47	3.981	A
2 - Regeneration Link	406.54	101.64	404.79	310.43	269.08	0.00	1331.86	1069.54	0.305	0.00	0.44	3.876	A
3 - Derby Rd	384.71	96.18	383.34	523.20	150.67	0.00	1501.03	1344.29	0.256	0.00	0.34	3.216	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	507.02	126.76	506.38	451.72	187.71	0.00	1307.39	1107.09	0.388	0.47	0.63	4.490	A
2 - Regeneration Link	485.45	121.36	484.83	371.77	322.33	0.00	1299.79	1069.54	0.373	0.44	0.59	4.415	A
3 - Derby Rd	459.38	114.84	458.96	626.69	180.46	0.00	1482.16	1344.29	0.310	0.34	0.45	3.516	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	620.98	155.24	619.78	552.97	229.80	0.00	1283.01	1107.09	0.484	0.63	0.93	5.418	A
2 - Regeneration Link	594.55	148.64	593.36	455.08	394.51	0.00	1256.33	1069.54	0.473	0.59	0.89	5.420	A

3 - Derby Rd	562.62	140.66	561.91	767.01	220.86	0.00	1456.57	1344.29	0.386	0.45	0.62	4.020	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	620.98	155.24	620.95	553.80	230.11	0.00	1282.83	1107.09	0.484	0.93	0.93	5.438	A
2 - Regeneration Link	594.55	148.64	594.53	455.81	395.25	0.00	1255.88	1069.54	0.473	0.89	0.89	5.443	A
3 - Derby Rd	562.62	140.66	562.61	768.49	221.30	0.00	1456.29	1344.29	0.386	0.62	0.63	4.028	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	507.02	126.76	508.20	453.02	188.19	0.00	1307.11	1107.09	0.388	0.93	0.64	4.512	A
2 - Regeneration Link	485.45	121.36	486.62	372.91	323.48	0.00	1299.10	1069.54	0.374	0.89	0.60	4.436	A
3 - Derby Rd	459.38	114.84	460.08	628.97	181.13	0.00	1481.74	1344.29	0.310	0.63	0.45	3.525	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	424.61	106.15	425.27	379.16	157.53	0.00	1324.87	1107.09	0.320	0.64	0.47	4.006	A
2 - Regeneration Link	406.54	101.64	407.18	312.10	270.69	0.00	1330.89	1069.54	0.305	0.60	0.44	3.901	A
3 - Derby Rd	384.71	96.18	385.13	526.31	151.56	0.00	1500.47	1344.29	0.256	0.45	0.35	3.230	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	6.85	0.46	3.981	A	A
2 - Regeneration Link	6.39	0.43	3.876	A	A
3 - Derby Rd	5.04	0.34	3.216	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	9.23	0.62	4.490	A	A
2 - Regeneration Link	8.69	0.58	4.415	A	A
3 - Derby Rd	6.59	0.44	3.516	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	13.52	0.90	5.418	A	A
2 - Regeneration Link	12.95	0.86	5.420	A	A
3 - Derby Rd	9.19	0.61	4.020	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	13.96	0.93	5.438	A	A
2 - Regeneration Link	13.38	0.89	5.443	A	A
3 - Derby Rd	9.40	0.63	4.028	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service

1 - Swadlincote Rd	9.82	0.65	4.512	A	A
2 - Regeneration Link	9.24	0.62	4.436	A	A
3 - Derby Rd	6.90	0.46	3.525	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.26	0.48	4.006	A	A
2 - Regeneration Link	6.76	0.45	3.901	A	A
3 - Derby Rd	5.28	0.35	3.230	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, AM	2024 Base Reg Link 25%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.60	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	611.00	100.000
2 - Regeneration Link	ONE HOUR	✓	315.00	100.000
3 - Derby Rd	ONE HOUR	✓	426.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	172.000	439.000
	2 - Regeneration Link	144.000	38.000	133.000
	3 - Derby Rd	324.000	102.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.28	0.72
	2 - Regeneration Link	0.46	0.12	0.42
	3 - Derby Rd	0.76	0.24	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.51	5.50	1.02	A	560.66	841.00	66.27	4.73	0.74	66.27	4.73
2 - Regeneration Link	0.29	4.20	0.40	A	289.05	433.57	27.42	3.79	0.30	27.42	3.79
3 - Derby Rd	0.32	3.60	0.47	A	390.91	586.36	32.31	3.31	0.36	32.31	3.31

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	459.99	115.00	457.95	351.11	105.03	0.00	1355.27	1175.89	0.339	0.00	0.51	4.003	A
2 - Regeneration Link	237.15	59.29	236.26	233.95	329.04	0.00	1295.75	985.13	0.183	0.00	0.22	3.394	A
3 - Derby Rd	320.72	80.18	319.64	428.79	136.50	0.00	1510.01	1235.92	0.212	0.00	0.27	3.021	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	549.28	137.32	548.57	420.37	125.75	0.00	1343.27	1175.89	0.409	0.51	0.69	4.526	A
2 - Regeneration Link	283.18	70.79	282.91	280.18	394.15	0.00	1256.55	985.13	0.225	0.22	0.29	3.697	A
3 - Derby Rd	382.97	95.74	382.67	513.60	163.46	0.00	1492.93	1235.92	0.257	0.27	0.34	3.242	A

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	672.72	168.18	671.40	514.70	153.97	0.00	1326.93	1175.89	0.507	0.69	1.02	5.480	A
2 - Regeneration Link	346.82	86.71	346.37	342.97	482.40	0.00	1203.40	985.13	0.288	0.29	0.40	4.199	A
3 - Derby Rd	469.03	117.26	468.54	628.64	200.12	0.00	1469.71	1235.92	0.319	0.34	0.47	3.593	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	672.72	168.18	672.70	515.27	154.14	0.00	1326.83	1175.89	0.507	1.02	1.02	5.503	A
2 - Regeneration Link	346.82	86.71	346.82	343.51	483.33	0.00	1202.84	985.13	0.288	0.40	0.40	4.205	A
3 - Derby Rd	469.03	117.26	469.03	629.76	200.38	0.00	1469.54	1235.92	0.319	0.47	0.47	3.597	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	549.28	137.32	550.57	421.29	126.03	0.00	1343.11	1175.89	0.409	1.02	0.70	4.549	A
2 - Regeneration Link	283.18	70.79	283.62	281.02	395.58	0.00	1255.68	985.13	0.226	0.40	0.29	3.707	A
3 - Derby Rd	382.97	95.74	383.45	515.34	163.87	0.00	1492.67	1235.92	0.257	0.47	0.35	3.246	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	459.99	115.00	460.71	352.69	105.50	0.00	1355.00	1175.89	0.339	0.70	0.52	4.030	A
2 - Regeneration Link	237.15	59.29	237.42	235.20	331.02	0.00	1294.56	985.13	0.183	0.29	0.23	3.405	A
3 - Derby Rd	320.72	80.18	321.02	431.26	137.17	0.00	1509.58	1235.92	0.212	0.35	0.27	3.031	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.45	0.50	4.003	A	A
2 - Regeneration Link	3.28	0.22	3.394	A	A
3 - Derby Rd	3.95	0.26	3.021	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	10.07	0.67	4.526	A	A
2 - Regeneration Link	4.28	0.29	3.697	A	A
3 - Derby Rd	5.08	0.34	3.242	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	14.79	0.99	5.480	A	A
2 - Regeneration Link	5.92	0.39	4.199	A	A
3 - Derby Rd	6.87	0.46	3.593	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	15.30	1.02	5.503	A	A
2 - Regeneration Link	6.05	0.40	4.205	A	A
3 - Derby Rd	7.00	0.47	3.597	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	10.73	0.72	4.549	A	A
2 - Regeneration Link	4.47	0.30	3.707	A	A
3 - Derby Rd	5.28	0.35	3.246	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.92	0.53	4.030	A	A
2 - Regeneration Link	3.43	0.23	3.405	A	A
3 - Derby Rd	4.12	0.27	3.031	A	A

(Default Analysis Set) - 2024 Base Reg Link 25%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25%, PM	2024 Base Reg Link 25%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.93	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	680.00	100.000
2 - Regeneration Link	ONE HOUR	✓	389.00	100.000
3 - Derby Rd	ONE HOUR	✓	470.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	227.000	453.000
	2 - Regeneration Link	163.000	12.000	214.000
	3 - Derby Rd	399.000	71.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.33	0.67
	2 - Regeneration Link	0.42	0.03	0.55
	3 - Derby Rd	0.85	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.55	5.86	1.21	A	623.98	935.97	77.32	4.96	0.86	77.33	4.96
2 - Regeneration Link	0.36	4.70	0.56	A	356.95	535.43	36.97	4.14	0.41	36.98	4.14
3 - Derby Rd	0.35	3.76	0.54	A	431.28	646.92	36.94	3.43	0.41	36.94	3.43

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	511.94	127.98	509.60	421.58	62.27	0.00	1380.04	1283.35	0.371	0.00	0.59	4.125	A
2 - Regeneration Link	292.86	73.21	291.69	232.38	339.48	0.00	1289.46	979.07	0.227	0.00	0.29	3.605	A
3 - Derby Rd	353.84	88.46	352.63	499.95	131.22	0.00	1513.35	1317.46	0.234	0.00	0.30	3.099	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	611.31	152.83	610.47	504.77	74.55	0.00	1372.92	1283.35	0.445	0.59	0.80	4.717	A
2 - Regeneration Link	349.70	87.43	349.33	278.34	406.68	0.00	1249.00	979.07	0.280	0.29	0.39	3.999	A
3 - Derby Rd	422.52	105.63	422.17	598.85	157.15	0.00	1496.93	1317.46	0.282	0.30	0.39	3.349	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	748.69	187.17	747.07	618.00	91.28	0.00	1363.24	1283.35	0.549	0.80	1.20	5.827	A
2 - Regeneration Link	428.30	107.07	427.62	340.67	497.68	0.00	1194.20	979.07	0.359	0.39	0.55	4.692	A
3 - Derby Rd	517.48	129.37	516.90	732.93	192.38	0.00	1474.61	1317.46	0.351	0.39	0.54	3.757	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	748.69	187.17	748.66	618.76	91.38	0.00	1363.17	1283.35	0.549	1.20	1.21	5.857	A
2 - Regeneration Link	428.30	107.07	428.29	341.30	498.74	0.00	1193.56	979.07	0.359	0.55	0.56	4.703	A
3 - Derby Rd	517.48	129.37	517.47	734.35	192.67	0.00	1474.43	1317.46	0.351	0.54	0.54	3.761	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	611.31	152.83	612.90	505.99	74.72	0.00	1372.82	1283.35	0.445	1.21	0.81	4.746	A
2 - Regeneration Link	349.70	87.43	350.37	279.32	408.30	0.00	1248.02	979.07	0.280	0.56	0.39	4.014	A
3 - Derby Rd	422.52	105.63	423.09	601.05	157.62	0.00	1496.63	1317.46	0.282	0.54	0.40	3.354	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	511.94	127.98	512.80	423.57	62.55	0.00	1379.87	1283.35	0.371	0.81	0.59	4.155	A
2 - Regeneration Link	292.86	73.21	293.24	233.74	341.62	0.00	1288.18	979.07	0.227	0.39	0.30	3.621	A
3 - Derby Rd	353.84	88.46	354.20	502.94	131.92	0.00	1512.91	1317.46	0.234	0.40	0.31	3.107	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.54	0.57	4.125	A	A
2 - Regeneration Link	4.29	0.29	3.605	A	A
3 - Derby Rd	4.47	0.30	3.099	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	11.66	0.78	4.717	A	A
2 - Regeneration Link	5.70	0.38	3.999	A	A
3 - Derby Rd	5.78	0.39	3.349	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	17.43	1.16	5.827	A	A
2 - Regeneration Link	8.14	0.54	4.692	A	A
3 - Derby Rd	7.91	0.53	3.757	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	18.10	1.21	5.857	A	A
2 - Regeneration Link	8.35	0.56	4.703	A	A
3 - Derby Rd	8.08	0.54	3.761	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	12.49	0.83	4.746	A	A
2 - Regeneration Link	5.99	0.40	4.014	A	A
3 - Derby Rd	6.03	0.40	3.354	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	9.10	0.61	4.155	A	A
2 - Regeneration Link	4.51	0.30	3.621	A	A
3 - Derby Rd	4.67	0.31	3.107	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 25% with Dev, AM	2024 Base Reg Link 25% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.86	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	628.00	100.000
2 - Regeneration Link	ONE HOUR	✓	354.00	100.000
3 - Derby Rd	ONE HOUR	✓	455.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	189.000	439.000
	2 - Regeneration Link	159.000	47.000	148.000
	3 - Derby Rd	324.000	131.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.30	0.70
	2 - Regeneration Link	0.45	0.13	0.42
	3 - Derby Rd	0.71	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.53	5.89	1.12	A	576.26	864.40	71.73	4.98	0.80	71.73	4.98
2 - Regeneration Link	0.32	4.43	0.48	A	324.84	487.25	32.09	3.95	0.36	32.09	3.95
3 - Derby Rd	0.34	3.78	0.52	A	417.52	626.27	35.91	3.44	0.40	35.91	3.44

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	472.79	118.20	470.62	362.32	133.53	0.00	1338.76	1134.21	0.353	0.00	0.54	4.137	A
2 - Regeneration Link	266.51	66.63	265.48	275.17	328.99	0.00	1295.78	1016.45	0.206	0.00	0.26	3.491	A
3 - Derby Rd	342.55	85.64	341.37	439.98	154.49	0.00	1498.62	1221.79	0.229	0.00	0.29	3.108	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	564.56	141.14	563.78	433.82	159.88	0.00	1323.51	1134.21	0.427	0.54	0.74	4.733	A
2 - Regeneration Link	318.24	79.56	317.92	329.55	394.11	0.00	1256.57	1016.45	0.253	0.26	0.34	3.835	A
3 - Derby Rd	409.04	102.26	408.69	527.02	185.00	0.00	1479.28	1221.79	0.277	0.29	0.38	3.362	A

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	691.44	172.86	689.93	531.14	195.74	0.00	1302.73	1134.21	0.531	0.74	1.12	5.860	A
2 - Regeneration Link	389.76	97.44	389.21	403.38	482.29	0.00	1203.47	1016.45	0.324	0.34	0.48	4.418	A
3 - Derby Rd	500.96	125.24	500.39	645.01	226.49	0.00	1453.01	1221.79	0.345	0.38	0.52	3.777	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	691.44	172.86	691.41	531.78	195.98	0.00	1302.60	1134.21	0.531	1.12	1.12	5.889	A
2 - Regeneration Link	389.76	97.44	389.75	404.06	483.33	0.00	1202.84	1016.45	0.324	0.48	0.48	4.427	A
3 - Derby Rd	500.96	125.24	500.96	646.27	226.81	0.00	1452.80	1221.79	0.345	0.52	0.52	3.781	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	564.56	141.14	566.05	434.85	160.25	0.00	1323.29	1134.21	0.427	1.12	0.75	4.763	A
2 - Regeneration Link	318.24	79.56	318.78	330.61	395.69	0.00	1255.61	1016.45	0.253	0.48	0.34	3.844	A
3 - Derby Rd	409.04	102.26	409.60	528.97	185.51	0.00	1478.97	1221.79	0.277	0.52	0.38	3.370	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	472.79	118.20	473.59	364.02	134.15	0.00	1338.41	1134.21	0.353	0.75	0.55	4.166	A
2 - Regeneration Link	266.51	66.63	266.83	276.68	331.06	0.00	1294.53	1016.45	0.206	0.34	0.26	3.503	A
3 - Derby Rd	342.55	85.64	342.89	442.62	155.28	0.00	1498.12	1221.79	0.229	0.38	0.30	3.116	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.91	0.53	4.137	A	A
2 - Regeneration Link	3.78	0.25	3.491	A	A
3 - Derby Rd	4.34	0.29	3.108	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	10.81	0.72	4.733	A	A
2 - Regeneration Link	4.98	0.33	3.835	A	A
3 - Derby Rd	5.62	0.37	3.362	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	16.20	1.08	5.860	A	A
2 - Regeneration Link	6.99	0.47	4.418	A	A
3 - Derby Rd	7.70	0.51	3.777	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	16.81	1.12	5.889	A	A
2 - Regeneration Link	7.15	0.48	4.427	A	A
3 - Derby Rd	7.86	0.52	3.781	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	11.57	0.77	4.763	A	A
2 - Regeneration Link	5.22	0.35	3.844	A	A
3 - Derby Rd	5.86	0.39	3.370	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.42	0.56	4.166	A	A
2 - Regeneration Link	3.97	0.26	3.503	A	A
3 - Derby Rd	4.53	0.30	3.116	A	A

(Default Analysis Set) - 2024 Base Reg Link 25% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship

2024 Base Reg Link 25% with Dev, PM	2024 Base Reg Link 25% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				5.38	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	703.00	100.000
2 - Regeneration Link	ONE HOUR	✓	448.00	100.000
3 - Derby Rd	ONE HOUR	✓	515.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	250.000	453.000
	2 - Regeneration Link	184.000	23.000	241.000
	3 - Derby Rd	399.000	116.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.36	0.64
	2 - Regeneration Link	0.41	0.05	0.54
	3 - Derby Rd	0.77	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.58	6.50	1.39	A	645.09	967.63	86.47	5.36	0.96	86.48	5.36
2 - Regeneration Link	0.41	5.14	0.70	A	411.09	616.64	45.60	4.44	0.51	45.61	4.44
3 - Derby Rd	0.39	4.07	0.64	A	472.57	708.86	43.05	3.64	0.48	43.05	3.64

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

1 - Swadlincote Rd	529.26	132.31	526.71	437.26	104.26	0.00	1355.72	1216.48	0.390	0.00	0.64	4.330	A
2 - Regeneration Link	337.28	84.32	335.87	291.57	339.40	0.00	1289.51	1021.86	0.262	0.00	0.35	3.770	A
3 - Derby Rd	387.72	96.93	386.33	520.08	155.19	0.00	1498.17	1297.38	0.259	0.00	0.35	3.233	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	631.98	158.00	631.01	523.58	124.84	0.00	1343.80	1216.48	0.470	0.64	0.88	5.043	A
2 - Regeneration Link	402.74	100.69	402.26	349.24	406.61	0.00	1249.04	1021.86	0.322	0.35	0.47	4.250	A
3 - Derby Rd	462.97	115.74	462.55	623.01	185.87	0.00	1478.74	1297.38	0.313	0.35	0.45	3.540	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	774.02	193.50	772.03	640.96	152.83	0.00	1327.59	1216.48	0.583	0.88	1.38	6.456	A
2 - Regeneration Link	493.26	123.31	492.36	427.38	497.48	0.00	1194.32	1021.86	0.413	0.47	0.70	5.122	A
3 - Derby Rd	567.03	141.76	566.30	762.35	227.50	0.00	1452.37	1297.38	0.390	0.45	0.64	4.059	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	774.02	193.50	773.97	641.88	153.04	0.00	1327.47	1216.48	0.583	1.38	1.39	6.503	A
2 - Regeneration Link	493.26	123.31	493.24	428.28	498.73	0.00	1193.57	1021.86	0.413	0.70	0.70	5.140	A
3 - Derby Rd	567.03	141.76	567.02	764.07	227.90	0.00	1452.11	1297.38	0.390	0.64	0.64	4.067	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	631.98	158.00	633.94	525.03	125.17	0.00	1343.61	1216.48	0.470	1.39	0.90	5.086	A
2 - Regeneration Link	402.74	100.69	403.63	350.61	408.50	0.00	1247.90	1021.86	0.323	0.70	0.48	4.269	A
3 - Derby Rd	462.97	115.74	463.69	625.63	186.50	0.00	1478.34	1297.38	0.313	0.64	0.46	3.552	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	529.26	132.31	530.26	439.45	104.77	0.00	1355.42	1216.48	0.390	0.90	0.65	4.369	A
2 - Regeneration Link	337.28	84.32	337.77	293.34	341.69	0.00	1288.13	1021.86	0.262	0.48	0.36	3.791	A
3 - Derby Rd	387.72	96.93	388.15	523.39	156.07	0.00	1497.61	1297.38	0.259	0.46	0.35	3.247	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	9.25	0.62	4.330	A	A
2 - Regeneration Link	5.16	0.34	3.770	A	A
3 - Derby Rd	5.10	0.34	3.233	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	12.85	0.86	5.043	A	A
2 - Regeneration Link	6.96	0.46	4.250	A	A
3 - Derby Rd	6.69	0.45	3.540	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	19.86	1.32	6.456	A	A
2 - Regeneration Link	10.19	0.68	5.122	A	A
3 - Derby Rd	9.34	0.62	4.059	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	20.73	1.38	6.503	A	A
2 - Regeneration Link	10.49	0.70	5.140	A	A
3 - Derby Rd	9.56	0.64	4.067	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	13.87	0.92	5.086	A	A
2 - Regeneration Link	7.36	0.49	4.269	A	A
3 - Derby Rd	7.01	0.47	3.552	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	9.91	0.66	4.369	A	A
2 - Regeneration Link	5.45	0.36	3.791	A	A
3 - Derby Rd	5.35	0.36	3.247	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, AM	2024 Base Reg Link 50%	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.47	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	527.00	100.000
2 - Regeneration Link	ONE HOUR	✓	387.00	100.000
3 - Derby Rd	ONE HOUR	✓	426.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	152.000	375.000
	2 - Regeneration Link	144.000	46.000	197.000
	3 - Derby Rd	243.000	183.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.29	0.71
	2 - Regeneration Link	0.37	0.12	0.51
	3 - Derby Rd	0.57	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.46	5.22	0.84	A	483.58	725.38	54.89	4.54	0.61	54.89	4.54
2 - Regeneration Link	0.34	4.39	0.52	A	355.12	532.68	34.87	3.93	0.39	34.87	3.93
3 - Derby Rd	0.32	3.62	0.47	A	390.91	586.36	32.46	3.32	0.36	32.46	3.32

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	396.75	99.19	395.04	290.32	171.81	0.00	1316.60	1027.91	0.301	0.00	0.43	3.899	A
2 - Regeneration Link	291.35	72.84	290.23	285.75	281.10	0.00	1324.62	1053.44	0.220	0.00	0.28	3.477	A
3 - Derby Rd	320.72	80.18	319.64	428.84	142.49	0.00	1506.22	1268.85	0.213	0.00	0.27	3.031	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 -													

Swadlincote Rd	473.76	118.44	473.19	347.60	205.70	0.00	1296.97	1027.91	0.365	0.43	0.57	4.367	A
2 - Regeneration Link	347.91	86.98	347.56	342.18	336.71	0.00	1291.13	1053.44	0.269	0.28	0.37	3.815	A
3 - Derby Rd	382.97	95.74	382.66	513.64	170.64	0.00	1488.39	1268.85	0.257	0.27	0.34	3.255	A

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	580.24	145.06	579.19	425.59	251.85	0.00	1270.24	1027.91	0.457	0.57	0.83	5.202	A
2 - Regeneration Link	426.09	106.52	425.50	418.90	412.14	0.00	1245.71	1053.44	0.342	0.37	0.52	4.386	A
3 - Derby Rd	469.03	117.26	468.54	628.74	208.90	0.00	1464.15	1268.85	0.320	0.34	0.47	3.613	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	580.24	145.06	580.22	426.09	252.13	0.00	1270.08	1027.91	0.457	0.83	0.84	5.218	A
2 - Regeneration Link	426.09	106.52	426.09	419.48	412.87	0.00	1245.27	1053.44	0.342	0.52	0.52	4.394	A
3 - Derby Rd	469.03	117.26	469.03	629.77	209.19	0.00	1463.96	1268.85	0.320	0.47	0.47	3.617	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	473.76	118.44	474.79	348.40	206.15	0.00	1296.71	1027.91	0.365	0.84	0.58	4.386	A
2 - Regeneration Link	347.91	86.98	348.49	343.09	337.85	0.00	1290.45	1053.44	0.270	0.52	0.37	3.823	A
3 - Derby Rd	382.97	95.74	383.45	515.25	171.09	0.00	1488.10	1268.85	0.257	0.47	0.35	3.262	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	396.75	99.19	397.34	291.66	172.58	0.00	1316.15	1027.91	0.301	0.58	0.43	3.921	A
2 - Regeneration Link	291.35	72.84	291.70	287.18	282.73	0.00	1323.64	1053.44	0.220	0.37	0.28	3.488	A
3 - Derby Rd	320.72	80.18	321.02	431.23	143.21	0.00	1505.76	1268.85	0.213	0.35	0.27	3.041	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	6.27	0.42	3.899	A	A
2 - Regeneration Link	4.12	0.27	3.477	A	A
3 - Derby Rd	3.96	0.26	3.031	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.40	0.56	4.367	A	A
2 - Regeneration Link	5.41	0.36	3.815	A	A
3 - Derby Rd	5.10	0.34	3.255	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	12.15	0.81	5.202	A	A

2 - Regeneration Link	7.58	0.51	4.386	A	A
3 - Derby Rd	6.91	0.46	3.613	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	12.52	0.83	5.218	A	A
2 - Regeneration Link	7.76	0.52	4.394	A	A
3 - Derby Rd	7.04	0.47	3.617	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.90	0.59	4.386	A	A
2 - Regeneration Link	5.67	0.38	3.823	A	A
3 - Derby Rd	5.31	0.35	3.262	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	6.63	0.44	3.921	A	A
2 - Regeneration Link	4.32	0.29	3.488	A	A
3 - Derby Rd	4.13	0.28	3.041	A	A

(Default Analysis Set) - 2024 Base Reg Link 50%, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50%, PM	2024 Base Reg Link 50%	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.75	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	567.00	100.000
2 - Regeneration Link	ONE HOUR	✓	504.00	100.000
3 - Derby Rd	ONE HOUR	✓	470.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	191.000	376.000
	2 - Regeneration Link	163.000	15.000	326.000
	3 - Derby Rd	342.000	128.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.34	0.66
	2 - Regeneration Link	0.32	0.03	0.65
	3 - Derby Rd	0.73	0.27	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.47	5.14	0.89	A	520.29	780.43	58.33	4.48	0.65	58.34	4.49
2 - Regeneration Link	0.45	5.22	0.80	A	462.48	693.72	51.90	4.49	0.58	51.90	4.49
3 - Derby Rd	0.35	3.77	0.54	A	431.28	646.92	37.00	3.43	0.41	37.00	3.43

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	426.87	106.72	425.04	378.79	107.28	0.00	1353.97	1182.74	0.315	0.00	0.46	3.866	A
2 - Regeneration Link	379.44	94.86	377.84	250.46	281.86	0.00	1324.16	1021.59	0.287	0.00	0.40	3.797	A
3 - Derby Rd	353.84	88.46	352.62	526.26	133.44	0.00	1511.95	1367.92	0.234	0.00	0.30	3.102	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	509.72	127.43	509.12	453.55	128.44	0.00	1341.71	1182.74	0.380	0.46	0.61	4.321	A
2 - Regeneration Link	453.09	113.27	452.53	299.94	337.62	0.00	1290.59	1021.59	0.351	0.40	0.54	4.293	A
3 - Derby Rd	422.52	105.63	422.17	630.33	159.82	0.00	1495.24	1367.92	0.283	0.30	0.39	3.355	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	624.28	156.07	623.18	555.25	157.26	0.00	1325.03	1182.74	0.471	0.61	0.88	5.120	A
2 - Regeneration Link	554.91	138.73	553.88	367.18	413.26	0.00	1245.04	1021.59	0.446	0.54	0.80	5.201	A
3 - Derby Rd	517.48	129.37	516.89	771.52	195.62	0.00	1472.56	1367.92	0.351	0.39	0.54	3.765	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	624.28	156.07	624.26	556.00	157.44	0.00	1324.92	1182.74	0.471	0.88	0.89	5.137	A
2 - Regeneration Link	554.91	138.73	554.90	367.73	413.97	0.00	1244.61	1021.59	0.446	0.80	0.80	5.219	A
3 - Derby Rd	517.48	129.37	517.47	772.89	195.98	0.00	1472.33	1367.92	0.351	0.54	0.54	3.769	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	509.72	127.43	510.80	454.73	128.74	0.00	1341.54	1182.74	0.380	0.89	0.62	4.338	A
2 - Regeneration Link	453.09	113.27	454.11	300.81	338.73	0.00	1289.92	1021.59	0.351	0.80	0.55	4.312	A
3 - Derby Rd	422.52	105.63	423.10	632.46	160.38	0.00	1494.88	1367.92	0.283	0.54	0.40	3.359	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	426.87	106.72	427.48	380.63	107.77	0.00	1353.68	1182.74	0.315	0.62	0.46	3.890	A
2 - Regeneration Link	379.44	94.86	380.00	251.77	283.48	0.00	1323.19	1021.59	0.287	0.55	0.40	3.821	A
3 - Derby Rd	353.84	88.46	354.20	529.28	134.21	0.00	1511.46	1367.92	0.234	0.40	0.31	3.113	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	6.69	0.45	3.866	A	A
2 - Regeneration Link	5.85	0.39	3.797	A	A
3 - Derby Rd	4.47	0.30	3.102	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	8.94	0.60	4.321	A	A
2 - Regeneration Link	7.90	0.53	4.293	A	A
3 - Derby Rd	5.79	0.39	3.355	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	12.87	0.86	5.120	A	A
2 - Regeneration Link	11.62	0.77	5.201	A	A
3 - Derby Rd	7.93	0.53	3.765	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	13.27	0.88	5.137	A	A

2 - Regeneration Link	11.98	0.80	5.219	A	A
3 - Derby Rd	8.09	0.54	3.769	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	9.48	0.63	4.338	A	A
2 - Regeneration Link	8.37	0.56	4.312	A	A
3 - Derby Rd	6.04	0.40	3.359	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.08	0.47	3.890	A	A
2 - Regeneration Link	6.18	0.41	3.821	A	A
3 - Derby Rd	4.67	0.31	3.113	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, AM	2024 Base Reg Link 50% with Dev	AM		ONE HOUR	07:15	08:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				4.72	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	

3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00
3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	544.00	100.000
2 - Regeneration Link	ONE HOUR	✓	426.00	100.000
3 - Derby Rd	ONE HOUR	✓	455.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	169.000	375.000
	2 - Regeneration Link	159.000	55.000	212.000
	3 - Derby Rd	243.000	212.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.31	0.69
	2 - Regeneration Link	0.37	0.13	0.50
	3 - Derby Rd	0.53	0.47	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	1.000	1.000	1.000
	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.48	5.56	0.92	A	499.18	748.78	59.53	4.77	0.66	59.53	4.77
2 - Regeneration Link	0.38	4.64	0.60	A	390.91	586.36	40.04	4.10	0.44	40.04	4.10
3 - Derby Rd	0.35	3.80	0.53	A	417.52	626.27	36.08	3.46	0.40	36.08	3.46

Main Results for each time segment

Main results: (07:15-07:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	409.55	102.39	407.72	301.54	200.30	0.00	1300.10	997.27	0.315	0.00	0.46	4.026	A
2 - Regeneration Link	320.72	80.18	319.44	326.96	281.06	0.00	1324.64	1079.92	0.242	0.00	0.32	3.576	A
3 - Derby Rd	342.55	85.64	341.36	440.03	160.47	0.00	1494.83	1252.82	0.229	0.00	0.30	3.118	A

Main results: (07:30-07:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	489.04	122.26	488.41	361.05	239.82	0.00	1277.21	997.27	0.383	0.46	0.62	4.560	A
2 - Regeneration Link	382.97	95.74	382.56	391.55	336.68	0.00	1291.15	1079.92	0.297	0.32	0.42	3.960	A
3 - Derby Rd	409.04	102.26	408.69	527.06	192.18	0.00	1474.74	1252.82	0.277	0.30	0.38	3.377	A

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	598.96	149.74	597.76	442.03	293.61	0.00	1246.06	997.27	0.481	0.62	0.91	5.543	A
2 - Regeneration Link	469.03	117.26	468.32	479.31	412.06	0.00	1245.76	1079.92	0.377	0.42	0.60	4.627	A

3 - Derby Rd	500.96	125.24	500.39	645.12	235.26	0.00	1447.45	1252.82	0.346	0.38	0.53	3.799	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	598.96	149.74	598.93	442.60	293.97	0.00	1245.85	997.27	0.481	0.91	0.92	5.564	A
2 - Regeneration Link	469.03	117.26	469.02	480.03	412.87	0.00	1245.27	1079.92	0.377	0.60	0.60	4.637	A
3 - Derby Rd	500.96	125.24	500.96	646.28	235.61	0.00	1447.23	1252.82	0.346	0.53	0.53	3.803	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	489.04	122.26	490.22	361.96	240.38	0.00	1276.88	997.27	0.383	0.92	0.63	4.584	A
2 - Regeneration Link	382.97	95.74	383.67	392.68	337.93	0.00	1290.40	1079.92	0.297	0.60	0.42	3.974	A
3 - Derby Rd	409.04	102.26	409.60	528.87	192.74	0.00	1474.39	1252.82	0.277	0.53	0.39	3.384	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	409.55	102.39	410.20	302.99	201.23	0.00	1299.56	997.27	0.315	0.63	0.46	4.052	A
2 - Regeneration Link	320.72	80.18	321.13	328.66	282.77	0.00	1323.62	1079.92	0.242	0.42	0.32	3.594	A
3 - Derby Rd	342.55	85.64	342.90	442.58	161.32	0.00	1494.29	1252.82	0.229	0.39	0.30	3.129	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:15-07:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	6.68	0.45	4.026	A	A
2 - Regeneration Link	4.66	0.31	3.576	A	A
3 - Derby Rd	4.35	0.29	3.118	A	A

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	9.04	0.60	4.560	A	A
2 - Regeneration Link	6.18	0.41	3.960	A	A
3 - Derby Rd	5.64	0.38	3.377	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	13.33	0.89	5.543	A	A
2 - Regeneration Link	8.79	0.59	4.627	A	A
3 - Derby Rd	7.75	0.52	3.799	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	13.77	0.92	5.564	A	A
2 - Regeneration Link	9.01	0.60	4.637	A	A
3 - Derby Rd	7.91	0.53	3.803	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service

1 - Swadlincote Rd	9.62	0.64	4.584	A	A
2 - Regeneration Link	6.50	0.43	3.974	A	A
3 - Derby Rd	5.89	0.39	3.384	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.08	0.47	4.052	A	A
2 - Regeneration Link	4.90	0.33	3.594	A	A
3 - Derby Rd	4.55	0.30	3.129	A	A

(Default Analysis Set) - 2024 Base Reg Link 50% with Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2024 Base Reg Link 50% with Dev, PM	2024 Base Reg Link 50% with Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	A,B,C				5.20	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
1 - Swadlincote Rd	A	1 - Swadlincote Rd	
2 - Regeneration Link	B	2 - Regeneration Link	
3 - Derby Rd	C	3 - Derby Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1 - Swadlincote Rd	0.00	99999.00		0.00
2 - Regeneration Link	0.00	99999.00		0.00

3 - Derby Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	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 - Swadlincote Rd	3.65	7.00	5.38	25.00	40.00	38.61	
2 - Regeneration Link	3.65	7.00	6.44	30.00	40.00	33.34	
3 - Derby Rd	3.65	7.00	7.83	25.00	40.00	21.16	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1 - Swadlincote Rd		(calculated)	(calculated)	0.579	1416.098
2 - Regeneration Link		(calculated)	(calculated)	0.602	1493.893
3 - Derby Rd		(calculated)	(calculated)	0.633	1596.479

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1 - Swadlincote Rd	ONE HOUR	✓	590.00	100.000
2 - Regeneration Link	ONE HOUR	✓	564.00	100.000
3 - Derby Rd	ONE HOUR	✓	515.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.000	214.000	376.000
	2 - Regeneration Link	184.000	26.000	354.000
	3 - Derby Rd	342.000	173.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.00	0.36	0.64
	2 - Regeneration Link	0.33	0.05	0.63
	3 - Derby Rd	0.66	0.34	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
	1 - Swadlincote Rd	1.000	1.000	1.000

From	2 - Regeneration Link	1.000	1.000	1.000
	3 - Derby Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1 - Swadlincote Rd	2 - Regeneration Link	3 - Derby Rd
From	1 - Swadlincote Rd	0.0	0.0	0.0
	2 - Regeneration Link	0.0	0.0	0.0
	3 - Derby Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1 - Swadlincote Rd	0.50	5.63	1.01	A	541.39	812.09	65.10	4.81	0.72	65.11	4.81
2 - Regeneration Link	0.50	5.77	0.99	A	517.54	776.30	62.69	4.85	0.70	62.70	4.85
3 - Derby Rd	0.39	4.08	0.64	A	472.57	708.86	43.13	3.65	0.48	43.13	3.65

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	444.18	111.05	442.19	394.46	149.26	0.00	1329.65	1125.88	0.334	0.00	0.50	4.047	A
2 - Regeneration Link	424.61	106.15	422.73	309.65	281.80	0.00	1324.20	1061.82	0.321	0.00	0.47	3.985	A
3 - Derby Rd	387.72	96.93	386.33	547.13	157.40	0.00	1496.77	1346.03	0.259	0.00	0.35	3.237	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	530.40	132.60	529.70	472.36	178.72	0.00	1312.59	1125.88	0.404	0.50	0.67	4.594	A
2 - Regeneration Link	507.02	126.76	506.33	370.85	337.57	0.00	1290.61	1061.82	0.393	0.47	0.64	4.586	A
3 - Derby Rd	462.97	115.74	462.55	655.38	188.53	0.00	1477.05	1346.03	0.313	0.35	0.45	3.546	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	649.60	162.40	648.28	578.21	218.79	0.00	1289.39	1125.88	0.504	0.67	1.00	5.604	A
2 - Regeneration Link	620.98	155.24	619.61	453.93	413.14	0.00	1245.11	1061.82	0.499	0.64	0.98	5.742	A
3 - Derby Rd	567.03	141.76	566.29	802.05	230.71	0.00	1450.33	1346.03	0.391	0.45	0.64	4.068	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	649.60	162.40	649.58	579.12	219.10	0.00	1289.21	1125.88	0.504	1.00	1.01	5.627	A
2 -													

Regeneration Link	620.98	155.24	620.95	454.71	413.97	0.00	1244.61	1061.82	0.499	0.98	0.99	5.771	A
3 - Derby Rd	567.03	141.76	567.02	803.71	231.20	0.00	1450.02	1346.03	0.391	0.64	0.64	4.076	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	530.40	132.60	531.70	473.78	179.20	0.00	1312.32	1125.88	0.404	1.01	0.68	4.620	A
2 - Regeneration Link	507.02	126.76	508.37	372.05	338.85	0.00	1289.85	1061.82	0.393	0.99	0.65	4.615	A
3 - Derby Rd	462.97	115.74	463.70	657.93	189.29	0.00	1476.57	1346.03	0.314	0.64	0.46	3.555	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1 - Swadlincote Rd	444.18	111.05	444.90	396.52	150.00	0.00	1329.23	1125.88	0.334	0.68	0.51	4.073	A
2 - Regeneration Link	424.61	106.15	425.32	311.37	283.53	0.00	1323.16	1061.82	0.321	0.65	0.48	4.014	A
3 - Derby Rd	387.72	96.93	388.15	550.48	158.36	0.00	1496.16	1346.03	0.259	0.46	0.35	3.252	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.28	0.49	4.047	A	A
2 - Regeneration Link	6.85	0.46	3.985	A	A
3 - Derby Rd	5.11	0.34	3.237	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	9.87	0.66	4.594	A	A
2 - Regeneration Link	9.42	0.63	4.586	A	A
3 - Derby Rd	6.70	0.45	3.546	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	14.60	0.97	5.604	A	A
2 - Regeneration Link	14.29	0.95	5.742	A	A
3 - Derby Rd	9.37	0.62	4.068	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	15.10	1.01	5.627	A	A
2 - Regeneration Link	14.80	0.99	5.771	A	A
3 - Derby Rd	9.58	0.64	4.076	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	10.53	0.70	4.620	A	A
2 - Regeneration Link	10.05	0.67	4.615	A	A
3 - Derby Rd	7.02	0.47	3.555	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1 - Swadlincote Rd	7.73	0.52	4.073	A	A

2 - Regeneration Link	7.28	0.49	4.014	A	A
3 - Derby Rd	5.35	0.36	3.252	A	A

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