

Junctions 8
PICADY 8 - Priority Intersection Module
Version: 8.0.2.316 [14 Feb 2013] © Copyright TRL Limited, 2013
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: 02. Lovedean Lane_Frogmore Lane.arc8

Path: J:\21834 Woodcroft Farm\004 Transport\Working Documents\Junction Analysis\PICADY\April 2013 Assessments

Report generation date: 08/07/2013 10:04:49

-
- » Existing Layout - 2010 Observed, AM
 - » Existing Layout - 2010 Observed, PM
 - » Existing Layout - 2018 Baseline, AM
 - » Existing Layout - 2018 Baseline, PM
 - » Existing Layout - 2018 Baseline + Dev, AM
 - » Existing Layout - 2018 Baseline + Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2010 Observed								
Stream B-AC	0.87	11.25	0.47	B	0.32	7.82	0.25	A
Stream C-AB	0.62	7.25	0.33	A	0.83	7.16	0.39	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Existing Layout - 2018 Baseline								
Stream B-AC	1.13	13.05	0.53	B	0.38	8.26	0.28	A
Stream C-AB	0.76	7.69	0.37	A	1.09	7.79	0.45	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Existing Layout - 2018 Baseline + Dev								
Stream B-AC	1.15	13.17	0.54	B	0.39	8.34	0.28	A
Stream C-AB	0.80	7.82	0.39	A	1.12	7.88	0.45	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 - 2010 Observed, AM" model duration: 08:00 - 09:00
 'D2 - 2010 Observed, PM" model duration: 17:00 - 18:00
 'D3 - 2018 Baseline, AM" model duration: 08:00 - 09:00
 'D4 - 2018 Baseline, PM" model duration: 17:00 - 18:00
 'D5 - 2018 Baseline + Dev, AM" model duration: 08:00 - 09:00
 'D6 - 2018 Baseline + Dev, PM" model duration: 17:00 - 18:00
 'D7 - 2023 Baseline, AM" model duration: 08:00 - 09:00
 'D8 - 2023 Baseline, PM" model duration: 17:00 - 18:00
 'D9 - 2023 Baseline + Dev, AM" model duration: 08:00 - 09:00
 'D10 - 2023 Baseline + Dev, PM" model duration: 17:00 - 18:00
 'D11 - 2023 Baseline + Dev (700 Units), AM" model duration: 08:00 - 09:00
 'D12 - 2023 Baseline + Dev (700 Units), PM" model duration: 17:00 - 18:00
 'D13 - 2018 Baseline + Dev (700 Units), AM" model duration: 08:00 - 09:00
 'D14 - 2018 Baseline + Dev (700 Units), PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.2.316 at 08/07/2013 10:04:45

File summary

File Description

Title	Lovedean Lane _Fromore Lane Junction
Location	Waterlooville
Site Number	02
Date	15/04/2013
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	21834
Enumerator	
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

Existing Layout - 2010 Observed, 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
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		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	Rela
2010 Observed, AM	2010 Observed	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
Lovedean Lane _Frogmore Lane	T-Junction	Two-way	A,B,C		9.38	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Lovedean Lane (N)		Major
B	Frogmore Lane		Minor
C	Lovedean Lane (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.20		0.00		2.20	200.00	✓	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

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.68										80	25

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

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
01	B-A	550.858	0.095	0.240	0.151	0.343
01	B-C	683.224	0.099	0.251	-	-
01	C-B	689.785	0.253	0.253	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

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

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 01 (for whole period)

		To		
		A	B	C
From	A	0.000	4.000	306.000
	B	4.000	0.000	277.000
	C	201.000	180.000	0.000

Turning Proportions (PCU) - Junction 01 (for whole period)

		To		
		A	B	C
From	A	0.00	0.01	0.99
	B	0.01	0.00	0.99
	C	0.53	0.47	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 01 (for whole period)

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

Heavy Vehicle Percentages - Junction 01 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

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	0.47	11.25	0.87	B	281.00	281.00	51.15	10.92	0.85	51.19	10.93
C-AB	0.33	7.25	0.62	A	246.75	246.75	36.98	8.99	0.62	37.00	9.00
C-A	-	-	-	-	134.25	134.25	-	-	-	-	-
A-B	-	-	-	-	4.00	4.00	-	-	-	-	-
A-C	-	-	-	-	306.00	306.00	-	-	-	-	-

Existing Layout - 2010 Observed, 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
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		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	Rela
2010 Observed, PM	2010 Observed	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
Lovedean Lane_Frogmore Lane	T-Junction	Two-way	A,B,C		7.37	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Lovedean Lane (N)		Major
B	Frogmore Lane		Minor
C	Lovedean Lane (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.20		0.00		2.20	200.00	✓	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

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.68										80	25

Source: Junctions 8 (8.0.2.316)

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

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
01	B-A	550.858	0.095	0.240	0.151	0.343
01	B-C	683.224	0.099	0.251	-	-
01	C-B	689.785	0.253	0.253	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

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

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 01 (for whole period)

	To			
From		A	B	C
	A	0.000	3.000	207.000
	B	8.000	0.000	142.000
	C	287.000	207.000	0.000

Turning Proportions (PCU) - Junction 01 (for whole period)

	To			
		A	B	C
From	A	0.00	0.01	0.99
	B	0.05	0.00	0.95
	C	0.58	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 01 (for whole period)

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

Heavy Vehicle Percentages - Junction 01 (for whole period)

	To			
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

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	0.25	7.82	0.32	A	150.00	150.00	19.23	7.69	0.32	19.23	7.69
C-AB	0.39	7.16	0.83	A	317.40	317.40	49.75	9.40	0.83	49.77	9.41
C-A	-	-	-	-	176.60	176.60	-	-	-	-	-
A-B	-	-	-	-	3.00	3.00	-	-	-	-	-
A-C	-	-	-	-	207.00	207.00	-	-	-	-	-

Existing Layout - 2018 Baseline, 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
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		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	Relative
2018 Baseline, AM	2018 Baseline	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
Lovedean Lane _Frogmore Lane	T-Junction	Two-way	A,B,C		10.53	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Lovedean Lane (N)		Major
B	Frogmore Lane		Minor
C	Lovedean Lane (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.20		0.00		2.20	200.00	✓	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

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.68										80	25

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

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
01	B-A	550.858	0.095	0.240	0.151	0.343
01	B-C	683.224	0.099	0.251	-	-
01	C-B	689.785	0.253	0.253	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

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

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 01 (for whole period)

	To			
From		A	B	C
	A	0.000	5.000	343.000
	B	5.000	0.000	310.000
	C	222.000	197.000	0.000

Turning Proportions (PCU) - Junction 01 (for whole period)

	To			
		A	B	C
From	A	0.00	0.01	0.99
	B	0.02	0.00	0.98
	C	0.53	0.47	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 01 (for whole period)

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

Heavy Vehicle Percentages - Junction 01 (for whole period)

	To			
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

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	0.53	13.05	1.13	B	315.00	315.00	66.08	12.59	1.10	66.15	12.60
C-AB	0.37	7.69	0.76	A	279.99	279.99	45.09	9.66	0.75	45.11	9.67
C-A	-	-	-	-	139.01	139.01	-	-	-	-	-
A-B	-	-	-	-	5.00	5.00	-	-	-	-	-
A-C	-	-	-	-	343.00	343.00	-	-	-	-	-

Existing Layout - 2018 Baseline, 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
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		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	Relative
2018 Baseline, PM	2018 Baseline	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
Lovedean Lane_Frogmore Lane	T-Junction	Two-way	A,B,C		7.93	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Lovedean Lane (N)		Major
B	Frogmore Lane		Minor
C	Lovedean Lane (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.20		0.00		2.20	200.00	✓	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

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.68										80	25

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

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
01	B-A	550.858	0.095	0.240	0.151	0.343
01	B-C	683.224	0.099	0.251	-	-
01	C-B	689.785	0.253	0.253	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

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

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 01 (for whole period)

	To			
From		A	B	C
	A	0.000	3.000	231.000
	B	9.000	0.000	157.000
	C	322.000	231.000	0.000

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Turning Proportions (PCU) - Junction 01 (for whole period)

	To			
From		A	B	C
	A	0.00	0.01	0.99
	B	0.05	0.00	0.95
	C	0.58	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 01 (for whole period)

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

Heavy Vehicle Percentages - Junction 01 (for whole period)

	To			
From		A	B	C
	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

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	0.28	8.26	0.38	A	166.00	166.00	22.44	8.11	0.37	22.45	8.11
C-AB	0.45	7.79	1.09	A	375.56	375.56	64.97	10.38	1.08	65.02	10.39
C-A	-	-	-	-	177.44	177.44	-	-	-	-	-
A-B	-	-	-	-	3.00	3.00	-	-	-	-	-
A-C	-	-	-	-	231.00	231.00	-	-	-	-	-

Existing Layout - 2018 Baseline + 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
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		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	Relatio
2018 Baseline + Dev, AM	2018 Baseline + Dev	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
Lovedean Lane _Frogmore Lane	T-Junction	Two-way	A,B,C		10.62	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Lovedean Lane (N)		Major
B	Frogmore Lane		Minor
C	Lovedean Lane (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.20		0.00		2.20	200.00	✓	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

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.68										80	25

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

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
01	B-A	550.858	0.095	0.240	0.151	0.343
01	B-C	683.224	0.099	0.251	-	-
01	C-B	689.785	0.253	0.253	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

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

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 01 (for whole period)

	To			
From		A	B	C
	A	0.000	5.000	345.000
	B	5.000	0.000	312.000
	C	226.000	203.000	0.000

Turning Proportions (PCU) - Junction 01 (for whole period)

	To			
		A	B	C
From	A	0.00	0.01	0.99
	B	0.02	0.00	0.98
	C	0.53	0.47	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 01 (for whole period)

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

Heavy Vehicle Percentages - Junction 01 (for whole period)

	To			
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

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	0.54	13.17	1.15	B	317.00	317.00	67.10	12.70	1.12	67.17	12.71
C-AB	0.39	7.82	0.80	A	290.35	290.35	47.63	9.84	0.79	47.65	9.85
C-A	-	-	-	-	138.65	138.65	-	-	-	-	-
A-B	-	-	-	-	5.00	5.00	-	-	-	-	-
A-C	-	-	-	-	345.00	345.00	-	-	-	-	-

Existing Layout - 2018 Baseline + 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
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		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	Relatio
2018 Baseline + Dev, PM	2018 Baseline + Dev	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
Lovedean Lane _Frogmore Lane	T-Junction	Two-way	A,B,C		8.02	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Lovedean Lane (N)		Major
B	Frogmore Lane		Minor
C	Lovedean Lane (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.20		0.00		2.20	200.00	✓	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

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.68										80	25

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

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
01	B-A	550.858	0.095	0.240	0.151	0.343
01	B-C	683.224	0.099	0.251	-	-
01	C-B	689.785	0.253	0.253	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

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

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 01 (for whole period)

	To		
	A	B	C
From	A	0.000	3.000
	B	9.000	0.000
	C	325.000	234.000

Turning Proportions (PCU) - Junction 01 (for whole period)

	To			
		A	B	C
From	A	0.00	0.01	0.99
	B	0.05	0.00	0.95
	C	0.58	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 01 (for whole period)

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

Heavy Vehicle Percentages - Junction 01 (for whole period)

	To			
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

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	0.28	8.34	0.39	A	170.00	170.00	23.21	8.19	0.39	23.22	8.20
C-AB	0.45	7.88	1.12	A	382.29	382.29	66.97	10.51	1.12	67.02	10.52
C-A	-	-	-	-	176.71	176.71	-	-	-	-	-
A-B	-	-	-	-	3.00	3.00	-	-	-	-	-
A-C	-	-	-	-	234.00	234.00	-	-	-	-	-