

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	496.43	0.000	0.00	0.000	A
B-A	100.19	100.19	0.00	449.59	0.223	0.28	10.302	B
C-A	1086.71	1086.71	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	503.09	0.000	0.00	0.000	A
B-A	81.81	82.10	0.00	474.60	0.172	0.21	9.178	A
C-A	887.29	887.29	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	507.56	0.000	0.00	0.000	A
B-A	68.51	68.70	0.00	492.68	0.139	0.16	8.494	A
C-A	743.07	743.07	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: A6102 Langsett Rd N-Orchard St (4).arc8

Path: Y:\2015\15-201 to 15-225\15-215 Oughtibridge Mill, Oughtibridge\Technical\Junction Models

Report generation date: 16/03/2016 15:27:25

Summary of junction performance

PM Peak				
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - Predicted 2021				
Stream B-C	0.00	0.00	0.00	A
Stream B-A	0.08	7.50	0.08	A
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	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 - Existing 2015, AM Peak" model duration: 07:30 - 09:00

"D2 - Existing 2015, PM Peak" model duration: 16:45 - 18:15

"D3 - Base 2021, AM Peak" model duration: 07:30 - 09:00

"D4 - Base 2021, PM Peak" model duration: 16:45 - 18:15

"D5 - Predicted 2021, AM Peak" model duration: 07:30 - 09:00

"D6 - Predicted 2021, PM Peak" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/03/2016 15:27:25

File summary

File Description

Title	A6102 Langsett Road N/Orchard Street Priority T-Junction
Location	Oughtibridge, Sheffield
Site Number	
Date	11/01/2016
Version	
Status	
Identifier	
Client	CEG
Jobnumber	15-215
Enumerator	RD
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 - Predicted 2021, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2021, PM Peak	Predicted 2021	PM Peak		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	One-way from C to A	A,B,C	7.50	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Orchard Street		Major
B	A6102 Langsett Road N (South)		Minor
C	A6102 Langsett Road N (North East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	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 plus flare				8.00	6.00	5.30	4.10	3.40	✓	2.00	100	0

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
1	B-A	585.852	0.079	0.199	0.125	0.285
1	B-C	526.072	0.060	0.151	-	-
1	C-B	573.963	0.164	0.164	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	0.00	100.000
B	ONE HOUR	✓	37.00	100.000
C	ONE HOUR	✓	471.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	37.000	0.000	0.000
	C	471.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.33	0.33	0.33
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	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
B-C	0.00	0.00	0.00	A
B-A	0.08	7.50	0.08	A
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	519.31	0.000	0.00	0.000	A
B-A	27.86	27.64	0.00	541.39	0.051	0.05	7.003	A
C-A	354.59	354.59	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	517.81	0.000	0.00	0.000	A
B-A	33.26	33.21	0.00	532.76	0.062	0.07	7.206	A
C-A	423.42	423.42	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	515.72	0.000	0.00	0.000	A
B-A	40.74	40.67	0.00	520.83	0.078	0.08	7.497	A
C-A	518.58	518.58	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	515.70	0.000	0.00	0.000	A
B-A	40.74	40.74	0.00	520.83	0.078	0.08	7.497	A
C-A	518.58	518.58	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	517.78	0.000	0.00	0.000	A
B-A	33.26	33.33	0.00	532.76	0.062	0.07	7.208	A
C-A	423.42	423.42	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	519.24	0.000	0.00	0.000	A
B-A	27.86	27.91	0.00	541.39	0.051	0.05	7.013	A
C-A	354.59	354.59	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

<h1>Junctions 8</h1>
<h2>PICADY 8 - Priority Intersection Module</h2>
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Filename: Forge Ln-Orchard St (5-1).arc8

Path: Y:\2015\15-201 to 15-225\15-215 Oughtibridge Mill, Oughtibridge\Technical\Junction Models

Report generation date: 16/03/2016 15:29:59

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - Predicted 2021				
Stream B-AC	0.06	9.13	0.06	A
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	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 - Existing 2015, AM Peak" model duration: 07:30 - 09:00

"D2 - Existing 2015, PM Peak" model duration: 16:45 - 18:15

"D3 - Base 2021, AM Peak" model duration: 07:30 - 09:00

"D4 - Base 2021, PM Peak" model duration: 16:45 - 18:15

"D5 - Predicted 2021, AM Peak " model duration: 07:30 - 09:00

"D6 - Predicted 2021, PM Peak" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/03/2016 15:29:59

File summary

File Description

Title	Orchard Street (North)/Forge Lane/Orchard Street (South) Priority T-Junction
Location	Oughtibridge, Sheffield
Site Number	
Date	11/01/2016
Version	
Status	
Identifier	
Client	CEG
Jobnumber	15-215
Enumerator	RD
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 - Predicted 2021, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2021, AM Peak	Predicted 2021	AM Peak		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	One-way from A to C	A,B,C	9.13	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Orchard Street (North)		Major
B	Forge Lane		Minor
C	Orchard Street (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	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	2.90										0	21

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
1	B-A	483.091	0.065	0.164	0.103	0.235
1	B-C	630.778	0.071	0.181	-	-
1	C-B	573.963	0.164	0.164	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	1078.00	100.000
B	ONE HOUR	✓	21.00	100.000
C	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	9.000	1069.000
	B	0.000	0.000	21.000
	C	0.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.01	0.99
	B	0.00	0.00	1.00
	C	0.33	0.33	0.33

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	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
B-AC	0.06	9.13	0.06	A
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	15.81	15.68	0.00	484.95	0.033	0.03	7.669	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	440.59	0.000	0.00	0.000	A
A-B	6.78	6.78	0.00	-	-	-	-	-
A-C	804.80	804.80	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	18.88	18.84	0.00	456.64	0.041	0.04	8.223	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	414.71	0.000	0.00	0.000	A
A-B	8.09	8.09	0.00	-	-	-	-	-
A-C	961.01	961.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	23.12	23.06	0.00	417.50	0.055	0.06	9.126	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	378.92	0.000	0.00	0.000	A
A-B	9.91	9.91	0.00	-	-	-	-	-
A-C	1176.99	1176.99	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	23.12	23.12	0.00	417.50	0.055	0.06	9.127	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	378.92	0.000	0.00	0.000	A

A-B	9.91	9.91	0.00	-	-	-	-	-
A-C	1176.99	1176.99	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	18.88	18.94	0.00	456.64	0.041	0.04	8.227	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	414.71	0.000	0.00	0.000	A
A-B	8.09	8.09	0.00	-	-	-	-	-
A-C	961.01	961.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	15.81	15.85	0.00	484.95	0.033	0.03	7.673	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	440.59	0.000	0.00	0.000	A
A-B	6.78	6.78	0.00	-	-	-	-	-
A-C	804.80	804.80	0.00	-	-	-	-	-

<h1>Junctions 8</h1>
<h2>PICADY 8 - Priority Intersection Module</h2>
Version: 8.0.2.316 [14 Feb 2013] © Copyright TRL Limited, 2016
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Filename: Forge Ln-Orchard St (5-1).arc8

Path: Y:\2015\15-201 to 15-225\15-215 Oughtibridge Mill, Oughtibridge\Technical\Junction Models

Report generation date: 16/03/2016 15:30:19

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - Predicted 2021				
Stream B-AC	0.02	6.94	0.02	A
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	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 - Existing 2015, AM Peak" model duration: 07:30 - 09:00

"D2 - Existing 2015, PM Peak" model duration: 16:45 - 18:15

"D3 - Base 2021, AM Peak" model duration: 07:30 - 09:00

"D4 - Base 2021, PM Peak" model duration: 16:45 - 18:15

"D5 - Predicted 2021, AM Peak" model duration: 07:30 - 09:00

"D6 - Predicted 2021, PM Peak" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/03/2016 15:30:19

File summary

File Description

Title	Orchard Street (North)/Forge Lane/Orchard Street (South) Priority T-Junction
Location	Oughtibridge, Sheffield
Site Number	
Date	11/01/2016
Version	
Status	
Identifier	
Client	CEG
Jobnumber	15-215
Enumerator	RD
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 - Predicted 2021, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2021, PM Peak	Predicted 2021	PM Peak		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	One-way from A to C	A,B,C	6.94	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Orchard Street (North)		Major
B	Forge Lane		Minor
C	Orchard Street (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	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	2.90										0	21

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
1	B-A	483.091	0.065	0.164	0.103	0.235
1	B-C	630.778	0.071	0.181	-	-
1	C-B	573.963	0.164	0.164	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	509.00	100.000
B	ONE HOUR	✓	11.00	100.000
C	ONE HOUR	✓	0.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	10.000	499.000
	B	0.000	0.000	11.000
	C	0.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.00	0.00	1.00
	C	0.33	0.33	0.33

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	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
B-AC	0.02	6.94	0.02	A
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	8.28	8.22	0.00	562.39	0.015	0.01	6.496	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	510.99	0.000	0.00	0.000	A
A-B	7.53	7.53	0.00	-	-	-	-	-
A-C	375.67	375.67	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	9.89	9.88	0.00	549.12	0.018	0.02	6.675	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	498.77	0.000	0.00	0.000	A
A-B	8.99	8.99	0.00	-	-	-	-	-
A-C	448.59	448.59	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	12.11	12.09	0.00	530.77	0.023	0.02	6.940	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	481.87	0.000	0.00	0.000	A
A-B	11.01	11.01	0.00	-	-	-	-	-
A-C	549.41	549.41	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	12.11	12.11	0.00	530.77	0.023	0.02	6.940	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	481.87	0.000	0.00	0.000	A

A-B	11.01	11.01	0.00	-	-	-	-	-
A-C	549.41	549.41	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	9.89	9.91	0.00	549.12	0.018	0.02	6.678	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	498.77	0.000	0.00	0.000	A
A-B	8.99	8.99	0.00	-	-	-	-	-
A-C	448.59	448.59	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	8.28	8.30	0.00	562.39	0.015	0.02	6.496	A
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	510.99	0.000	0.00	0.000	A
A-B	7.53	7.53	0.00	-	-	-	-	-
A-C	375.67	375.67	0.00	-	-	-	-	-

<h1>Junctions 8</h1>
<h2>PICADY 8 - Priority Intersection Module</h2>
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Filename: Orchard St-Station Ln-Low Rd-Bridge Hill (5-2).arc8
 Path: Y:\2015\15-201 to 15-225\15-215 Oughtibridge Mill, Oughtibridge\Technical\Junction Models
 Report generation date: 16/03/2016 15:32:54

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - Predicted 2021				
Stream B-ACD	3.52	31.23	0.79	D
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.00	0.00	0.00	A
Stream D-AB	1.19	25.97	0.55	D
Stream D-BC	1.05	22.44	0.52	C
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A

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

"D1 - Existing 2015, AM Peak" model duration: 07:30 - 09:00
 "D2 - Existing 2015, PM Peak" model duration: 16:45 - 18:15
 "D3 - Base 2021, AM Peak" model duration: 07:30 - 09:00
 "D4 - Base 2021, PM Peak" model duration: 16:45 - 18:15
 "D5 - Predicted 2021, AM Peak" model duration: 07:30 - 09:00
 "D6 - Predicted 2021, PM Peak" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/03/2016 15:32:54

File summary

File Description

Title	Orchard Street/Station Lane/Low Road/Bridge Hill Priority Crossroads Junction
Location	Oughtibridge, Sheffield
Site Number	
Date	11/01/2016
Version	
Status	
Identifier	
Client	CEG
Jobnumber	15-215
Enumerator	RD
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 - Predicted 2021, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2021, AM Peak	Predicted 2021	AM Peak		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Crossroads	One-way from A to C	A,B,C,D	28.08	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Orchard Street		Major
B	Station Lane		Minor
C	Low Road		Major
D	Bridge Hill		Minor

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)
A	6.00		0.00		2.20	0.00		
C	6.00		0.00		2.20	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	4.00								✓		0	100
	One lane												

D	plus flare				10.00	5.40	4.20	4.20	4.20	✓	1.00	32	0
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Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

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	573.963	-	-	-	-	-	-	0.164	0.235	0.164	-	-	-
1	B-A	578.734	0.078	0.197	0.197	-	-	-	0.124	0.281	-	0.197	0.197	0.098
1	B-C	755.659	0.086	0.216	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	578.734	0.078	0.197	0.197	-	-	-	0.124	0.281	0.124	-	-	-
1	B-D, offside lane	578.734	0.078	0.197	0.197	-	-	-	0.124	0.281	0.124	-	-	-
1	C-B	573.963	0.164	0.164	0.235	-	-	-	-	-	-	-	-	-
1	D-A	677.033	-	-	-	-	-	-	0.194	-	0.077	-	-	-
1	D-B, nearside lane	529.457	0.113	0.113	0.257	-	-	-	0.180	0.180	0.071	-	-	-
1	D-B, offside lane	529.457	0.113	0.113	0.257	-	-	-	0.180	0.180	0.071	-	-	-
1	D-C	529.457	-	0.113	0.257	0.090	0.180	0.180	0.180	0.180	0.071	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	1090.00	100.000
B	ONE HOUR	✓	387.00	100.000
C	ONE HOUR	✓	0.00	100.000
D	ONE HOUR	✓	312.00	100.000

Turning Proportions

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

	To			
	A	B	C	D

From	A	0.000	295.000	795.000	0.000
	B	0.000	0.000	387.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	286.000	26.000	0.000

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

From	To				
		A	B	C	D
	A	0.00	0.27	0.73	0.00
	B	0.00	0.00	1.00	0.00
	C	0.25	0.25	0.25	0.25
D	0.00	0.92	0.08	0.00	

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.79	31.23	3.52	D
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.00	0.00	0.00	A
D-AB	0.55	25.97	1.19	D
D-BC	0.52	22.44	1.05	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	291.35	287.75	0.00	607.16	0.480	0.90	11.151	B
A-B	222.09	222.09	0.00	-	-	-	-	-
A-C	598.52	598.52	0.00	-	-	-	-	-

A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
D-AB	112.81	111.24	0.00	395.39	0.285	0.39	12.601	B
D-BC	122.08	120.48	0.00	421.31	0.290	0.40	11.905	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	439.11	0.000	0.00	0.000	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	347.91	345.70	0.00	578.33	0.602	1.45	15.325	C
A-B	265.20	265.20	0.00	-	-	-	-	-
A-C	714.69	714.69	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
D-AB	136.44	135.65	0.00	362.39	0.377	0.59	15.820	C
D-BC	144.04	143.36	0.00	390.93	0.368	0.57	14.501	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	412.93	0.000	0.00	0.000	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	426.09	418.66	0.00	538.48	0.791	3.31	28.400	D
A-B	324.80	324.80	0.00	-	-	-	-	-
A-C	875.31	875.31	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
D-AB	170.40	168.15	0.00	310.26	0.549	1.15	24.939	C
D-BC	173.12	171.33	0.00	335.39	0.516	1.02	21.701	C
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	376.74	0.000	0.00	0.000	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	426.09	425.27	0.00	538.48	0.791	3.52	31.229	D
A-B	324.80	324.80	0.00	-	-	-	-	-
A-C	875.31	875.31	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
D-AB	170.58	170.41	0.00	308.60	0.553	1.19	25.971	D
D-BC	172.93	172.80	0.00	332.90	0.519	1.05	22.440	C
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	376.74	0.000	0.00	0.000	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	347.91	355.68	0.00	578.33	0.602	1.57	16.687	C
A-B	265.20	265.20	0.00	-	-	-	-	-
A-C	714.69	714.69	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
D-AB	136.63	138.90	0.00	360.67	0.379	0.63	16.391	C
D-BC	143.85	145.65	0.00	388.92	0.370	0.60	14.906	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	412.93	0.000	0.00	0.000	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	291.35	293.87	0.00	607.16	0.480	0.94	11.580	B
A-B	222.09	222.09	0.00	-	-	-	-	-
A-C	598.52	598.52	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A

D-AB	112.93	113.80	0.00	394.19	0.286	0.41	12.878	B
D-BC	121.96	122.71	0.00	420.33	0.290	0.42	12.127	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	439.11	0.000	0.00	0.000	A

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Orchard St-Station Ln-Low Rd-Bridge Hill (5-2).arc8

Path: Y:\2015\15-201 to 15-225\15-215 Oughtibridge Mill, Oughtibridge\Technical\Junction Models

Report generation date: 16/03/2016 15:33:18

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - Predicted 2021				
Stream B-ACD	12.95	78.30	0.97	F
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.00	0.00	0.00	A
Stream D-AB	0.51	13.59	0.34	B
Stream D-BC	0.59	14.08	0.37	B
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A

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

"D1 - Existing 2015, AM Peak" model duration: 07:30 - 09:00

"D2 - Existing 2015, PM Peak" model duration: 16:45 - 18:15

"D3 - Base 2021, AM Peak" model duration: 07:30 - 09:00

"D4 - Base 2021, PM Peak" model duration: 16:45 - 18:15

"D5 - Predicted 2021, AM Peak" model duration: 07:30 - 09:00

"D6 - Predicted 2021, PM Peak" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/03/2016 15:33:18

File summary

File Description

Title	Orchard Street/Station Lane/Low Road/Bridge Hill Priority Crossroads Junction
Location	Oughtibridge, Sheffield
Site Number	
Date	11/01/2016
Version	
Status	
Identifier	
Client	CEG
Jobnumber	15-215
Enumerator	RD
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 - Predicted 2021, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2021, PM Peak	Predicted 2021	PM Peak		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Crossroads	One-way from A to C	A,B,C,D	57.90	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Orchard Street		Major
B	Station Lane		Minor
C	Low Road		Major
D	Bridge Hill		Minor

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)
A	6.00		0.00		2.20	0.00		
C	6.00		0.00		2.20	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	4.00								✓		0	100
	One lane												

D	plus flare				10.00	5.40	4.20	4.20	4.20	✓	1.00	32	0
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Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

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	573.963	-	-	-	-	-	-	0.164	0.235	0.164	-	-	-
1	B-A	578.734	0.078	0.197	0.197	-	-	-	0.124	0.281	-	0.197	0.197	0.098
1	B-C	755.659	0.086	0.216	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	578.734	0.078	0.197	0.197	-	-	-	0.124	0.281	0.124	-	-	-
1	B-D, offside lane	578.734	0.078	0.197	0.197	-	-	-	0.124	0.281	0.124	-	-	-
1	C-B	573.963	0.164	0.164	0.235	-	-	-	-	-	-	-	-	-
1	D-A	677.033	-	-	-	-	-	-	0.194	-	0.077	-	-	-
1	D-B, nearside lane	529.457	0.113	0.113	0.257	-	-	-	0.180	0.180	0.071	-	-	-
1	D-B, offside lane	529.457	0.113	0.113	0.257	-	-	-	0.180	0.180	0.071	-	-	-
1	D-C	529.457	-	0.113	0.257	0.090	0.180	0.180	0.180	0.180	0.071	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	506.00	100.000
B	ONE HOUR	✓	568.00	100.000
C	ONE HOUR	✓	0.00	100.000
D	ONE HOUR	✓	263.00	100.000

Turning Proportions

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

	To			
	A	B	C	D

From	A	0.000	82.000	424.000	0.000
	B	0.000	0.000	568.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	220.000	43.000	0.000

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

From	To				
		A	B	C	D
	A	0.00	0.16	0.84	0.00
	B	0.00	0.00	1.00	0.00
	C	0.25	0.25	0.25	0.25
D	0.00	0.84	0.16	0.00	

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.97	78.30	12.95	F
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.00	0.00	0.00	A
D-AB	0.34	13.59	0.51	B
D-BC	0.37	14.08	0.59	B
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	427.62	421.15	0.00	681.31	0.628	1.62	13.503	B
A-B	61.73	61.73	0.00	-	-	-	-	-
A-C	319.21	319.21	0.00	-	-	-	-	-

A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
D-AB	89.25	88.28	0.00	451.60	0.198	0.24	9.884	A
D-BC	108.75	107.52	0.00	458.82	0.237	0.31	10.212	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	511.36	0.000	0.00	0.000	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	510.62	505.17	0.00	666.88	0.766	2.98	21.530	C
A-B	73.72	73.72	0.00	-	-	-	-	-
A-C	381.17	381.17	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
D-AB	108.70	108.35	0.00	432.50	0.251	0.33	11.093	B
D-BC	127.73	127.35	0.00	440.35	0.290	0.40	11.487	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	499.21	0.000	0.00	0.000	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	625.38	597.14	0.00	646.93	0.967	10.04	53.754	F
A-B	90.28	90.28	0.00	-	-	-	-	-
A-C	466.83	466.83	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
D-AB	137.12	136.43	0.00	403.09	0.340	0.50	13.463	B
D-BC	152.44	151.74	0.00	410.31	0.372	0.58	13.883	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	482.41	0.000	0.00	0.000	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	625.38	613.77	0.00	646.93	0.967	12.95	78.296	F
A-B	90.28	90.28	0.00	-	-	-	-	-
A-C	466.83	466.83	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
D-AB	137.43	137.40	0.00	402.26	0.342	0.51	13.587	B
D-BC	152.14	152.10	0.00	407.67	0.373	0.59	14.081	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	482.41	0.000	0.00	0.000	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	510.62	547.82	0.00	666.88	0.766	3.64	36.463	E
A-B	73.72	73.72	0.00	-	-	-	-	-
A-C	381.17	381.17	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
D-AB	109.01	109.68	0.00	431.57	0.253	0.34	11.206	B
D-BC	127.43	128.10	0.00	436.72	0.292	0.42	11.692	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	499.21	0.000	0.00	0.000	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	427.62	435.19	0.00	681.31	0.628	1.75	15.045	C
A-B	61.73	61.73	0.00	-	-	-	-	-
A-C	319.21	319.21	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A

D-AB	89.40	89.77	0.00	450.83	0.198	0.25	9.980	A
D-BC	108.60	109.02	0.00	457.59	0.237	0.32	10.342	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	0.00	0.00	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	511.36	0.000	0.00	0.000	A

<h1>Junctions 8</h1>
<h2>PICADY 8 - Priority Intersection Module</h2>
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Filename: A6102 Langsett Rd N-Bridge Hill-A6102 Langsett Rd S-Church St (6).arc8
 Path: Y:\2015\15-201 to 15-225\15-215 Oughtibridge Mill, Oughtibridge\Technical\Junction Models
 Report generation date: 16/03/2016 15:37:04

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - Predicted 2021				
Stream B-ACD	0.00	0.00	0.00	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.00	0.00	0.00	A
Stream D-ABC	2.65	23.97	0.74	C
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.30	8.15	0.23	A

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

"D1 - Existing 2015, AM Peak" model duration: 07:30 - 09:00
 "D2 - Existing 2015, PM Peak" model duration: 16:45 - 18:15
 "D3 - Base 2021, AM Peak" model duration: 07:30 - 09:00
 "D4 - Base 2021, PM Peak" model duration: 16:45 - 18:15
 "D5 - Predicted 2021, AM Peak" model duration: 07:30 - 09:00
 "D6 - Predicted 2021, PM Peak" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/03/2016 15:37:03

File summary

File Description

Title	A6102 Langsett Road S/Bridge Hill/A6102 Lngasset Road N/Church Street Priority Crossroads Junction
Location	Oughtibridge, Sheffield
Site Number	
Date	11/01/2016
Version	
Status	
Identifier	
Client	CEG
Jobnumber	15-215
Enumerator	RD
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
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Existing Layout - Predicted 2021, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2021, AM Peak	Predicted 2021	AM Peak		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Crossroads	One-way from C to A	A,B,C,D	20.14	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A6102 Langsett Road N		Major
B	Bridge Hill		Minor
C	A6102 Langsett Road S		Major
D	Church Street		Minor

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)
A	6.00		0.00		2.20	0.00		
C	6.00		0.00		2.20	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	4.20										0	0
D	One lane	5.00										0	27

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

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	573.963	-	-	-	-	-	-	0.164	0.235	0.164	-	-	-
1	B-A	535.261	0.072	0.182	0.182	-	-	-	0.115	0.260	-	0.182	0.182	0.091
1	B-C	698.897	0.079	0.200	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	535.261	0.072	0.182	0.182	-	-	-	0.115	0.260	0.115	-	-	-
1	B-D, offside lane	535.261	0.072	0.182	0.182	-	-	-	0.115	0.260	0.115	-	-	-
1	C-B	573.963	0.164	0.164	0.235	-	-	-	-	-	-	-	-	-
1	D-A	769.271	-	-	-	-	-	-	0.220	-	0.087	-	-	-
1	D-B, nearside lane	589.158	0.126	0.126	0.286	-	-	-	0.200	0.200	0.079	-	-	-
1	D-B, offside lane	589.158	0.126	0.126	0.286	-	-	-	0.200	0.200	0.079	-	-	-
1	D-C	589.158	-	0.126	0.286	0.100	0.200	0.200	0.200	0.200	0.079	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	0.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	597.00	100.000
D	ONE HOUR	✓	375.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	288.000	120.000	0.000	189.000
	D	181.000	194.000	0.000	0.000

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

		To			
		A	B	C	D
From	A	0.25	0.25	0.25	0.25
	B	0.25	0.25	0.25	0.25
	C	0.48	0.20	0.00	0.32
	D	0.48	0.52	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.00	0.00	0.00	A
D-ABC	0.74	23.97	2.65	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.23	8.15	0.30	A

Main Results for each time segment**Main results: (07:30-07:45)**

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	501.46	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	493.74	0.000	0.00	0.000	A
D-ABC	282.32	278.79	0.00	594.30	0.475	0.88	11.290	B
C-D	142.29	142.29	0.00	-	-	-	-	-
C-A	216.82	216.82	0.00	-	-	-	-	-
C-B	90.34	89.60	0.00	573.96	0.157	0.18	7.422	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	487.41	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	478.00	0.000	0.00	0.000	A
D-ABC	337.12	335.31	0.00	580.53	0.581	1.34	14.566	B
C-D	169.91	169.91	0.00	-	-	-	-	-
C-A	258.91	258.91	0.00	-	-	-	-	-
C-B	107.88	107.70	0.00	573.96	0.188	0.23	7.721	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	467.98	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	456.42	0.000	0.00	0.000	A
D-ABC	412.88	408.04	0.00	561.55	0.735	2.55	22.737	C
C-D	208.09	208.09	0.00	-	-	-	-	-
C-A	317.09	317.09	0.00	-	-	-	-	-
C-B	132.12	131.86	0.00	573.96	0.230	0.30	8.137	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	467.59	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	456.36	0.000	0.00	0.000	A
D-ABC	412.88	412.47	0.00	561.51	0.735	2.65	23.974	C
C-D	208.09	208.09	0.00	-	-	-	-	-
C-A	317.09	317.09	0.00	-	-	-	-	-
C-B	132.12	132.12	0.00	573.96	0.230	0.30	8.147	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	486.86	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	477.89	0.000	0.00	0.000	A
D-ABC	337.12	341.98	0.00	580.47	0.581	1.44	15.384	C
C-D	169.91	169.91	0.00	-	-	-	-	-
C-A	258.91	258.91	0.00	-	-	-	-	-
C-B	107.88	108.13	0.00	573.96	0.188	0.23	7.733	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	500.90	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	493.52	0.000	0.00	0.000	A
D-ABC	282.32	284.36	0.00	594.18	0.475	0.93	11.694	B
C-D	142.29	142.29	0.00	-	-	-	-	-
C-A	216.82	216.82	0.00	-	-	-	-	-
C-B	90.34	90.52	0.00	573.96	0.157	0.19	7.448	A

<h1>Junctions 8</h1>
<h2>PICADY 8 - Priority Intersection Module</h2>
Version: 8.0.2.316 [14 Feb 2013] © Copyright TRL Limited, 2016
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Filename: A6102 Langsett Rd N-Bridge Hill-A6102 Langsett Rd S-Church St (6).arc8
 Path: Y:\2015\15-201 to 15-225\15-215 Oughtibridge Mill, Oughtibridge\Technical\Junction Models
 Report generation date: 16/03/2016 15:37:25

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - Predicted 2021				
Stream B-ACD	0.00	0.00	0.00	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	0.00	0.00	0.00	A
Stream D-ABC	2.79	29.32	0.75	D
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	0.28	8.05	0.22	A

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

"D1 - Existing 2015, AM Peak" model duration: 07:30 - 09:00
 "D2 - Existing 2015, PM Peak" model duration: 16:45 - 18:15
 "D3 - Base 2021, AM Peak" model duration: 07:30 - 09:00
 "D4 - Base 2021, PM Peak" model duration: 16:45 - 18:15
 "D5 - Predicted 2021, AM Peak" model duration: 07:30 - 09:00
 "D6 - Predicted 2021, PM Peak" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/03/2016 15:37:25

File summary

File Description

Title	A6102 Langsett Road S/Bridge Hill/A6102 Lngasset Road N/Church Street Priority Crossroads Junction
Location	Oughtibridge, Sheffield
Site Number	
Date	11/01/2016
Version	
Status	
Identifier	
Client	CEG
Jobnumber	15-215
Enumerator	RD
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
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Existing Layout - Predicted 2021, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2021, PM Peak	Predicted 2021	PM Peak		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Crossroads	One-way from C to A	A,B,C,D	23.76	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A6102 Langsett Road N		Major
B	Bridge Hill		Minor
C	A6102 Langsett Road S		Major
D	Church Street		Minor

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)
A	6.00		0.00		2.20	0.00		
C	6.00		0.00		2.20	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	4.20										0	0
D	One lane	5.00										0	27

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

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	573.963	-	-	-	-	-	-	0.164	0.235	0.164	-	-	-
1	B-A	535.261	0.072	0.182	0.182	-	-	-	0.115	0.260	-	0.182	0.182	0.091
1	B-C	698.897	0.079	0.200	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	535.261	0.072	0.182	0.182	-	-	-	0.115	0.260	0.115	-	-	-
1	B-D, offside lane	535.261	0.072	0.182	0.182	-	-	-	0.115	0.260	0.115	-	-	-
1	C-B	573.963	0.164	0.164	0.235	-	-	-	-	-	-	-	-	-
1	D-A	769.271	-	-	-	-	-	-	0.220	-	0.087	-	-	-
1	D-B, nearside lane	589.158	0.126	0.126	0.286	-	-	-	0.200	0.200	0.079	-	-	-
1	D-B, offside lane	589.158	0.126	0.126	0.286	-	-	-	0.200	0.200	0.079	-	-	-
1	D-C	589.158	-	0.126	0.286	0.100	0.200	0.200	0.200	0.200	0.079	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	0.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	976.00	100.000
D	ONE HOUR	✓	325.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	694.000	115.000	0.000	167.000
	D	174.000	151.000	0.000	0.000

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

		To			
		A	B	C	D
From	A	0.25	0.25	0.25	0.25
	B	0.25	0.25	0.25	0.25
	C	0.71	0.12	0.00	0.17
	D	0.54	0.46	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.00	0.00	0.00	A
D-ABC	0.75	29.32	2.79	D
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.22	8.05	0.28	A

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	473.88	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	447.12	0.000	0.00	0.000	A
D-ABC	244.68	241.45	0.00	540.91	0.452	0.81	11.900	B
C-D	125.73	125.73	0.00	-	-	-	-	-
C-A	522.48	522.48	0.00	-	-	-	-	-
C-B	86.58	85.87	0.00	573.96	0.151	0.18	7.365	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	454.04	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	422.33	0.000	0.00	0.000	A
D-ABC	292.17	290.34	0.00	514.84	0.568	1.26	15.900	C
C-D	150.13	150.13	0.00	-	-	-	-	-
C-A	623.89	623.89	0.00	-	-	-	-	-
C-B	103.38	103.22	0.00	573.96	0.180	0.22	7.646	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	426.30	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	388.25	0.000	0.00	0.000	A
D-ABC	357.83	352.26	0.00	478.72	0.747	2.66	27.306	D
C-D	183.87	183.87	0.00	-	-	-	-	-
C-A	764.11	764.11	0.00	-	-	-	-	-
C-B	126.62	126.37	0.00	573.96	0.221	0.28	8.039	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	425.86	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	388.19	0.000	0.00	0.000	A
D-ABC	357.83	357.29	0.00	478.69	0.748	2.79	29.318	D
C-D	183.87	183.87	0.00	-	-	-	-	-
C-A	764.11	764.11	0.00	-	-	-	-	-
C-B	126.62	126.61	0.00	573.96	0.221	0.28	8.047	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	453.43	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	422.23	0.000	0.00	0.000	A
D-ABC	292.17	297.87	0.00	514.78	0.568	1.36	17.003	C
C-D	150.13	150.13	0.00	-	-	-	-	-
C-A	623.89	623.89	0.00	-	-	-	-	-
C-B	103.38	103.62	0.00	573.96	0.180	0.22	7.657	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	473.33	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	446.91	0.000	0.00	0.000	A
D-ABC	244.68	246.75	0.00	540.80	0.452	0.85	12.327	B
C-D	125.73	125.73	0.00	-	-	-	-	-
C-A	522.48	522.48	0.00	-	-	-	-	-
C-B	86.58	86.75	0.00	573.96	0.151	0.18	7.393	A

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: A6102 Forge Hill-A6102 Langsett Rd S (7).arc8
Path: Y:\2015\15-201 to 15-225\15-215 Oughtibridge Mill, Oughtibridge\Technical\Junction Models
Report generation date: 16/03/2016 15:41:13

Summary of junction performance

AM Peak				
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - Predicted 2021				
Stream B-C	0.00	0.00	0.00	A
Stream B-A	0.94	13.03	0.49	B
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	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 - Existing 2015, AM Peak" model duration: 07:30 - 09:00
"D2 - Existing 2015, PM Peak" model duration: 16:45 - 18:15
"D3 - Base 2021, AM Peak" model duration: 07:30 - 09:00
"D4 - Base 2021, PM Peak" model duration: 16:45 - 18:15
"D5 - Predicted 2021, AM Peak " model duration: 07:30 - 09:00
"D6 - Predicted 2021, PM Peak" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/03/2016 15:41:12

File summary

File Description

Title	A6102 Forge Hill/A6102 Langsett Road S Priority T-Junction
Location	Oughtibridge, Sheffield
Site Number	
Date	11/01/2016
Version	
Status	
Identifier	
Client	CEG
Jobnumber	15-215
Enumerator	RD
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 - Predicted 2021, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2021, AM Peak	Predicted 2021	AM Peak		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	One-way from C to A	A,B,C	13.03	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A6102 Langsett Road S (North West)		Major
B	A6102 Forge Hill		Minor
C	A6102 Langsett Road S (South East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	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 plus flare				10.00	7.10	5.80	4.80	2.90	✓	2.00	100	0

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
1	B-A	587.891	0.079	0.200	0.126	0.286
1	B-C	559.908	0.063	0.160	-	-
1	C-B	573.963	0.164	0.164	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	0.00	100.000
B	ONE HOUR	✓	238.00	100.000
C	ONE HOUR	✓	359.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	238.000	0.000	0.000
	C	359.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.33	0.33	0.33
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	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
B-C	0.00	0.00	0.00	A
B-A	0.49	13.03	0.94	B
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	514.63	0.000	0.00	0.000	A
B-A	179.18	177.30	0.00	553.88	0.323	0.47	9.513	A
C-A	270.27	270.27	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	504.70	0.000	0.00	0.000	A
B-A	213.96	213.32	0.00	547.28	0.391	0.63	10.757	B
C-A	322.73	322.73	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	491.09	0.000	0.00	0.000	A
B-A	262.04	260.87	0.00	538.16	0.487	0.92	12.925	B
C-A	395.27	395.27	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	490.79	0.000	0.00	0.000	A
B-A	262.04	262.00	0.00	538.16	0.487	0.94	13.029	B
C-A	395.27	395.27	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	504.23	0.000	0.00	0.000	A
B-A	213.96	215.09	0.00	547.28	0.391	0.65	10.875	B
C-A	322.73	322.73	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	513.97	0.000	0.00	0.000	A
B-A	179.18	179.85	0.00	553.88	0.323	0.49	9.644	A
C-A	270.27	270.27	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: A6102 Forge Hill-A6102 Langsett Rd S (7).arc8
Path: Y:\2015\15-201 to 15-225\15-215 Oughtibridge Mill, Oughtibridge\Technical\Junction Models
Report generation date: 16/03/2016 15:41:48

Summary of junction performance

PM Peak				
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - Predicted 2021				
Stream B-C	0.00	0.00	0.00	A
Stream B-A	3.24	31.44	0.78	D
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	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 - Existing 2015, AM Peak" model duration: 07:30 - 09:00
"D2 - Existing 2015, PM Peak" model duration: 16:45 - 18:15
"D3 - Base 2021, AM Peak" model duration: 07:30 - 09:00
"D4 - Base 2021, PM Peak" model duration: 16:45 - 18:15
"D5 - Predicted 2021, AM Peak" model duration: 07:30 - 09:00
"D6 - Predicted 2021, PM Peak" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/03/2016 15:41:48

File summary

File Description

Title	A6102 Forge Hill/A6102 Langsett Road S Priority T-Junction
Location	Oughtibridge, Sheffield
Site Number	
Date	11/01/2016
Version	
Status	
Identifier	
Client	CEG
Jobnumber	15-215
Enumerator	RD
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 - Predicted 2021, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2021, PM Peak	Predicted 2021	PM Peak		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	One-way from C to A	A,B,C	31.44	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A6102 Langsett Road S (North West)		Major
B	A6102 Forge Hill		Minor
C	A6102 Langsett Road S (South East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	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 plus flare				10.00	7.10	5.80	4.80	2.90	✓	2.00	100	0

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
1	B-A	587.891	0.079	0.200	0.126	0.286
1	B-C	559.908	0.063	0.160	-	-
1	C-B	573.963	0.164	0.164	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	0.00	100.000
B	ONE HOUR	✓	354.00	100.000
C	ONE HOUR	✓	622.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	354.000	0.000	0.000
	C	622.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.33	0.33	0.33
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	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
B-C	0.00	0.00	0.00	A
B-A	0.78	31.44	3.24	D
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	489.38	0.000	0.00	0.000	A
B-A	266.51	262.57	0.00	528.97	0.504	0.99	13.327	B
C-A	468.27	468.27	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	472.77	0.000	0.00	0.000	A
B-A	318.24	316.08	0.00	517.54	0.615	1.52	17.669	C
C-A	559.17	559.17	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	449.47	0.000	0.00	0.000	A
B-A	389.76	383.60	0.00	501.72	0.777	3.07	29.007	D
C-A	684.83	684.83	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	447.75	0.000	0.00	0.000	A
B-A	389.76	389.05	0.00	501.72	0.777	3.24	31.442	D
C-A	684.83	684.83	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	470.33	0.000	0.00	0.000	A
B-A	318.24	324.52	0.00	517.54	0.615	1.67	19.206	C
C-A	559.17	559.17	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	487.61	0.000	0.00	0.000	A
B-A	266.51	269.03	0.00	528.97	0.504	1.04	13.979	B
C-A	468.27	468.27	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	573.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

<h1>Junctions 8</h1>
<h2>PICADY 8 - Priority Intersection Module</h2>
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Filename: Site Access - RD.arc8

Path: Y:\2015\15-201 to 15-225\15-215 Oughtibridge Mill, Oughtibridge\Technical\Junction Models

Report generation date: 16/03/2016 15:43:30

Summary of junction performance

AM Peak				
	Queue (PCU)	Delay (s)	RFC	LOS
Proposed Layout - Predicted 2021				
Stream B-C	0.31	10.05	0.24	B
Stream B-A	0.06	11.78	0.05	B
Stream C-AB	0.09	7.93	0.08	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 - Predicted 2021, AM Peak" model duration: 07:30 - 09:00

"D2 - Predicted 2021, PM Peak" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/03/2016 15:43:30

File summary

File Description

Title	Oughtibridge Mill Site Access RTGI
Location	Oughtibridge, Sheffield
Site Number	
Date	11/01/2016
Version	
Status	
Identifier	
Client	CEG
Jobnumber	15-215
Enumerator	RD
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

Proposed Layout - Predicted 2021, AM Peak

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Proposed Layout			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2021, AM Peak	Predicted 2021	AM Peak		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Site access	T-Junction	Two-way	A,B,C	9.73	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A6102 Main Road (North West)	A6102 Main Road (North West)		Major
Site Access	Site Access		Minor
A6102 Main Road (South East)	A6102 Main Road (South East)		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)
A6102 Main Road (South East)	9.80		0.00	✓	3.10	100.00	✓	6.00

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)
Site Access	One lane plus flare				10.00	3.80	3.00	3.00	3.00	✓	1.00	20	16

Pedestrian Crossings

Name	Crossing Type
A6102 Main Road (North West)	None
Site Access	None

A6102 Main Road (South East)	None
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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	590.478	0.090	0.227	0.143	0.324
1	B-C	669.555	0.086	0.217	-	-
1	C-B	693.767	0.224	0.224	-	-

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 (%)
A6102 Main Road (North West)	ONE HOUR	✓	810.00	100.000
Site Access	ONE HOUR	✓	118.00	100.000
A6102 Main Road (South East)	ONE HOUR	✓	347.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Site access (for whole period)

		To		
		A	B	C
From	A	0.000	6.000	804.000
	B	16.000	0.000	102.000
	C	311.000	36.000	0.000

Turning Proportions (PCU) - Site access (for whole period)

		To		
		A	B	C
From	A	0.00	0.01	0.99
	B	0.14	0.00	0.86
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Site access (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 - Site access (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
B-C	0.24	10.05	0.31	B
B-A	0.05	11.78	0.06	B
C-AB	0.08	7.93	0.09	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	76.79	76.13	0.00	534.10	0.144	0.17	7.850	A
B-A	12.05	11.93	0.00	409.44	0.029	0.03	9.053	A
C-AB	27.10	26.90	0.00	556.95	0.049	0.05	6.790	A
C-A	234.14	234.14	0.00	-	-	-	-	-
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	605.29	605.29	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	91.70	91.49	0.00	507.52	0.181	0.22	8.648	A
B-A	14.38	14.35	0.00	373.52	0.039	0.04	10.021	B
C-AB	32.36	32.31	0.00	530.39	0.061	0.06	7.227	A
C-A	279.58	279.58	0.00	-	-	-	-	-
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	722.78	722.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	112.30	111.94	0.00	470.53	0.239	0.31	10.029	B
B-A	17.62	17.55	0.00	323.20	0.055	0.06	11.775	B
C-AB	39.64	39.55	0.00	493.67	0.080	0.09	7.924	A
C-A	342.42	342.42	0.00	-	-	-	-	-
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	885.22	885.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	112.30	111.94	0.00	470.53	0.239	0.31	10.029	B
B-A	17.62	17.55	0.00	323.20	0.055	0.06	11.775	B
C-AB	39.64	39.55	0.00	493.67	0.080	0.09	7.924	A
C-A	342.42	342.42	0.00	-	-	-	-	-
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	885.22	885.22	0.00	-	-	-	-	-

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	112.30	112.30	0.00	470.50	0.239	0.31	10.049	B
B-A	17.62	17.61	0.00	323.13	0.055	0.06	11.782	B
C-AB	39.64	39.64	0.00	493.67	0.080	0.09	7.928	A
C-A	342.42	342.42	0.00	-	-	-	-	-
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	885.22	885.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	91.70	92.05	0.00	507.48	0.181	0.22	8.674	A
B-A	14.38	14.45	0.00	373.44	0.039	0.04	10.031	B
C-AB	32.36	32.45	0.00	530.39	0.061	0.07	7.230	A
C-A	279.58	279.58	0.00	-	-	-	-	-
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	722.78	722.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	76.79	77.00	0.00	534.04	0.144	0.17	7.880	A
B-A	12.05	12.09	0.00	409.32	0.029	0.03	9.063	A
C-AB	27.10	27.16	0.00	556.95	0.049	0.05	6.797	A
C-A	234.14	234.14	0.00	-	-	-	-	-
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	605.29	605.29	0.00	-	-	-	-	-

<h1>Junctions 8</h1>
<h2>PICADY 8 - Priority Intersection Module</h2>
Version: 8.0.2.316 [14 Feb 2013] © Copyright TRL Limited, 2016
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Filename: Site Access - RD.arc8

Path: Y:\2015\15-201 to 15-225\15-215 Oughtibridge Mill, Oughtibridge\Technical\Junction Models

Report generation date: 16/03/2016 15:44:24

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Proposed Layout - Predicted 2021				
Stream B-C	0.11	7.00	0.10	A
Stream B-A	0.03	10.47	0.02	B
Stream C-AB	0.20	7.27	0.17	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 - Predicted 2021, AM Peak" model duration: 07:30 - 09:00

"D2 - Predicted 2021, PM Peak " model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/03/2016 15:44:24

File summary

File Description

Title	Oughtibridge Mill Site Access RTGI
Location	Oughtibridge, Sheffield
Site Number	
Date	11/01/2016
Version	
Status	
Identifier	
Client	CEG
Jobnumber	15-215
Enumerator	RD
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

Proposed Layout - Predicted 2021, PM Peak

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Proposed Layout			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2021, PM Peak	Predicted 2021	PM Peak		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Site access	T-Junction	Two-way	A,B,C	7.35	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A6102 Main Road (North West)	A6102 Main Road (North West)		Major
Site Access	Site Access		Minor
A6102 Main Road (South East)	A6102 Main Road (South East)		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)
A6102 Main Road (South East)	9.80		0.00	✓	3.10	100.00	✓	6.00

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)
Site Access	One lane plus flare				10.00	3.80	3.00	3.00	3.00	✓	1.00	20	16

Pedestrian Crossings

Name	Crossing Type
A6102 Main Road (North West)	None
Site Access	None

A6102 Main Road (South East)	None
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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	590.478	0.090	0.227	0.143	0.324
1	B-C	669.555	0.086	0.217	-	-
1	C-B	693.767	0.224	0.224	-	-

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 (%)
A6102 Main Road (North West)	ONE HOUR	✓	400.00	100.000
Site Access	ONE HOUR	✓	61.00	100.000
A6102 Main Road (South East)	ONE HOUR	✓	772.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Site access (for whole period)

		To		
		A	B	C
From	A	0.000	14.000	386.000
	B	8.000	0.000	53.000
	C	681.000	91.000	0.000

Turning Proportions (PCU) - Site access (for whole period)

		To		
		A	B	C
From	A	0.00	0.04	0.97
	B	0.13	0.00	0.87
	C	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Site access (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 - Site access (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
B-C	0.10	7.00	0.11	A
B-A	0.02	10.47	0.03	B
C-AB	0.17	7.27	0.20	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	39.90	39.62	0.00	603.59	0.066	0.07	6.380	A
B-A	6.02	5.97	0.00	428.09	0.014	0.01	8.527	A
C-AB	68.51	68.02	0.00	626.20	0.109	0.12	6.444	A
C-A	512.69	512.69	0.00	-	-	-	-	-
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	290.60	290.60	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	47.65	47.58	0.00	590.61	0.081	0.09	6.629	A
B-A	7.19	7.18	0.00	396.36	0.018	0.02	9.250	A
C-AB	81.81	81.68	0.00	613.09	0.133	0.15	6.772	A
C-A	612.20	612.20	0.00	-	-	-	-	-
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	347.01	347.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	58.35	58.25	0.00	572.55	0.102	0.11	6.997	A
B-A	8.81	8.78	0.00	352.62	0.025	0.03	10.470	B
C-AB	100.20	100.00	0.00	594.97	0.168	0.20	7.268	A
C-A	749.79	749.79	0.00	-	-	-	-	-
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	424.99	424.99	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C								
B-A								
C-AB								
C-A								
A-B								
A-C								

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	58.35	58.35	0.00	572.54	0.102	0.11	7.000	A
B-A	8.81	8.81	0.00	352.56	0.025	0.03	10.472	B
C-AB	100.20	100.19	0.00	594.97	0.168	0.20	7.275	A
C-A	749.79	749.79	0.00	-	-	-	-	-
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	424.99	424.99	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	47.65	47.74	0.00	590.60	0.081	0.09	6.632	A
B-A	7.19	7.22	0.00	396.26	0.018	0.02	9.253	A
C-AB	81.81	81.99	0.00	613.09	0.133	0.16	6.782	A
C-A	612.20	612.20	0.00	-	-	-	-	-
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	347.01	347.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	39.90	39.97	0.00	603.56	0.066	0.07	6.387	A
B-A	6.02	6.04	0.00	427.89	0.014	0.01	8.535	A
C-AB	68.51	68.64	0.00	626.20	0.109	0.12	6.459	A
C-A	512.69	512.69	0.00	-	-	-	-	-
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	290.60	290.60	0.00	-	-	-	-	-

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