

APPENDIX BGH 17

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Woodlands Rd-Cliffe Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Cliffe Ln

Report generation date: 04/01/2019 15:30:49

« Existing Layout - 2024 Base, AM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Base				
Stream B-C	0.08	5.72	0.07	A
Stream B-A	0.25	10.17	0.20	B
Stream C-AB	0.10	5.59	0.07	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak " model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:30:49

File summary

Title	Woodlands Road/Cliffe Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Base, AM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Base, AM Peak	2024 Base	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.85	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Cliffe Lane (East)	A	Cliffe Lane (East)		Major
Woodlands Road	B	Woodlands Road		Minor
Cliffe Lane (West)	C	Cliffe Lane (West)		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)
Cliffe Lane (West)	6.50		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	3.65	2.75	2.75	2.75	✓	1.00	20	19

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	512.207	0.091	0.231	0.145	0.330
1	B-C	763.226	0.114	0.289	-	-
1	C-B	631.874	0.240	0.240	-	-

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 (%)
Cliffe Lane (East)	ONE HOUR	✓	173.00	100.000
Woodlands Road	ONE HOUR	✓	125.00	100.000
Cliffe Lane (West)	ONE HOUR	✓	177.00	100.000

Turning Proportions

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.000	59.000	114.000
	Woodlands Road	80.000	0.000	45.000
	Cliffe Lane (West)	145.000	32.000	0.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.00	0.34	0.66
	Woodlands Road	0.64	0.00	0.36
	Cliffe Lane (West)	0.82	0.18	0.00

Vehicle Mix

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	Cliffe Lane (West)	1.000	1.000	1.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	Cliffe Lane (West)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.07	5.72	0.08	A
B-A	0.20	10.17	0.25	B
C-AB	0.07	5.59	0.10	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

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	33.88	33.68	0.00	708.18	0.048	0.05	5.336	A
B-A	60.23	59.64	0.00	464.45	0.130	0.15	8.881	A
C-AB	28.64	28.40	0.00	673.16	0.043	0.06	5.582	A
C-A	104.62	104.62	0.00	-	-	-	-	-
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	85.83	85.83	0.00	-	-	-	-	-

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	40.45	40.41	0.00	696.05	0.058	0.06	5.490	A
B-A	71.92	71.77	0.00	455.04	0.158	0.19	9.388	A
C-AB	35.40	35.34	0.00	681.52	0.052	0.07	5.573	A
C-A	123.72	123.72	0.00	-	-	-	-	-
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	102.48	102.48	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	49.55	49.48	0.00	678.50	0.073	0.08	5.723	A
B-A	88.08	87.84	0.00	442.04	0.199	0.25	10.156	B
C-AB	45.42	45.32	0.00	693.17	0.066	0.10	5.557	A
C-A	149.46	149.46	0.00	-	-	-	-	-
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	125.52	125.52	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	49.55	49.54	0.00	678.36	0.073	0.08	5.724	A
B-A	88.08	88.08	0.00	442.02	0.199	0.25	10.170	B
C-AB	45.44	45.44	0.00	693.19	0.066	0.10	5.558	A
C-A	149.44	149.44	0.00	-	-	-	-	-
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	125.52	125.52	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	40.45	40.52	0.00	695.85	0.058	0.06	5.493	A
B-A	71.92	72.15	0.00	455.00	0.158	0.19	9.410	A
C-AB	35.43	35.52	0.00	681.55	0.052	0.07	5.574	A
C-A	123.69	123.69	0.00	-	-	-	-	-
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	102.48	102.48	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	33.88	33.92	0.00	707.83	0.048	0.05	5.343	A
B-A	60.23	60.39	0.00	464.36	0.130	0.15	8.914	A
C-AB	28.68	28.75	0.00	673.20	0.043	0.06	5.589	A
C-A	104.57	104.57	0.00	-	-	-	-	-
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	85.83	85.83	0.00	-	-	-	-	-

Junctions 8				
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Filename: Woodlands Rd-Cliffe Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Cliffe Ln

Report generation date: 04/01/2019 15:31:06

« Existing Layout - 2024 Base, PM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Base				
Stream B-C	0.07	5.60	0.06	A
Stream B-A	0.14	9.58	0.12	A
Stream C-AB	0.17	6.02	0.11	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:31:06

File summary

Title	Woodlands Road/Cliffe Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Base, PM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Base, PM Peak	2024 Base	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.01	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Cliffe Lane (East)	A	Cliffe Lane (East)		Major
Woodlands Road	B	Woodlands Road		Minor
Cliffe Lane (West)	C	Cliffe Lane (West)		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)
Cliffe Lane (West)	6.50		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	3.65	2.75	2.75	2.75	✓	1.00	20	19

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	512.207	0.091	0.231	0.145	0.330
1	B-C	763.226	0.114	0.289	-	-
1	C-B	631.874	0.240	0.240	-	-

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 (%)
Cliffe Lane (East)	ONE HOUR	✓	216.00	100.000
Woodlands Road	ONE HOUR	✓	88.00	100.000
Cliffe Lane (West)	ONE HOUR	✓	189.00	100.000

Turning Proportions

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.000	84.000	132.000
	Woodlands Road	48.000	0.000	40.000
	Cliffe Lane (West)	134.000	55.000	0.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.00	0.39	0.61
	Woodlands Road	0.55	0.00	0.45
	Cliffe Lane (West)	0.71	0.29	0.00

Vehicle Mix

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	Cliffe Lane (West)	1.000	1.000	1.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	Cliffe Lane (West)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	5.60	0.07	A
B-A	0.12	9.58	0.14	A
C-AB	0.11	6.02	0.17	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

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	30.11	29.94	0.00	712.48	0.042	0.04	5.273	A
B-A	36.14	35.80	0.00	455.17	0.079	0.09	8.577	A
C-AB	48.70	48.31	0.00	660.38	0.074	0.10	5.880	A
C-A	93.59	93.59	0.00	-	-	-	-	-
A-B	63.24	63.24	0.00	-	-	-	-	-
A-C	99.38	99.38	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	35.96	35.92	0.00	702.02	0.051	0.05	5.404	A
B-A	43.15	43.07	0.00	443.94	0.097	0.11	8.978	A
C-AB	60.12	60.01	0.00	666.36	0.090	0.12	5.937	A
C-A	109.79	109.79	0.00	-	-	-	-	-
A-B	75.51	75.51	0.00	-	-	-	-	-
A-C	118.67	118.67	0.00	-	-	-	-	-

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	44.04	43.98	0.00	687.32	0.064	0.07	5.595	A
B-A	52.85	52.72	0.00	428.53	0.123	0.14	9.576	A
C-AB	77.00	76.84	0.00	674.77	0.114	0.17	6.021	A
C-A	131.09	131.09	0.00	-	-	-	-	-
A-B	92.49	92.49	0.00	-	-	-	-	-
A-C	145.33	145.33	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	44.04	44.04	0.00	687.25	0.064	0.07	5.596	A
B-A	52.85	52.85	0.00	428.48	0.123	0.14	9.583	A
C-AB	77.03	77.03	0.00	674.81	0.114	0.17	6.024	A
C-A	131.06	131.06	0.00	-	-	-	-	-
A-B	92.49	92.49	0.00	-	-	-	-	-
A-C	145.33	145.33	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	35.96	36.01	0.00	701.92	0.051	0.05	5.406	A
B-A	43.15	43.28	0.00	443.87	0.097	0.11	8.989	A
C-AB	60.16	60.32	0.00	666.41	0.090	0.13	5.942	A
C-A	109.75	109.75	0.00	-	-	-	-	-
A-B	75.51	75.51	0.00	-	-	-	-	-
A-C	118.67	118.67	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	30.11	30.15	0.00	712.29	0.042	0.04	5.277	A
B-A	36.14	36.22	0.00	455.02	0.079	0.09	8.597	A
C-AB	48.78	48.88	0.00	660.44	0.074	0.10	5.888	A
C-A	93.51	93.51	0.00	-	-	-	-	-
A-B	63.24	63.24	0.00	-	-	-	-	-
A-C	99.38	99.38	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Woodlands Rd-Spen Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Spen Ln

Report generation date: 04/01/2019 15:36:21

« Existing Layout - 2024 Base, AM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Base				
Stream B-C	0.15	7.39	0.13	A
Stream B-A	0.16	11.83	0.14	B
Stream C-AB	0.29	5.71	0.15	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak " model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:36:21

File summary

Title	Woodlands Road/Spenn Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Base, AM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Base, AM Peak	2024 Base	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.62	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A643 Spen Lane (West)	A	A643 Spen Lane (West)		Major
Woodlands Road	B	Woodlands Road		Minor
A643 Spen Lane (East)	C	A643 Spen Lane (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)
A643 Spen Lane (East)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	4.60	3.20	2.80	2.80	✓	1.00	27	24

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	519.287	0.090	0.229	0.144	0.327
1	B-C	695.084	0.102	0.258	-	-
1	C-B	631.874	0.234	0.234	-	-

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 (%)
A643 Spen Lane (West)	ONE HOUR	✓	424.00	100.000
Woodlands Road	ONE HOUR	✓	112.00	100.000
A643 Spen Lane (East)	ONE HOUR	✓	338.00	100.000

Turning Proportions

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.000	50.000	374.000
	Woodlands Road	45.000	0.000	67.000
	A643 Spen Lane (East)	280.000	58.000	0.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.00	0.12	0.88
	Woodlands Road	0.40	0.00	0.60
	A643 Spen Lane (East)	0.83	0.17	0.00

Vehicle Mix

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	A643 Spen Lane (East)	1.000	1.000	1.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	A643 Spen Lane (East)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.13	7.39	0.15	A
B-A	0.14	11.83	0.16	B
C-AB	0.15	5.71	0.29	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

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	50.44	50.08	0.00	605.45	0.083	0.09	6.478	A
B-A	33.88	33.52	0.00	406.64	0.083	0.09	9.640	A
C-AB	61.37	60.79	0.00	700.91	0.088	0.14	5.621	A
C-A	193.10	193.10	0.00	-	-	-	-	-
A-B	37.64	37.64	0.00	-	-	-	-	-
A-C	281.57	281.57	0.00	-	-	-	-	-

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	60.23	60.14	0.00	587.03	0.103	0.11	6.832	A
B-A	40.45	40.35	0.00	384.52	0.105	0.12	10.456	B
C-AB	80.22	80.01	0.00	718.15	0.112	0.20	5.646	A
C-A	223.64	223.64	0.00	-	-	-	-	-
A-B	44.95	44.95	0.00	-	-	-	-	-
A-C	336.22	336.22	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	73.77	73.62	0.00	561.03	0.131	0.15	7.384	A
B-A	49.55	49.37	0.00	353.85	0.140	0.16	11.814	B
C-AB	109.00	108.65	0.00	740.62	0.147	0.28	5.700	A
C-A	263.15	263.15	0.00	-	-	-	-	-
A-B	55.05	55.05	0.00	-	-	-	-	-
A-C	411.78	411.78	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	73.77	73.77	0.00	560.90	0.132	0.15	7.389	A
B-A	49.55	49.54	0.00	353.79	0.140	0.16	11.831	B
C-AB	109.11	109.10	0.00	740.76	0.147	0.29	5.708	A
C-A	263.03	263.03	0.00	-	-	-	-	-
A-B	55.05	55.05	0.00	-	-	-	-	-
A-C	411.78	411.78	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	60.23	60.37	0.00	586.81	0.103	0.12	6.842	A
B-A	40.45	40.62	0.00	384.44	0.105	0.12	10.475	B
C-AB	80.36	80.70	0.00	718.36	0.112	0.20	5.653	A
C-A	223.50	223.50	0.00	-	-	-	-	-
A-B	44.95	44.95	0.00	-	-	-	-	-
A-C	336.22	336.22	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	50.44	50.54	0.00	605.10	0.083	0.09	6.492	A
B-A	33.88	33.99	0.00	406.53	0.083	0.09	9.667	A
C-AB	61.58	61.80	0.00	701.10	0.088	0.15	5.638	A
C-A	192.88	192.88	0.00	-	-	-	-	-
A-B	37.64	37.64	0.00	-	-	-	-	-
A-C	281.57	281.57	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Woodlands Rd-Spen Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Spen Ln

Report generation date: 04/01/2019 15:37:01

« Existing Layout - 2024 Base, PM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Base				
Stream B-C	0.21	7.49	0.17	A
Stream B-A	0.18	12.94	0.15	B
Stream C-AB	0.52	5.30	0.22	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:37:01

File summary

Title	Woodlands Road/Spenn Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Base, PM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Base, PM Peak	2024 Base	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.19	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A643 Spen Lane (West)	A	A643 Spen Lane (West)		Major
Woodlands Road	B	Woodlands Road		Minor
A643 Spen Lane (East)	C	A643 Spen Lane (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)
A643 Spen Lane (East)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	4.60	3.20	2.80	2.80	✓	1.00	27	24

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	511.997	0.089	0.225	0.142	0.322
1	B-C	704.436	0.103	0.261	-	-
1	C-B	631.874	0.234	0.234	-	-

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 (%)
A643 Spen Lane (West)	ONE HOUR	✓	376.00	100.000
Woodlands Road	ONE HOUR	✓	136.00	100.000
A643 Spen Lane (East)	ONE HOUR	✓	514.00	100.000

Turning Proportions

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.000	54.000	322.000
	Woodlands Road	46.000	0.000	90.000
	A643 Spen Lane (East)	436.000	78.000	0.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.00	0.14	0.86
	Woodlands Road	0.34	0.00	0.66
	A643 Spen Lane (East)	0.85	0.15	0.00

Vehicle Mix

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	A643 Spen Lane (East)	1.000	1.000	1.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	A643 Spen Lane (East)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.17	7.49	0.21	A
B-A	0.15	12.94	0.18	B
C-AB	0.22	5.30	0.52	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

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	67.76	67.27	0.00	622.19	0.109	0.12	6.482	A
B-A	34.63	34.24	0.00	387.73	0.089	0.10	10.173	B
C-AB	99.65	98.69	0.00	789.57	0.126	0.24	5.209	A
C-A	287.31	287.31	0.00	-	-	-	-	-
A-B	40.65	40.65	0.00	-	-	-	-	-
A-C	242.42	242.42	0.00	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	80.91	80.78	0.00	604.76	0.134	0.15	6.868	A
B-A	41.35	41.23	0.00	363.12	0.114	0.13	11.184	B
C-AB	132.47	132.09	0.00	822.39	0.161	0.34	5.222	A
C-A	329.61	329.61	0.00	-	-	-	-	-
A-B	48.54	48.54	0.00	-	-	-	-	-
A-C	289.47	289.47	0.00	-	-	-	-	-

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	99.09	98.89	0.00	579.66	0.171	0.20	7.484	A
B-A	50.65	50.44	0.00	328.98	0.154	0.18	12.915	B
C-AB	190.64	189.91	0.00	871.50	0.219	0.52	5.290	A
C-A	375.28	375.28	0.00	-	-	-	-	-
A-B	59.46	59.46	0.00	-	-	-	-	-
A-C	354.53	354.53	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	99.09	99.09	0.00	579.47	0.171	0.21	7.493	A
B-A	50.65	50.64	0.00	328.86	0.154	0.18	12.939	B
C-AB	190.94	190.92	0.00	871.85	0.219	0.52	5.301	A
C-A	374.98	374.98	0.00	-	-	-	-	-
A-B	59.46	59.46	0.00	-	-	-	-	-
A-C	354.53	354.53	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	80.91	81.11	0.00	604.47	0.134	0.16	6.883	A
B-A	41.35	41.55	0.00	362.96	0.114	0.13	11.209	B
C-AB	132.82	133.52	0.00	822.89	0.161	0.35	5.238	A
C-A	329.25	329.25	0.00	-	-	-	-	-
A-B	48.54	48.54	0.00	-	-	-	-	-
A-C	289.47	289.47	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	67.76	67.89	0.00	621.78	0.109	0.12	6.502	A
B-A	34.63	34.76	0.00	387.50	0.089	0.10	10.210	B
C-AB	100.18	100.57	0.00	790.02	0.127	0.25	5.230	A
C-A	286.79	286.79	0.00	-	-	-	-	-
A-B	40.65	40.65	0.00	-	-	-	-	-
A-C	242.42	242.42	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Balme Rd-Bradford Rd-High Street.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Balme Rd-Bradford Rd-High Street

Report generation date: 04/01/2019 15:14:14

« Existing Layout - 2024 Base, AM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Base				
Stream B-ACD	0.08	12.05	0.08	B
Stream A-BCD	0.90	4.44	0.25	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream D-AB	0.32	9.64	0.24	A
Stream D-BC	0.42	20.47	0.30	C
Stream C-ABD	0.05	4.63	0.04	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:14:13

File summary

Title	Balme Road/A638 Bradford Road/High Street Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Developments Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Base, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Base, AM Peak	2024 Base	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	8.71	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A638 Bradford Road (South)	A	A638 Bradford Road (South)		Major
High Street	B	High Street		Minor
A638 Bradford Road (North)	C	A638 Bradford Road (North)		Major
Balme Road	D	Balme Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A638 Bradford Road (South)	8.35		0.00		2.20	100.00	✓	0.00
A638 Bradford Road (North)	8.35		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
High Street	One lane	3.20										17	17
Balme Road	One lane plus flare				10.00	5.20	4.00	3.80	3.80	✓	1.00	25	28

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	631.874	-	-	-	-	-	-	0.220	0.314	0.220	-	-	-
1	B-A	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	-	0.207	0.207	0.104
1	B-C	647.346	0.089	0.225	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	B-D, offside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	C-B	631.874	0.220	0.220	0.314	-	-	-	-	-	-	-	-	-
1	D-A	710.028	-	-	-	-	-	-	0.247	-	0.098	-	-	-
1	D-B, nearside lane	552.750	0.144	0.144	0.326	-	-	-	0.228	0.228	0.090	-	-	-
1	D-B, offside lane	526.157	0.137	0.137	0.311	-	-	-	0.217	0.217	0.086	-	-	-
1	D-C	526.157	-	0.137	0.311	0.109	0.217	0.217	0.217	0.217	0.086	-	-	-

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 (%)
A638 Bradford Road (South)	ONE HOUR	✓	822.00	100.000
High Street	ONE HOUR	✓	22.00	100.000
A638 Bradford Road (North)	ONE HOUR	✓	588.00	100.000
Balme Road	ONE HOUR	✓	176.00	100.000

Turning Proportions

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.000	14.000	747.000	61.000
	High Street	1.000	0.000	13.000	8.000
	A638 Bradford Road (North)	522.000	10.000	0.000	56.000
	Balme Road	106.000	4.000	66.000	0.000

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.00	0.02	0.91	0.07
	High Street	0.05	0.00	0.59	0.36
	A638 Bradford Road (North)	0.89	0.02	0.00	0.10
	Balme Road	0.60	0.02	0.38	0.00

Vehicle Mix

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	1.000	1.000	1.000	1.000
	High Street	1.000	1.000	1.000	1.000
	A638 Bradford Road (North)	1.000	1.000	1.000	1.000
	Balme Road	1.000	1.000	1.000	1.000

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.0	0.0	0.0	0.0
	High Street	0.0	0.0	0.0	0.0
	A638 Bradford Road (North)	0.0	0.0	0.0	0.0
	Balme Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.08	12.05	0.08	B
A-BCD	0.25	4.44	0.90	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.24	9.64	0.32	A
D-BC	0.30	20.47	0.42	C
C-ABD	0.04	4.63	0.05	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

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	16.56	16.40	0.00	409.55	0.040	0.04	9.153	A
A-BCD	113.31	112.16	0.00	927.91	0.122	0.29	4.413	A
A-B	9.30	9.30	0.00	-	-	-	-	-
A-C	496.23	496.23	0.00	-	-	-	-	-
D-AB	81.53	80.87	0.00	575.52	0.142	0.16	7.269	A
D-BC	50.97	50.28	0.00	339.65	0.150	0.17	12.411	B
C-ABD	15.09	15.00	0.00	793.63	0.019	0.02	4.623	A
C-D	41.43	41.43	0.00	-	-	-	-	-
C-A	386.16	386.16	0.00	-	-	-	-	-

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	19.78	19.72	0.00	374.20	0.053	0.06	10.154	B
A-BCD	168.73	167.89	0.00	997.37	0.169	0.50	4.347	A
A-B	10.49	10.49	0.00	-	-	-	-	-
A-C	559.74	559.74	0.00	-	-	-	-	-
D-AB	97.44	97.24	0.00	544.49	0.179	0.22	8.046	A
D-BC	60.78	60.48	0.00	302.48	0.201	0.25	14.858	B
C-ABD	20.69	20.65	0.00	826.27	0.025	0.03	4.468	A
C-D	49.21	49.21	0.00	-	-	-	-	-
C-A	458.70	458.70	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-ACD	24.22	24.12	0.00	323.30	0.075	0.08	12.029	B
A-BCD	276.92	275.37	0.00	1092.71	0.253	0.88	4.419	A
A-B	11.56	11.56	0.00	-	-	-	-	-
A-C	616.57	616.57	0.00	-	-	-	-	-
D-AB	119.55	119.15	0.00	494.02	0.242	0.31	9.594	A
D-BC	74.23	73.58	0.00	250.31	0.297	0.41	20.298	C
C-ABD	30.55	30.49	0.00	870.84	0.035	0.05	4.283	A
C-D	59.76	59.76	0.00	-	-	-	-	-
C-A	557.09	557.09	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-ACD	24.22	24.22	0.00	322.92	0.075	0.08	12.051	B
A-BCD	277.81	277.76	0.00	1093.61	0.254	0.90	4.437	A
A-B	11.54	11.54	0.00	-	-	-	-	-
A-C	615.69	615.69	0.00	-	-	-	-	-
D-AB	119.55	119.54	0.00	493.09	0.242	0.32	9.637	A
D-BC	74.23	74.20	0.00	250.04	0.297	0.42	20.466	C
C-ABD	30.59	30.59	0.00	870.63	0.035	0.05	4.287	A
C-D	59.76	59.76	0.00	-	-	-	-	-
C-A	557.05	557.05	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-ACD	19.78	19.87	0.00	373.64	0.053	0.06	10.178	B
A-BCD	169.72	171.22	0.00	998.72	0.170	0.52	4.371	A
A-B	10.47	10.47	0.00	-	-	-	-	-
A-C	558.77	558.77	0.00	-	-	-	-	-
D-AB	97.45	97.84	0.00	543.43	0.179	0.22	8.087	A
D-BC	60.77	61.40	0.00	302.13	0.201	0.26	14.995	B
C-ABD	20.73	20.80	0.00	825.90	0.025	0.03	4.473	A
C-D	49.21	49.21	0.00	-	-	-	-	-
C-A	458.66	458.66	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-ACD	16.56	16.62	0.00	409.09	0.040	0.04	9.175	A
A-BCD	114.35	115.23	0.00	928.80	0.123	0.30	4.436	A
A-B	9.28	9.28	0.00	-	-	-	-	-
A-C	495.21	495.21	0.00	-	-	-	-	-
D-AB	81.53	81.75	0.00	574.57	0.142	0.17	7.310	A
D-BC	50.97	51.28	0.00	339.31	0.150	0.18	12.513	B
C-ABD	15.16	15.19	0.00	793.28	0.019	0.02	4.628	A
C-D	41.42	41.42	0.00	-	-	-	-	-
C-A	386.10	386.10	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Balme Rd-Bradford Rd-High Street.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Balme Rd-Bradford Rd-High Street

Report generation date: 04/01/2019 15:14:36

« Existing Layout - 2024 Base, PM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Base				
Stream B-ACD	0.04	13.36	0.04	B
Stream A-BCD	2.25	7.79	0.51	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream D-AB	0.61	15.21	0.38	C
Stream D-BC	0.71	34.04	0.42	D
Stream C-ABD	0.07	3.97	0.05	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak " model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:14:36

File summary

Title	Balme Road/A638 Bradford Road/High Street Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Developments Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Base, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Base, PM Peak	2024 Base	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	12.33	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A638 Bradford Road (South)	A	A638 Bradford Road (South)		Major
High Street	B	High Street		Minor
A638 Bradford Road (North)	C	A638 Bradford Road (North)		Major
Balme Road	D	Balme Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A638 Bradford Road (South)	8.35		0.00		2.20	100.00	✓	0.00
A638 Bradford Road (North)	8.35		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
High Street	One lane	3.20										17	17
Balme Road	One lane plus flare				10.00	5.20	4.00	3.80	3.80	✓	1.00	25	28

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	631.874	-	-	-	-	-	-	0.220	0.314	0.220	-	-	-
1	B-A	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	-	0.207	0.207	0.104
1	B-C	647.346	0.089	0.225	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	B-D, offside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	C-B	631.874	0.220	0.220	0.314	-	-	-	-	-	-	-	-	-
1	D-A	713.104	-	-	-	-	-	-	0.248	-	0.098	-	-	-
1	D-B, nearside lane	555.144	0.144	0.144	0.328	-	-	-	0.229	0.229	0.091	-	-	-
1	D-B, offside lane	523.763	0.136	0.136	0.309	-	-	-	0.216	0.216	0.086	-	-	-
1	D-C	523.763	-	0.136	0.309	0.108	0.216	0.216	0.216	0.216	0.086	-	-	-

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 (%)
A638 Bradford Road (South)	ONE HOUR	✓	753.00	100.000
High Street	ONE HOUR	✓	11.00	100.000
A638 Bradford Road (North)	ONE HOUR	✓	874.00	100.000
Balme Road	ONE HOUR	✓	203.00	100.000

Turning Proportions

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.000	5.000	630.000	118.000
	High Street	3.000	0.000	6.000	2.000
	A638 Bradford Road (North)	751.000	10.000	0.000	113.000
	Balme Road	126.000	10.000	67.000	0.000

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.00	0.01	0.84	0.16
	High Street	0.27	0.00	0.55	0.18
	A638 Bradford Road (North)	0.86	0.01	0.00	0.13
	Balme Road	0.62	0.05	0.33	0.00

Vehicle Mix

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	1.000	1.000	1.000	1.000
	High Street	1.000	1.000	1.000	1.000
	A638 Bradford Road (North)	1.000	1.000	1.000	1.000
	Balme Road	1.000	1.000	1.000	1.000

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.0	0.0	0.0	0.0
	High Street	0.0	0.0	0.0	0.0
	A638 Bradford Road (North)	0.0	0.0	0.0	0.0
	Balme Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	13.36	0.04	B
A-BCD	0.51	7.79	2.25	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.38	15.21	0.61	C
D-BC	0.42	34.04	0.71	D
C-ABD	0.05	3.97	0.07	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

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	8.28	8.19	0.00	386.33	0.021	0.02	9.518	A
A-BCD	206.34	203.85	0.00	834.11	0.247	0.62	5.711	A
A-B	2.84	2.84	0.00	-	-	-	-	-
A-C	357.72	357.72	0.00	-	-	-	-	-
D-AB	99.26	98.32	0.00	517.80	0.192	0.23	8.563	A
D-BC	53.57	52.71	0.00	296.65	0.181	0.22	14.707	B
C-ABD	19.06	18.96	0.00	927.93	0.021	0.02	3.960	A
C-D	83.56	83.56	0.00	-	-	-	-	-
C-A	555.37	555.37	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	9.89	9.86	0.00	344.72	0.029	0.03	10.750	B
A-BCD	297.65	296.05	0.00	881.89	0.338	1.02	6.170	A
A-B	2.99	2.99	0.00	-	-	-	-	-
A-C	376.29	376.29	0.00	-	-	-	-	-
D-AB	118.84	118.45	0.00	470.98	0.252	0.33	10.200	B
D-BC	63.65	63.19	0.00	250.27	0.254	0.33	19.193	C
C-ABD	26.75	26.71	0.00	979.40	0.027	0.03	3.777	A
C-D	99.26	99.26	0.00	-	-	-	-	-
C-A	659.69	659.69	0.00	-	-	-	-	-

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	12.11	12.05	0.00	282.95	0.043	0.04	13.286	B
A-BCD	483.05	478.38	0.00	954.64	0.506	2.19	7.632	A
A-B	2.72	2.72	0.00	-	-	-	-	-
A-C	343.29	343.29	0.00	-	-	-	-	-
D-AB	146.36	145.31	0.00	386.26	0.379	0.59	14.876	B
D-BC	77.15	75.74	0.00	183.60	0.420	0.68	32.956	D
C-ABD	50.46	50.33	0.00	1102.69	0.046	0.07	3.420	A
C-D	119.26	119.26	0.00	-	-	-	-	-
C-A	792.57	792.57	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-ACD	12.11	12.11	0.00	281.52	0.043	0.04	13.361	B
A-BCD	486.57	486.33	0.00	957.42	0.508	2.25	7.793	A
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	339.80	339.80	0.00	-	-	-	-	-
D-AB	146.41	146.35	0.00	383.01	0.382	0.61	15.210	C
D-BC	77.10	77.00	0.00	182.50	0.422	0.71	34.044	D
C-ABD	50.61	50.61	0.00	1102.19	0.046	0.07	3.423	A
C-D	119.24	119.24	0.00	-	-	-	-	-
C-A	792.45	792.45	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-ACD	9.89	9.95	0.00	342.92	0.029	0.03	10.812	B
A-BCD	300.74	305.39	0.00	885.60	0.340	1.09	6.301	A
A-B	2.96	2.96	0.00	-	-	-	-	-
A-C	373.23	373.23	0.00	-	-	-	-	-
D-AB	118.88	119.93	0.00	468.25	0.254	0.35	10.365	B
D-BC	63.61	65.03	0.00	249.10	0.255	0.35	19.701	C
C-ABD	26.86	26.98	0.00	978.52	0.027	0.04	3.786	A
C-D	99.25	99.25	0.00	-	-	-	-	-
C-A	659.60	659.60	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-ACD	8.28	8.31	0.00	385.18	0.022	0.02	9.552	A
A-BCD	208.60	210.33	0.00	836.10	0.250	0.65	5.793	A
A-B	2.82	2.82	0.00	-	-	-	-	-
A-C	355.47	355.47	0.00	-	-	-	-	-
D-AB	99.28	99.70	0.00	516.29	0.192	0.24	8.649	A
D-BC	53.55	54.06	0.00	295.82	0.181	0.23	14.923	B
C-ABD	19.16	19.20	0.00	927.24	0.021	0.03	3.966	A
C-D	83.55	83.55	0.00	-	-	-	-	-
C-A	555.28	555.28	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: West Ln-Oxford Rd.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\West Ln-Oxford Rd

Report generation date: 04/01/2019 15:25:17

« Existing Layout - 2024 Base, AM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Base				
Stream B-CD	2.24	26.96	0.70	D
Stream B-A	1.07	51.07	0.53	F
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	-	-	-	-
Stream AB-CD	0.00	3.88	0.00	A
Stream AB-C	-	-	-	-
Stream D-ABC	0.03	10.14	0.03	B
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	-	-	-	-
Stream CD-AB	2.48	12.75	0.62	B
Stream CD-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:25:17

File summary

Title	West Lane/A651 Oxford Road/Cambridge Chase Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Base, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Base, AM Peak	2024 Base	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D	21.71	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A651 Oxford Road (South)	A	A651 Oxford Road (South)		Major
West Lane	B	West Lane		Minor
A651 Oxford Road (North)	C	A651 Oxford Road (North)		Major
Cambridge Chase	D	Cambridge Chase		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A651 Oxford Road (South)	7.00		0.00		2.20	100.00	✓	0.00
A651 Oxford Road (North)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
West Lane	One lane plus flare				7.50	4.80	3.90	3.50	3.00	✓	1.00	20	17
Cambridge Chase	One lane	3.16										19	17

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-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
1	AB-D	631.874	-	-	-	-	-	0.234	0.234	0.234	-	-
1	B-A	430.175	0.075	0.189	0.189	-	-	0.119	0.271	-	0.119	0.271
1	B-CD	724.433	0.106	0.268	0.268	-	-	-	-	-	-	-
1	CD-B	631.874	0.234	0.234	0.234	-	-	-	-	-	-	-
1	D-AB	644.805	-	-	-	-	-	0.239	0.239	0.095	-	-
1	D-C	500.020	-	0.139	0.315	0.139	0.315	0.220	0.220	0.087	-	-

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 (%)
A651 Oxford Road (South)	ONE HOUR	✓	639.00	100.000
West Lane	ONE HOUR	✓	355.00	100.000
A651 Oxford Road (North)	ONE HOUR	✓	560.00	100.000
Cambridge Chase	ONE HOUR	✓	9.00	100.000

Turning Proportions

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.000	104.000	535.000	0.000
	West Lane	72.000	0.000	282.000	1.000
	A651 Oxford Road (North)	356.000	204.000	0.000	0.000
	Cambridge Chase	5.000	1.000	3.000	0.000

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.00	0.16	0.84	0.00
	West Lane	0.20	0.00	0.79	0.00
	A651 Oxford Road (North)	0.64	0.36	0.00	0.00
	Cambridge Chase	0.56	0.11	0.33	0.00

Vehicle Mix

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	1.000	1.000	1.000	1.000
	West Lane	1.000	1.000	1.000	1.000
	A651 Oxford Road (North)	1.000	1.000	1.000	1.000
	Cambridge Chase	1.000	1.000	1.000	1.000

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

	To				
From		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
	A651 Oxford Road (South)	0.0	0.0	0.0	0.0
	West Lane	0.0	0.0	0.0	0.0
	A651 Oxford Road (North)	0.0	0.0	0.0	0.0
	Cambridge Chase	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.70	26.96	2.24	D
B-A	0.53	51.07	1.07	F
A-B	-	-	-	-
A-C	-	-	-	-
A-D	-	-	-	-
AB-CD	0.00	3.88	0.00	A
AB-C	-	-	-	-
D-ABC	0.03	10.14	0.03	B
C-D	-	-	-	-
C-A	-	-	-	-
C-B	-	-	-	-
CD-AB	0.62	12.75	2.48	B
CD-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	213.06	210.71	0.00	570.24	0.374	0.59	9.950	A
B-A	54.21	53.18	0.00	261.27	0.207	0.26	17.221	C
A-B	78.30	78.30	0.00	-	-	-	-	-
A-C	402.78	402.78	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	1.74	1.73	0.00	930.09	0.002	0.00	3.877	A
AB-C	611.75	611.75	0.00	-	-	-	-	-
D-ABC	6.78	6.71	0.00	442.22	0.015	0.02	8.265	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	268.02	268.02	0.00	-	-	-	-	-
C-B	153.58	153.58	0.00	-	-	-	-	-
CD-AB	248.41	245.44	0.00	712.02	0.349	0.74	7.696	A
CD-A	177.67	177.67	0.00	-	-	-	-	-

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-CD	254.41	253.14	0.00	528.18	0.482	0.91	13.025	B
B-A	64.73	64.13	0.00	219.42	0.295	0.40	23.091	C
A-B	93.49	93.49	0.00	-	-	-	-	-
A-C	480.95	480.95	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	2.41	2.40	0.00	982.58	0.002	0.00	3.671	A
AB-C	731.68	731.68	0.00	-	-	-	-	-
D-ABC	8.09	8.07	0.00	410.98	0.020	0.02	8.934	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	320.04	320.04	0.00	-	-	-	-	-
C-B	183.39	183.39	0.00	-	-	-	-	-
CD-AB	332.10	330.34	0.00	732.80	0.453	1.18	8.969	A
CD-A	176.71	176.71	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-CD	311.59	306.88	0.00	449.42	0.693	2.08	24.482	C
B-A	79.27	76.96	0.00	152.31	0.520	0.98	46.438	E
A-B	114.51	114.51	0.00	-	-	-	-	-
A-C	589.05	589.05	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	3.49	3.48	0.00	1047.54	0.003	0.00	3.447	A
AB-C	892.44	892.44	0.00	-	-	-	-	-
D-ABC	9.91	9.88	0.00	365.51	0.027	0.03	10.123	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	391.96	391.96	0.00	-	-	-	-	-
C-B	224.61	224.61	0.00	-	-	-	-	-
CD-AB	473.88	469.01	0.00	762.41	0.622	2.40	12.330	B
CD-A	149.27	149.27	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-CD	311.59	310.97	0.00	443.21	0.703	2.24	26.961	D
B-A	79.27	78.94	0.00	148.75	0.533	1.07	51.070	F
A-B	114.51	114.51	0.00	-	-	-	-	-
A-C	589.05	589.05	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	3.55	3.55	0.00	1049.48	0.003	0.00	3.441	A
AB-C	896.47	896.47	0.00	-	-	-	-	-
D-ABC	9.91	9.91	0.00	364.99	0.027	0.03	10.137	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	391.96	391.96	0.00	-	-	-	-	-
C-B	224.61	224.61	0.00	-	-	-	-	-
CD-AB	476.49	476.18	0.00	764.54	0.623	2.48	12.746	B
CD-A	146.68	146.68	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-CD	254.41	259.46	0.00	523.10	0.486	0.97	13.903	B
B-A	64.73	67.22	0.00	216.17	0.299	0.44	24.539	C
A-B	93.49	93.49	0.00	-	-	-	-	-
A-C	480.95	480.95	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	2.48	2.48	0.00	985.87	0.003	0.00	3.662	A
AB-C	737.94	737.94	0.00	-	-	-	-	-
D-ABC	8.09	8.12	0.00	410.35	0.020	0.02	8.952	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	320.04	320.04	0.00	-	-	-	-	-
C-B	183.39	183.39	0.00	-	-	-	-	-
CD-AB	334.78	339.65	0.00	735.74	0.455	1.26	9.271	A
CD-A	174.06	174.06	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-CD	213.06	214.51	0.00	568.15	0.375	0.61	10.220	B
B-A	54.21	54.90	0.00	259.62	0.209	0.27	17.644	C
A-B	78.30	78.30	0.00	-	-	-	-	-
A-C	402.78	402.78	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	1.78	1.78	0.00	932.20	0.002	0.00	3.869	A
AB-C	615.51	615.51	0.00	-	-	-	-	-
D-ABC	6.78	6.79	0.00	441.87	0.015	0.02	8.274	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	268.02	268.02	0.00	-	-	-	-	-
C-B	153.58	153.58	0.00	-	-	-	-	-
CD-AB	250.24	252.18	0.00	713.62	0.351	0.78	7.865	A
CD-A	175.89	175.89	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
Version: 8.0.5.523 [19102,19/06/2015] © Copyright TRL Limited, 2019				
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Filename: West Ln-Oxford Rd.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\West Ln-Oxford Rd

Report generation date: 04/01/2019 15:25:39

« Existing Layout - 2024 Base, PM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Base				
Stream B-CD	0.73	13.12	0.42	B
Stream B-A	0.74	32.74	0.43	D
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	-	-	-	-
Stream AB-CD	0.02	4.39	0.02	A
Stream AB-C	-	-	-	-
Stream D-ABC	0.03	9.31	0.03	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	-	-	-	-
Stream CD-AB	4.01	16.59	0.73	C
Stream CD-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:25:38

File summary

Title	West Lane/A651 Oxford Road/Cambridge Chase Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Base, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Base, PM Peak	2024 Base	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D	17.07	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A651 Oxford Road (South)	A	A651 Oxford Road (South)		Major
West Lane	B	West Lane		Minor
A651 Oxford Road (North)	C	A651 Oxford Road (North)		Major
Cambridge Chase	D	Cambridge Chase		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A651 Oxford Road (South)	7.00		0.00		2.20	100.00	✓	0.00
A651 Oxford Road (North)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
West Lane	One lane plus flare				7.50	4.80	3.90	3.50	3.00	✓	1.00	20	17
Cambridge Chase	One lane	3.16										19	17

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-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
1	AB-D	631.874	-	-	-	-	-	0.234	0.234	0.234	-	-
1	B-A	440.765	0.077	0.194	0.194	-	-	0.122	0.277	-	0.122	0.277
1	B-CD	710.787	0.104	0.263	0.263	-	-	-	-	-	-	-
1	CD-B	631.874	0.234	0.234	0.234	-	-	-	-	-	-	-
1	D-AB	644.805	-	-	-	-	-	0.239	0.239	0.095	-	-
1	D-C	500.020	-	0.139	0.315	0.139	0.315	0.220	0.220	0.087	-	-

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 (%)
A651 Oxford Road (South)	ONE HOUR	✓	493.00	100.000
West Lane	ONE HOUR	✓	260.00	100.000
A651 Oxford Road (North)	ONE HOUR	✓	661.00	100.000
Cambridge Chase	ONE HOUR	✓	10.00	100.000

Turning Proportions

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.000	59.000	434.000	0.000
	West Lane	76.000	0.000	179.000	5.000
	A651 Oxford Road (North)	414.000	244.000	0.000	3.000
	Cambridge Chase	3.000	5.000	2.000	0.000

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.00	0.12	0.88	0.00
	West Lane	0.29	0.00	0.69	0.02
	A651 Oxford Road (North)	0.63	0.37	0.00	0.00
	Cambridge Chase	0.30	0.50	0.20	0.00

Vehicle Mix

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	1.000	1.000	1.000	1.000
	West Lane	1.000	1.000	1.000	1.000
	A651 Oxford Road (North)	1.000	1.000	1.000	1.000
	Cambridge Chase	1.000	1.000	1.000	1.000

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

	To				
From		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
	A651 Oxford Road (South)	0.0	0.0	0.0	0.0
	West Lane	0.0	0.0	0.0	0.0
	A651 Oxford Road (North)	0.0	0.0	0.0	0.0
	Cambridge Chase	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.42	13.12	0.73	B
B-A	0.43	32.74	0.74	D
A-B	-	-	-	-
A-C	-	-	-	-
A-D	-	-	-	-
AB-CD	0.02	4.39	0.02	A
AB-C	-	-	-	-
D-ABC	0.03	9.31	0.03	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	-	-	-	-
CD-AB	0.73	16.59	4.01	C
CD-A	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	138.52	137.29	0.00	582.90	0.238	0.31	8.060	A
B-A	57.22	56.21	0.00	279.75	0.205	0.25	16.036	C
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	326.74	326.74	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	7.52	7.48	0.00	827.60	0.009	0.01	4.389	A
AB-C	456.51	456.51	0.00	-	-	-	-	-
D-ABC	7.53	7.46	0.00	468.50	0.016	0.02	7.807	A
C-D	2.26	2.26	0.00	-	-	-	-	-
C-A	311.68	311.68	0.00	-	-	-	-	-
C-B	183.70	183.70	0.00	-	-	-	-	-
CD-AB	317.84	313.87	0.00	763.67	0.416	0.99	7.976	A
CD-A	183.51	183.51	0.00	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	165.41	164.94	0.00	547.30	0.302	0.43	9.404	A
B-A	68.32	67.83	0.00	245.20	0.279	0.38	20.237	C
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	390.16	390.16	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	10.29	10.27	0.00	865.88	0.012	0.01	4.207	A
AB-C	544.81	544.81	0.00	-	-	-	-	-
D-ABC	8.99	8.97	0.00	439.43	0.020	0.02	8.363	A
C-D	2.70	2.70	0.00	-	-	-	-	-
C-A	372.18	372.18	0.00	-	-	-	-	-
C-B	219.35	219.35	0.00	-	-	-	-	-
CD-AB	425.77	423.15	0.00	793.72	0.536	1.65	9.751	A
CD-A	172.93	172.93	0.00	-	-	-	-	-

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-CD	202.59	201.45	0.00	480.69	0.421	0.71	12.841	B
B-A	83.68	82.34	0.00	195.11	0.429	0.71	31.550	D
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	477.84	477.84	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	14.94	14.91	0.00	916.18	0.016	0.02	3.994	A
AB-C	664.36	664.36	0.00	-	-	-	-	-
D-ABC	11.01	10.98	0.00	397.71	0.028	0.03	9.309	A
C-D	3.30	3.30	0.00	-	-	-	-	-
C-A	455.82	455.82	0.00	-	-	-	-	-
C-B	268.65	268.65	0.00	-	-	-	-	-
CD-AB	610.33	601.71	0.00	836.29	0.730	3.80	15.421	C
CD-A	122.93	122.93	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-CD	202.59	202.52	0.00	476.81	0.425	0.73	13.119	B
B-A	83.68	83.56	0.00	193.25	0.433	0.74	32.739	D
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	477.84	477.84	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	15.03	15.03	0.00	916.78	0.016	0.02	3.992	A
AB-C	665.33	665.33	0.00	-	-	-	-	-
D-ABC	11.01	11.01	0.00	397.63	0.028	0.03	9.311	A
C-D	3.30	3.30	0.00	-	-	-	-	-
C-A	455.82	455.82	0.00	-	-	-	-	-
C-B	268.65	268.65	0.00	-	-	-	-	-
CD-AB	615.56	614.73	0.00	839.99	0.733	4.01	16.591	C
CD-A	117.72	117.72	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-CD	165.41	166.55	0.00	544.06	0.304	0.44	9.564	A
B-A	68.32	69.66	0.00	242.90	0.281	0.40	20.934	C
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	390.16	390.16	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	10.40	10.43	0.00	866.83	0.012	0.01	4.205	A
AB-C	546.30	546.30	0.00	-	-	-	-	-
D-ABC	8.99	9.02	0.00	439.32	0.020	0.02	8.368	A
C-D	2.70	2.70	0.00	-	-	-	-	-
C-A	372.18	372.18	0.00	-	-	-	-	-
C-B	219.35	219.35	0.00	-	-	-	-	-
CD-AB	431.01	439.90	0.00	798.79	0.540	1.79	10.401	B
CD-A	167.73	167.73	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-CD	138.52	139.03	0.00	580.97	0.238	0.32	8.156	A
B-A	57.22	57.77	0.00	278.33	0.206	0.26	16.362	C
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	326.74	326.74	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	7.63	7.65	0.00	828.66	0.009	0.01	4.386	A
AB-C	458.14	458.14	0.00	-	-	-	-	-
D-ABC	7.53	7.55	0.00	468.39	0.016	0.02	7.813	A
C-D	2.26	2.26	0.00	-	-	-	-	-
C-A	311.68	311.68	0.00	-	-	-	-	-
C-B	183.70	183.70	0.00	-	-	-	-	-
CD-AB	320.75	323.72	0.00	766.06	0.419	1.05	8.237	A
CD-A	180.66	180.66	0.00	-	-	-	-	-

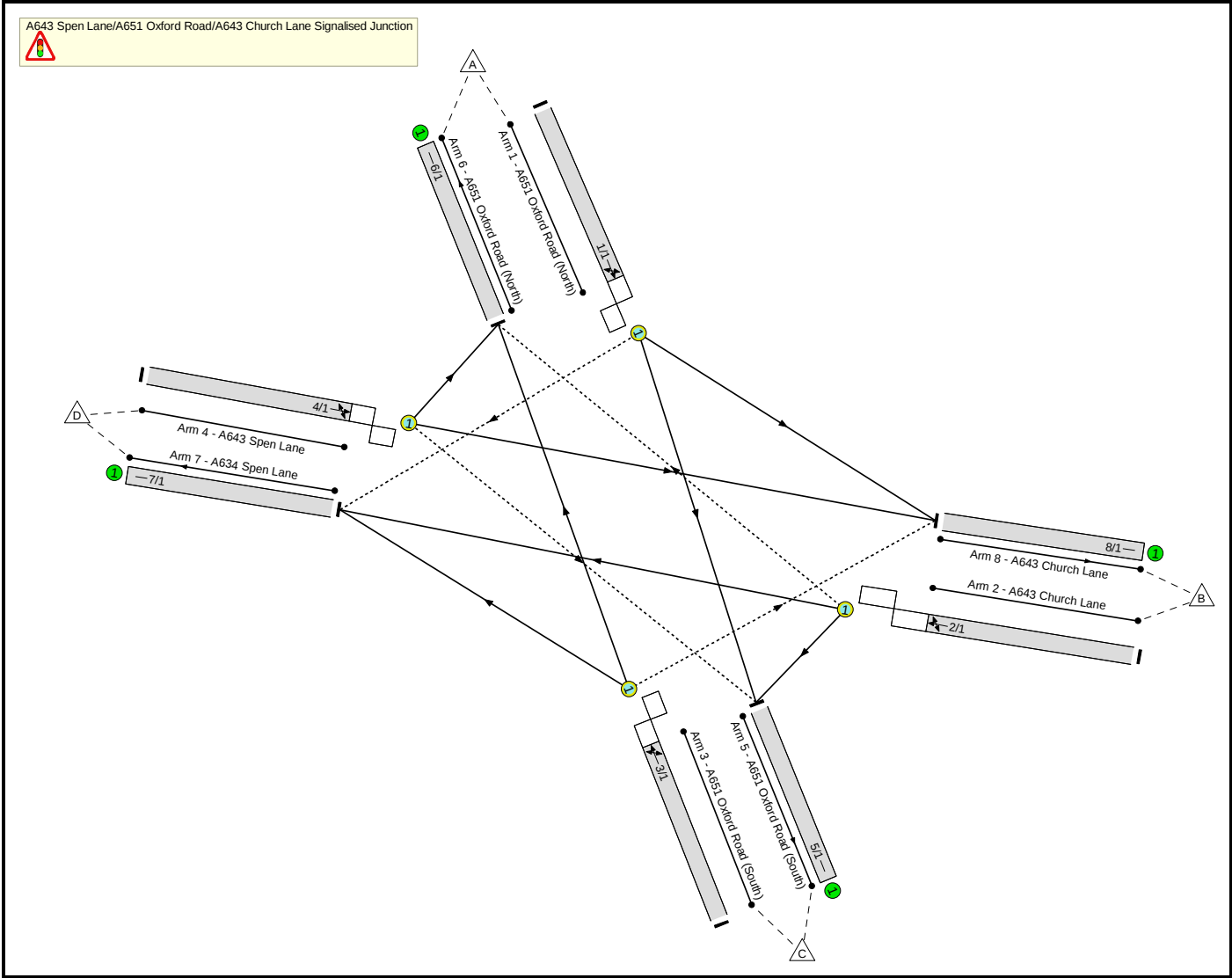
Full Input Data And Results

Full Input Data And Results

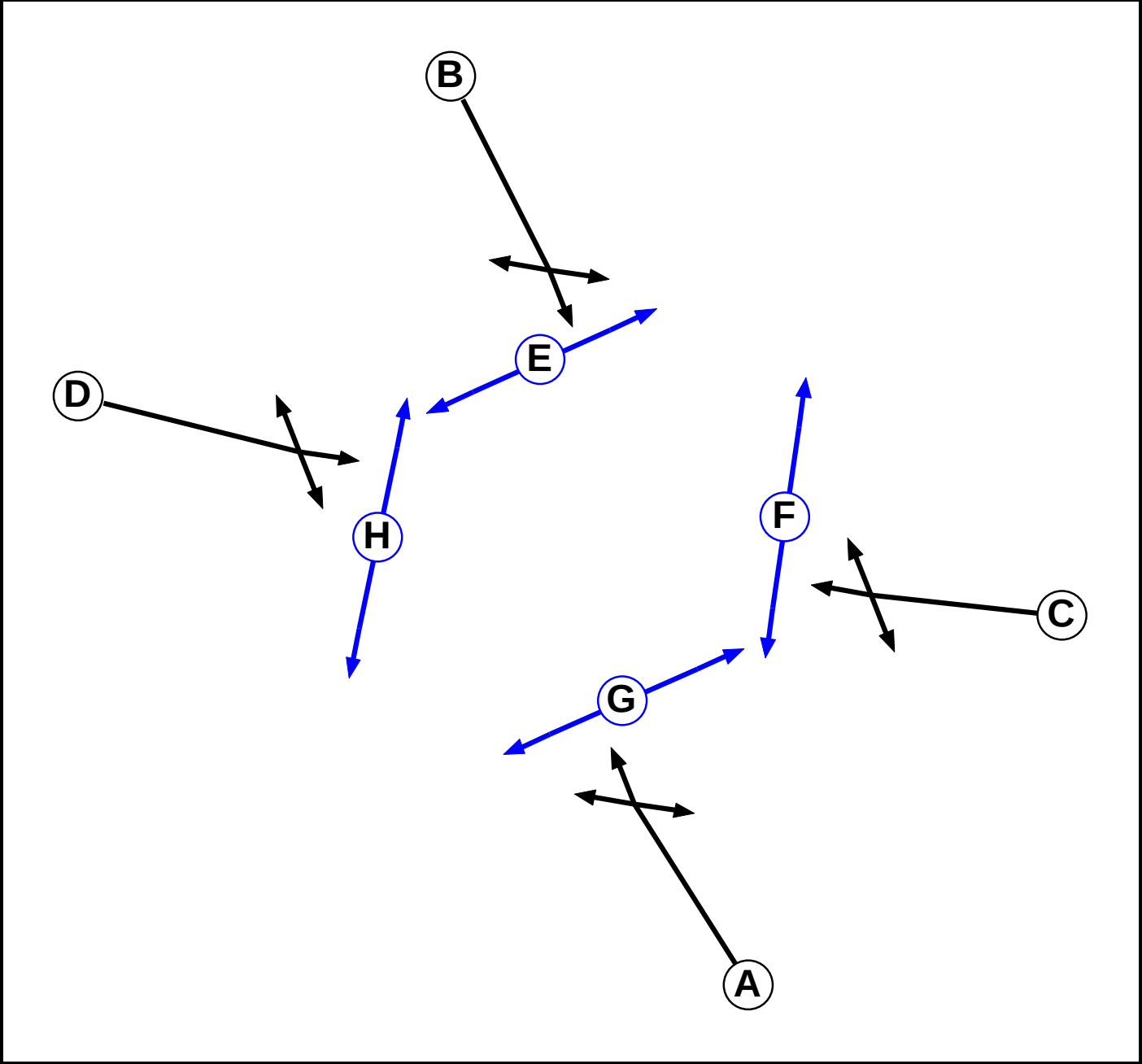
User and Project Details

Project:	Sykes Meadows, Cliffe Lane, Gomersal
Title:	A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction
Location:	Gomersal
File name:	Church Ln-Oxford Rd-Spen Ln Signals - TO KIRKLEES SIGNAL SPEC - 186s.lsg3x
Author:	R Donaldson
Company:	Bryan G Hall
Address:	
Notes:	2024 Base LinSig Output

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		10	10
B	Traffic		10	10
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		9	9
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		9	9

Full Input Data And Results

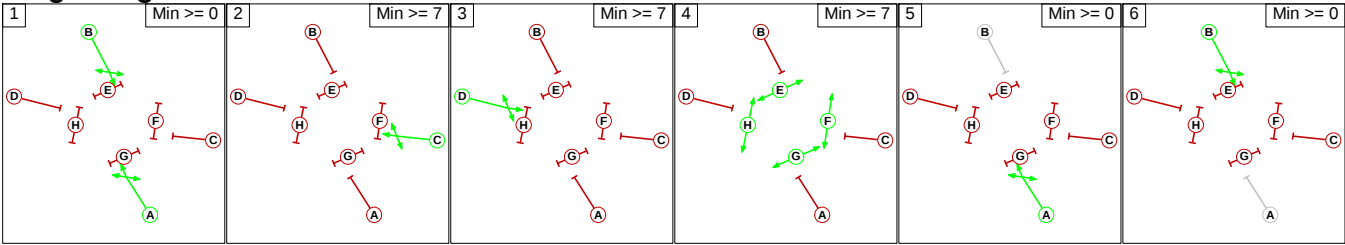
Phase Intergreens Matrix

Terminating Phase	Starting Phase								
		A	B	C	D	E	F	G	H
	A		-	8	8	14	14	7	14
	B	-		8	8	8	14	14	14
	C	8	8		7	13	5	13	10
	D	6	6	6		9	12	13	5
	E	5	11	5	5		-	-	-
	F	5	5	8	5	-		-	-
	G	8	5	5	5	-	-		-
	H	5	5	5	12	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage						
		1	2	3	4	5	6
	1		8	8	14	0	0
	2	8		7	13	8	8
	3	6	6		13	6	6
	4	11	8	12		8	11
	5	2	8	8	14		2
	6	2	8	8	14	2	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (A651 Oxford Road (North))	7/1 (Right)	1439	0	3/1	1.09	All	4.00	2.00	0.50	4	2.00
2/1 (A643 Church Lane)	6/1 (Right)	1439	0	4/1	1.09	All	6.00	3.00	0.50	6	2.00
3/1 (A651 Oxford Road (South))	8/1 (Right)	1439	0	1/1	1.09	All	4.00	2.00	0.50	4	2.00
4/1 (A643 Spen Lane)	5/1 (Right)	1439	0	2/1	1.09	All	4.00	2.00	0.50	4	2.00

Full Input Data And Results

Lane Input Data

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A651 Oxford Road (North))	O	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
											Arm 7 Right	10.00
											Arm 8 Left	10.00
											Arm 5 Left	12.50
2/1 (A643 Church Lane)	O	C	2	3	60.0	Geom	-	3.70	10.00	Y	Arm 6 Right	43.50
											Arm 7 Ahead	Inf
3/1 (A651 Oxford Road (South))	O	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Left	30.00
											Arm 8 Right	12.00
4/1 (A643 Spen Lane)	O	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Right	48.00
											Arm 6 Left	9.00
											Arm 8 Ahead	Inf
5/1 (A651 Oxford Road (South))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A651 Oxford Road (North))	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (A634 Spen Lane)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (A643 Church Lane)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
3: '2024 Base AM Peak'	07:30	08:30	01:00	
4: '2024 Base PM Peak'	16:30	17:30	01:00	

Scenario 3: '2024 Base AM Peak' (FG3: '2024 Base AM Peak', Plan 1: 'Network Control Plan 1')
Traffic Flows, Desired
Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	119	251	51	421
	B	209	0	29	166	404
	C	386	49	0	55	490
	D	67	373	43	0	483
	Tot.	662	541	323	272	1798

Traffic Lane Flows

Lane	Scenario 3: 2024 Base AM Peak
Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	
1/1	421
2/1	404
3/1	490
4/1	483
5/1	323
6/1	662
7/1	272
8/1	541

Lane Saturation Flows

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A651 Oxford Road (North))	3.50	0.00	Y	Arm 5 Ahead	Inf	59.6 %	1853	1853
				Arm 7 Right	10.00	12.1 %		
				Arm 8 Left	10.00	28.3 %		
2/1 (A643 Church Lane)	3.70	10.00	Y	Arm 5 Left	12.50	7.2 %	1525	1525
				Arm 6 Right	43.50	51.7 %		
				Arm 7 Ahead	Inf	41.1 %		
3/1 (A651 Oxford Road (South))	3.50	0.00	Y	Arm 6 Ahead	Inf	78.8 %	1930	1930
				Arm 7 Left	30.00	11.2 %		
				Arm 8 Right	12.00	10.0 %		
4/1 (A643 Spen Lane)	3.00	0.00	Y	Arm 5 Right	48.00	8.9 %	1867	1867
				Arm 6 Left	9.00	13.9 %		
				Arm 8 Ahead	Inf	77.2 %		
5/1 (A651 Oxford Road (South) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A651 Oxford Road (North) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A634 Spen Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A643 Church Lane Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2024 Base PM Peak' (FG4: '2024 Base PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	138	258	72	468
	B	114	0	30	319	463
	C	328	33	0	125	486
	D	71	209	69	0	349
	Tot.	513	380	357	516	1766

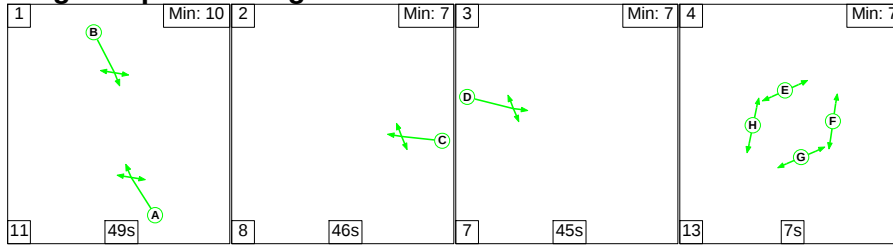
Traffic Lane Flows

Lane	Scenario 4: 2024 Base PM Peak
Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	
1/1	468
2/1	463
3/1	486
4/1	349
5/1	357
6/1	513
7/1	516
8/1	380

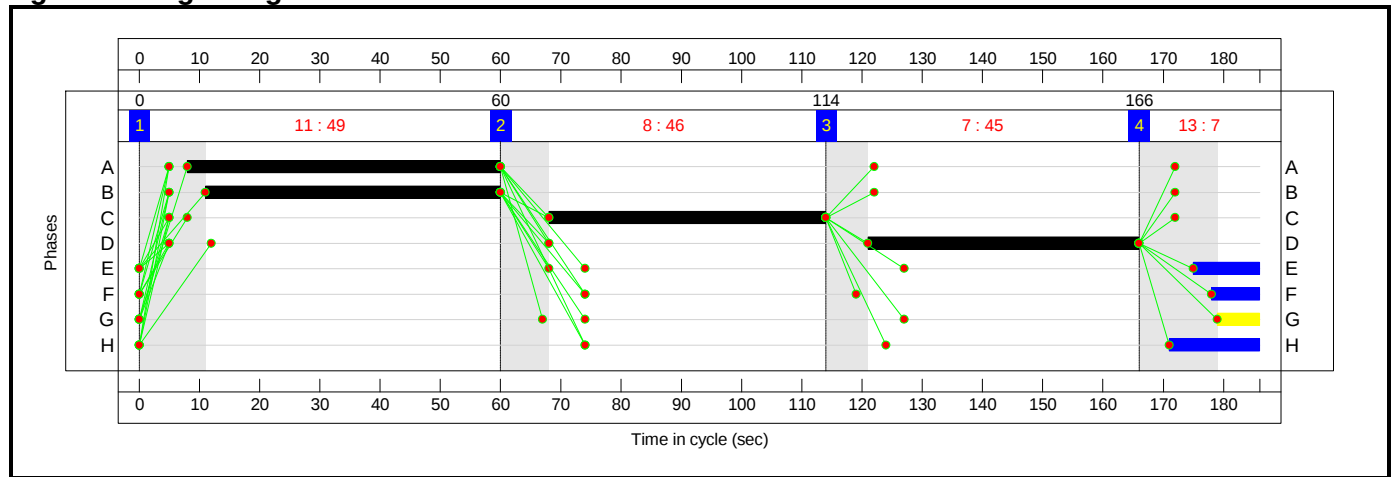
Lane Saturation Flows

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction									
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)	
1/1 (A651 Oxford Road (North))	3.50	0.00	Y	Arm 5 Ahead	Inf	55.1 %	1841	1841	
				Arm 7 Right	10.00	15.4 %			
				Arm 8 Left	10.00	29.5 %			
2/1 (A643 Church Lane)	3.70	10.00	Y	Arm 5 Left	12.50	6.5 %	1540	1540	
				Arm 6 Right	43.50	24.6 %			
				Arm 7 Ahead	Inf	68.9 %			
3/1 (A651 Oxford Road (South))	3.50	0.00	Y	Arm 6 Ahead	Inf	67.5 %	1924	1924	
				Arm 7 Left	30.00	25.7 %			
				Arm 8 Right	12.00	6.8 %			
	4/1 (A643 Spen Lane)	3.00	0.00	Y	Arm 5 Right	48.00	19.8 %	1841	1841
					Arm 6 Left	9.00	20.3 %		
					Arm 8 Ahead	Inf	59.9 %		
5/1 (A651 Oxford Road (South) Lane 1)	Infinite Saturation Flow						Inf	Inf	
6/1 (A651 Oxford Road (North) Lane 1)	Infinite Saturation Flow						Inf	Inf	
7/1 (A634 Spen Lane Lane 1)	Infinite Saturation Flow						Inf	Inf	
8/1 (A643 Church Lane Lane 1)	Infinite Saturation Flow						Inf	Inf	

Stage Sequence Diagram



Stage	1	2	3	4
Duration	49	46	45	7
Change Point	0	60	114	166



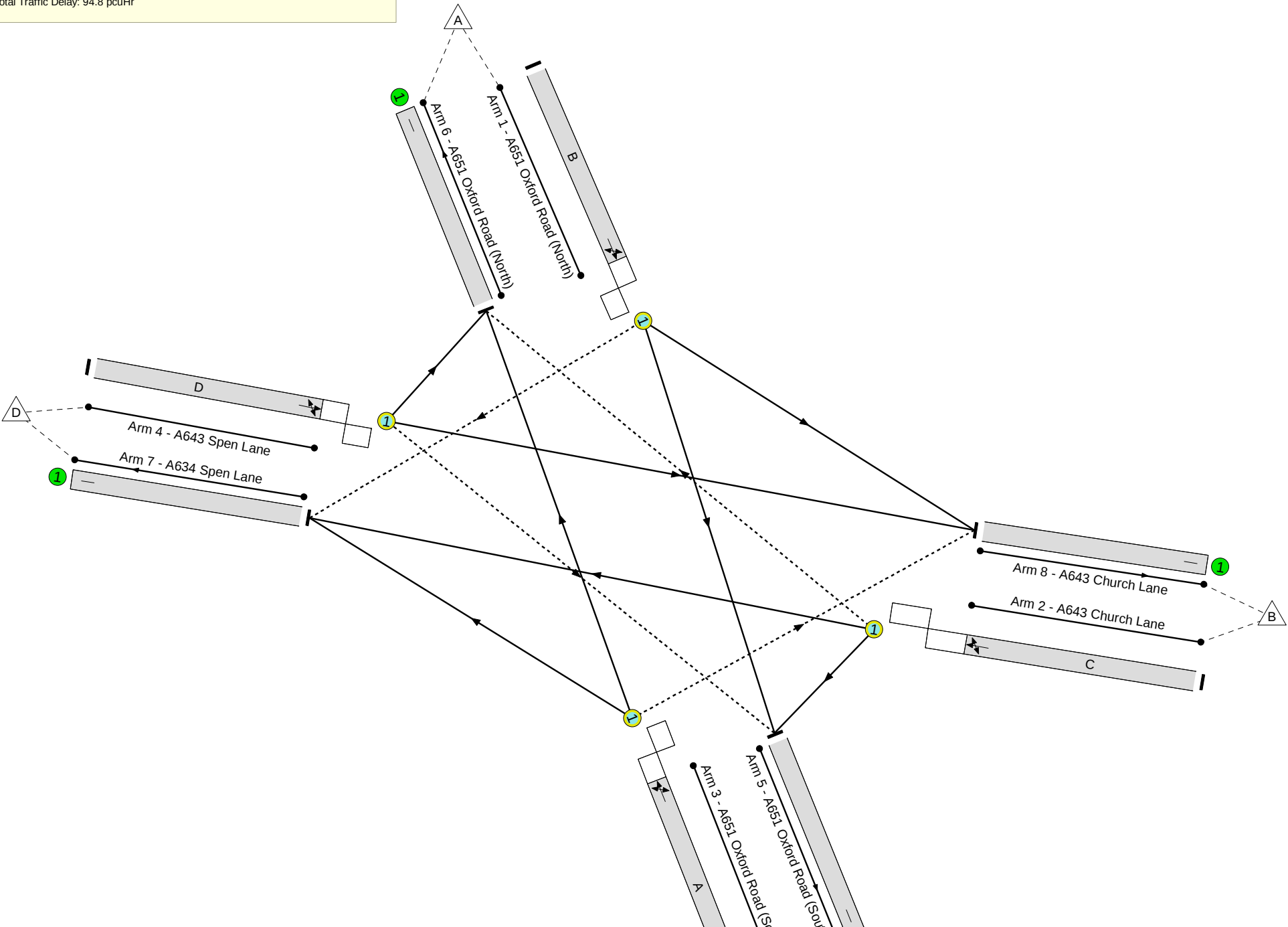
Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction
PRC: -17.5 %
Total Traffic Delay: 94.8 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	105.8%
A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	105.8%
1/1	A651 Oxford Road (North) Ahead Right Left	O	N/A	N/A	B		1	49	-	421	1853	398	105.8%
2/1	A643 Church Lane Left Right Ahead	O	N/A	N/A	C		1	46	-	404	1525	385	104.8%
3/1	A651 Oxford Road (South) Ahead Left Right	O	N/A	N/A	A		1	52	-	490	1930	526	93.1%
4/1	A643 Spen Lane Right Left Ahead	O	N/A	N/A	D		1	45	-	483	1867	462	104.6%
5/1	A651 Oxford Road (South)	U	N/A	N/A	-		-	-	-	323	Inf	Inf	0.0%
6/1	A651 Oxford Road (North)	U	N/A	N/A	-		-	-	-	662	Inf	Inf	0.0%
7/1	A634 Spen Lane	U	N/A	N/A	-		-	-	-	272	Inf	Inf	0.0%
8/1	A643 Church Lane	U	N/A	N/A	-		-	-	-	541	Inf	Inf	0.0%

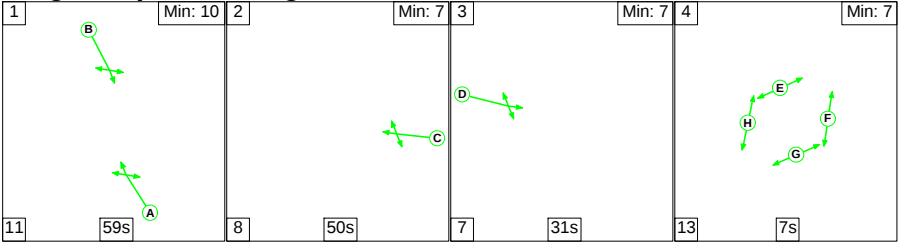
Full Input Data And Results

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Full Input Data And Results

Scenario 4: '2024 Base PM Peak' (FG4: '2024 Base PM Peak', Plan 1: 'Network Control Plan 1')

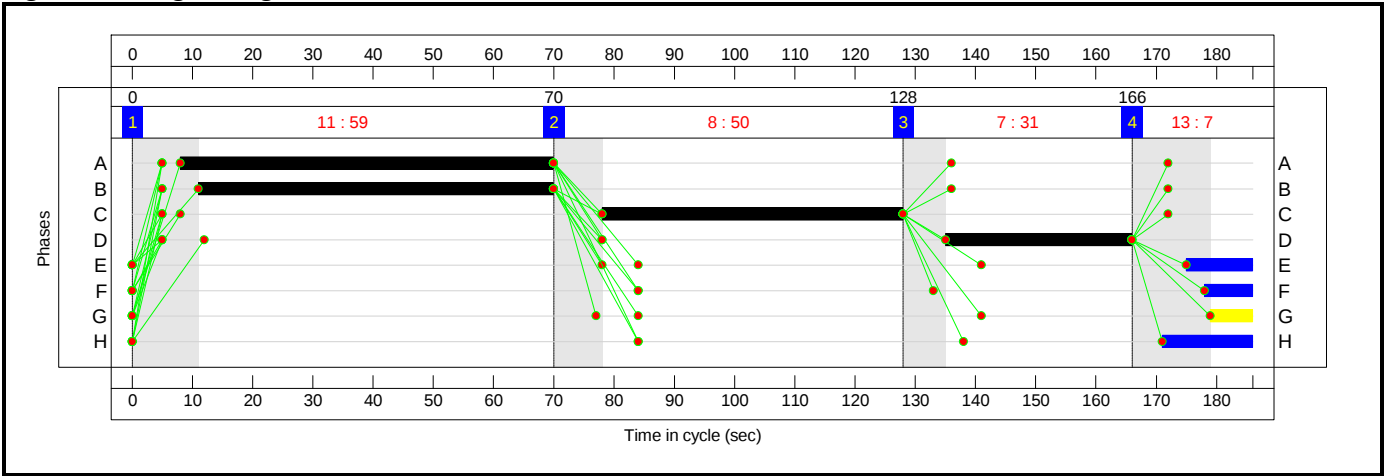
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	59	50	31	7
Change Point	0	70	128	166

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

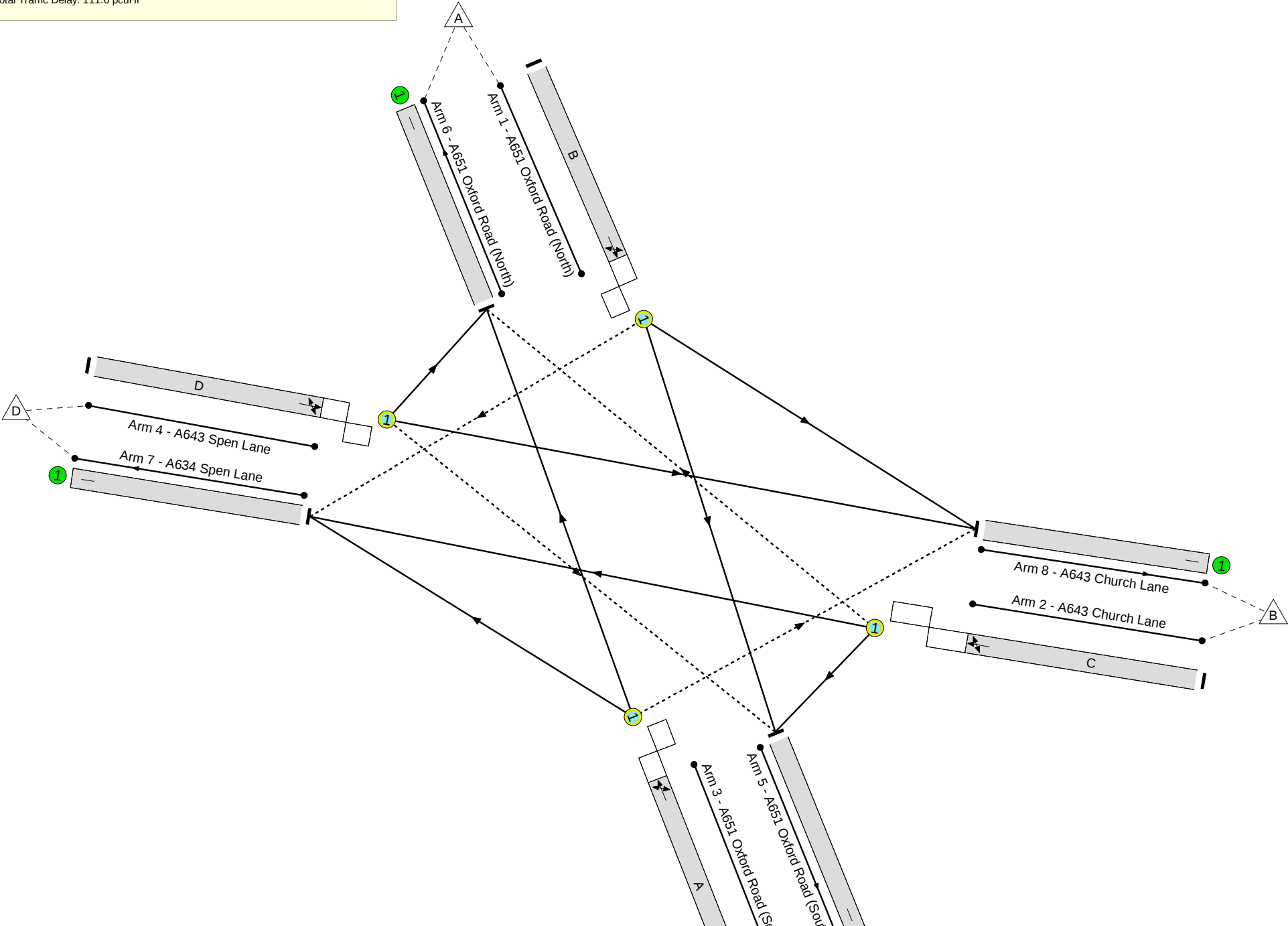
Full Input Data And Results



A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction

PRC: -22.4 %

Total Traffic Delay: 111.6 pcuHr



Full Input Data And Results

Network Results

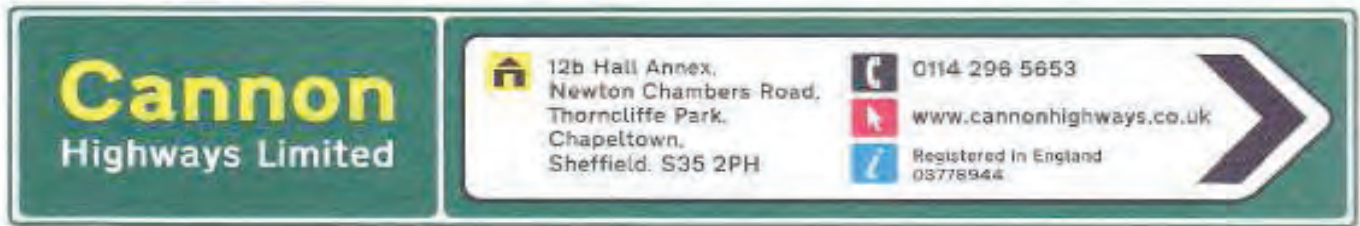
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	110.2%
A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	110.2%
1/1	A651 Oxford Road (North) Ahead Right Left	O	N/A	N/A	B		1	59	-	468	1841	429	109.1%
2/1	A643 Church Lane Left Right Ahead	O	N/A	N/A	C		1	50	-	463	1540	422	109.6%
3/1	A651 Oxford Road (South) Ahead Left Right	O	N/A	N/A	A		1	62	-	486	1924	650	74.7%
4/1	A643 Spen Lane Right Left Ahead	O	N/A	N/A	D		1	31	-	349	1841	317	110.2%
5/1	A651 Oxford Road (South)	U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%
6/1	A651 Oxford Road (North)	U	N/A	N/A	-		-	-	-	513	Inf	Inf	0.0%
7/1	A634 Spen Lane	U	N/A	N/A	-		-	-	-	516	Inf	Inf	0.0%
8/1	A643 Church Lane	U	N/A	N/A	-		-	-	-	380	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction	-	-	94	144	28	39.9	71.2	0.5	111.6	-	-	-	-
A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	-	-	94	144	28	39.9	71.2	0.5	111.6	-	-	-	-
1/1	468	429	63	0	3	11.4	24.4	0.4	36.1	277.9	26.2	24.4	50.6
2/1	463	422	0	91	13	11.7	25.0	0.0	36.7	285.5	26.0	25.0	51.0
3/1	486	486	31	0	2	7.4	1.5	0.1	8.9	66.0	22.4	1.5	23.9
4/1	349	317	0	53	10	9.5	20.4	0.0	29.9	308.2	19.7	20.4	40.1
5/1	326	326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	349	349	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -22.4 Total Delay for Signalled Lanes (pcuHr): 111.62 Cycle Time (s): 186 PRC Over All Lanes (%): -22.4 Total Delay Over All Lanes(pcuHr): 111.62													

APPENDIX BGH 18

APPENDIX BGH 19



Mr R Morton
KCS Development Ltd
3rd Floor
Goodbard House
15 Infirmary Street
Leeds,
LS1 2JS

Ref: 246/DT/01

20 May 2014

Dear Richard,

Proposed Residential Development in Land to the Rear of Cliffe Lane, Gomersal

Please find enclosed a copy of our sketch number SK4 showing a possible access off Cliffe Lane that is suitable to accommodate residential development in the land to the rear of the existing houses.

The access comprises a simple priority junction with associated access road constructed within the land currently occupied by number 271 Cliffe Lane. The layout of the junction incorporates minor realignment of the existing footways and the carriageway in Cliffe Lane in order to secure the appropriate levels of junction visibility. In addition, it should be noted that the existing access to neighbouring land, located immediately adjacent to the proposed junction, should be stopped up and access to the neighbouring land incorporated into the new access road (I understand that an appropriate legal agreement is now in place to enable the existing access to the neighbouring land to be diverted and that the revised access arrangement is shown on the latest development proposals).

The local highways development control officer at Kirklees Council has reviewed the proposed access arrangements and indicated to me that they would be acceptable for the purpose of residential development. Responding, in writing, to my submission of our sketch SK4 he stated that, "*I can confirm that subject to the scale of development and the findings and conclusions or a transport assessment the proposed access arrangements are acceptable in principle to serve residential development.*"

If the proposals progress to an application the submission must include an independent Stage 1 Road Safety Audit and Designer's response covering all aspects of the access arrangements.

e-mail: davetaylor39@cannonhighways.co.uk

I would reiterate that the private access directly to the west of the proposed access, which shares the alignment of Public Footpath No. SPEN/56/10 should be incorporated in to the proposed access to form a single point of access.

Please note this reply is given in good faith and is based on information which you have supplied or is held by the Council. Although every effort has been made to ensure the accuracy of the response it should be understood that neither the Council nor any of its Officers should be held legally responsible for the advice given, nor does this opinion prejudice the outcome of any application for planning permission to this Authority in the future."

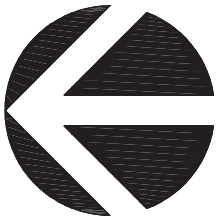
I trust that this is satisfactory. Nevertheless, if you have any queries or would like to discuss the access arrangements in more detail please do not hesitate to contact me.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'D. Taylor', is centered below the text 'Yours sincerely,'. The signature is fluid and cursive.

Dave Taylor

PROPOSED RESIDENTIAL DEVELOPMENT
OFF CLIFFE LANE, GOMERSAL



SKETCH SK4

APPENDIX BGH 20

Cliffe Lane, Gomersal - Speed Survey (Monday 6th November 2017)

Weather Conditions - Fine & Mainly Sunny/Road Surface - Dry

Westbound

28	29	29	25	37	29	31	22	24	32
27	31	29	38	26	57	31	24	34	26
27	31	34	28	30	34	32	26	36	30
31	26	40	30	32	28	30	33	26	34
31	28	30	36	28	32	25	35	28	32
30	31	27	35	33	31	29	26	31	22
25	30	32	28	25	22	31	25	30	33
33	31	30	35	26	31	24	30	32	30
31	24	20	31	28	30	24	30	26	32
24	26	28	32	30	25	36	25	29	32
31	29	26	28	31	26	33	27	33	28
30	27	33	30	27	36	32	30	35	28
26	22	27	34	29	32	30	24	34	29
32	28	42	34	28	23	32	29	36	28
27	30	39	24	33	24	36	31	27	26
30	27	35	29	27	33	30	24	34	30
36	30	27	24	31	38	25	30	33	27
31	29	35	26	30	27	35	33	29	26
36	25	31	34	27	31	35	29	32	27
26	37	31	25	33	28	29	31	29	23

Max - 57

Min - 20

85% - 34

Ave - 30

Sp. Limit - 30

28 - Cars/LGV's

27 - HGV's/PSV's

Cliffe Lane, Gomersal - Speed Survey (Monday 6th November 2017)

Weather Conditions - Fine & Mainly Sunny/Road Surface - Dry

Eastbound

26	29	36	31	28	30	25	27	29	26
26	32	27	33	30	24	26	33	30	25
29	27	31	33	25	28	33	36	31	26
32	27	25	29	40	27	37	32	25	34
30	36	25	32	36	33	23	27	34	31
29	34	30	37	27	32	38	27	34	31
26	31	28	31	40	33	30	36	22	32
28	26	28	36	31	33	29	23	31	36
32	27	31	24	26	33	39	27	25	32
33	27	31	36	29	33	31	33	28	30
33	28	30	25	32	26	28	31	25	28
27	24	37	31	28	31	40	27	33	27
30	25	32	30	25	29	31	26	33	37
37	32	24	33	30	33	37	26	29	24
35	26	33	29	31	27	33	26	29	31
32	26	29	34	28	31	34	24	28	33
31	28	41	32	29	25	29	34	26	31
42	30	34	25	31	29	25	30	34	24
30	32	37	30	36	32	34	31	35	33
28	34	30	35	32	25	36	26	34	24

Max - 42

Min - 22

85% - 34

Ave - 30

Sp. Limit - 30

26 - Cars/LGV's

31 - HGV's/PSV's

B R Y A N G H A L L

consulting civil & transportation planning engineers

Location: Gomersal, West Yorkshire	Date: Monday 6 th November 2017 Time: 09:15 - 15:30	
Road: Cliffe Lane	Weather: Fine/Mainly Sunny, Dry Road Surface	
Speed (mph)	Westbound	Eastbound
66+	0	0
65	0	0
64	0	0
63	0	0
62	0	0
61	0	0
60	0	0
59	0	0
58	0	0
57	1	0
56	0	0
55	0	0
54	0	0
53	0	0
52	0	0
51	0	0
50	0	0
49	0	0
48	0	0
47	0	0
46	0	0
45	0	0
44	0	0
43	0	0
42	1	1
41	0	1
40	1	3
39	1	1
38	2	1
37	2	7
36	8	10
35	8	3
34	9	12
33	12	20
32	15	16
31	23	23
30	25	16
29	16	15
28	16	14
27	16	15
26	16	16
25	10	15
24	11	8
23	2	2
22	4	1
21	0	0
20	1	0
19	0	0
18	0	0
17	0	0
16	0	0
No. of readings	200	200
Dry Weather Mean speed	30	30
85th %ile dry weather spot speed	34	34
85th %ile wet weather journey speed	32	32

APPENDIX BGH 21



CLIFFE LANE, GOMERSAL, PROPOSED ACCESS JUNCTION

Stage 1 Road Safety Audit
KCS Development Ltd

24/09/2018



Quality Management

ISSUE	REVISION	DESCRIPTION	DATE	PREPARED BY	CHECKED
1		Draft	24 September 2018	<i>M Morley</i>	<i>A Bawn</i>
Project number - RSI-MM-0918-003					

roadsafetyini

Cliffe Lane, Gomersal, Proposed Access Junction

Stage 1 Road Safety Audit

24/09/2018

Client

KCS Development Ltd

Consultant

Road Safety Initiatives LLP

www.roadsafetyinitiatives.co.uk

Registered Address

Road Safety Initiatives LLP
OC380991
c/o Harlands Accountants, The Greenhouse
Amos Drive, Greencroft Industrial Park,
Annfield Plain, Stanley
County Durham, DH9 7XN

Enquiries regarding this audit should be made to

M Morley

Partner
Road Safety Initiatives LLP

Tel: +44 (0)7758 408396
[mailto: martin@roadsafetyinitiatives.co.uk](mailto:martin@roadsafetyinitiatives.co.uk)

Table of Contents

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2 Items Raised At This Stage 1 Road Safety Audit 8

3 Audit Team Statement 9

Appendices, Figures and Tables 10

APPENDIX A - Scheme Documents Issued for Road Safety Audit

APPENDIX B – Key Plan

roadsafetyini

1 Introduction

- 1.1.1 This report results from a Stage 1 Road Safety Audit carried out on the proposed access junction in Cliffe Lane, Gomersal, associated with a new residential development. This report is at the request of Robbie Donaldson (Bryan G Hall), on behalf of Richard Morton (KCS Development Ltd), the Project Sponsor.
- 1.1.2 The Road Safety Audit was carried out by experienced Road Safety Engineers, employed by Road Safety Initiatives LLP, who have not been involved with the design process.
- 1.1.3 The terms of reference of the Road Safety Audit are described in HD 19/15. The Road Safety Audit Team has only reported on road safety implications in the context of the chosen scheme design. No attempt has been made to comment on the justification of the scheme or to carry out a technical/ design standards check. Consequently, the Road Safety Auditors accept no responsibility for the design or construction of the scheme.
- 1.1.4 It is confirmed that this is a “Stage 1” Road Safety Audit, i.e. undertaken at completion of the preliminary design. As far as the Road Safety Audit Team is aware, no Road Safety Audits have been undertaken on this scheme beforehand.
- 1.1.5 The Road Safety Audit Team membership consisted of:
M Morley, BSc (Hons), MCIHT, MSoRSA
(Certificate of Competency in Road Safety Audit gained in February 2013)
Road Safety Audit Team Leader (Partner, Road Safety Initiatives LLP)
A Bawn, BSc (Hons), CEng, MICE
Road Safety Audit Team Member (Consultant, Road Safety Initiatives LLP)
- 1.1.6 The Road Safety Audit was undertaken in accordance with the Audit Brief provided by Robbie Donaldson and James Pointon (Bryan G Hall) on behalf of the Project Sponsor, Richard Morton. The Road Safety Audit comprised of an examination of the documents provided and listed in **Appendix A**.
- 1.1.7 The Road Safety Audit Team visited the site together on Monday 17th September 2018 between 13:55 and 14:30 hours. It was cloudy and the road surfaces were dry at the time of the site visit. Traffic flows in Cliffe Lane were light. Very few pedestrians and cyclists were observed during the site visit.
- 1.1.8 Matters which the Terms of Reference exclude from this report, but which the Road Safety Audit Team wishes to draw to the attention of the Project Sponsor, will be supplied in separate correspondence to this Road Safety Audit Report.
- 1.1.9 All Road Safety problems are referenced to the detailed design drawings and the locations have been indicated on the plans supplied with the Road Safety Audit Brief in **Appendix B**.

1.2 Scheme Description

- 1.2.1 The Road Safety Audit reviews the road safety aspects of the proposed access junction at No. 271 Cliffe Lane (No. 271, a detached house, would be demolished as part of the works). The access junction has been designed with a visibility splay of 2.4m x 52m. To achieve the intended visibility splay, the northern footway of Cliffe Lane will be widened. To compensate for the relocation of the northern kerbline, there will be subtle kerbline realignment on the south side of Cliffe Lane (and consequential slight narrowing of the southern footway).

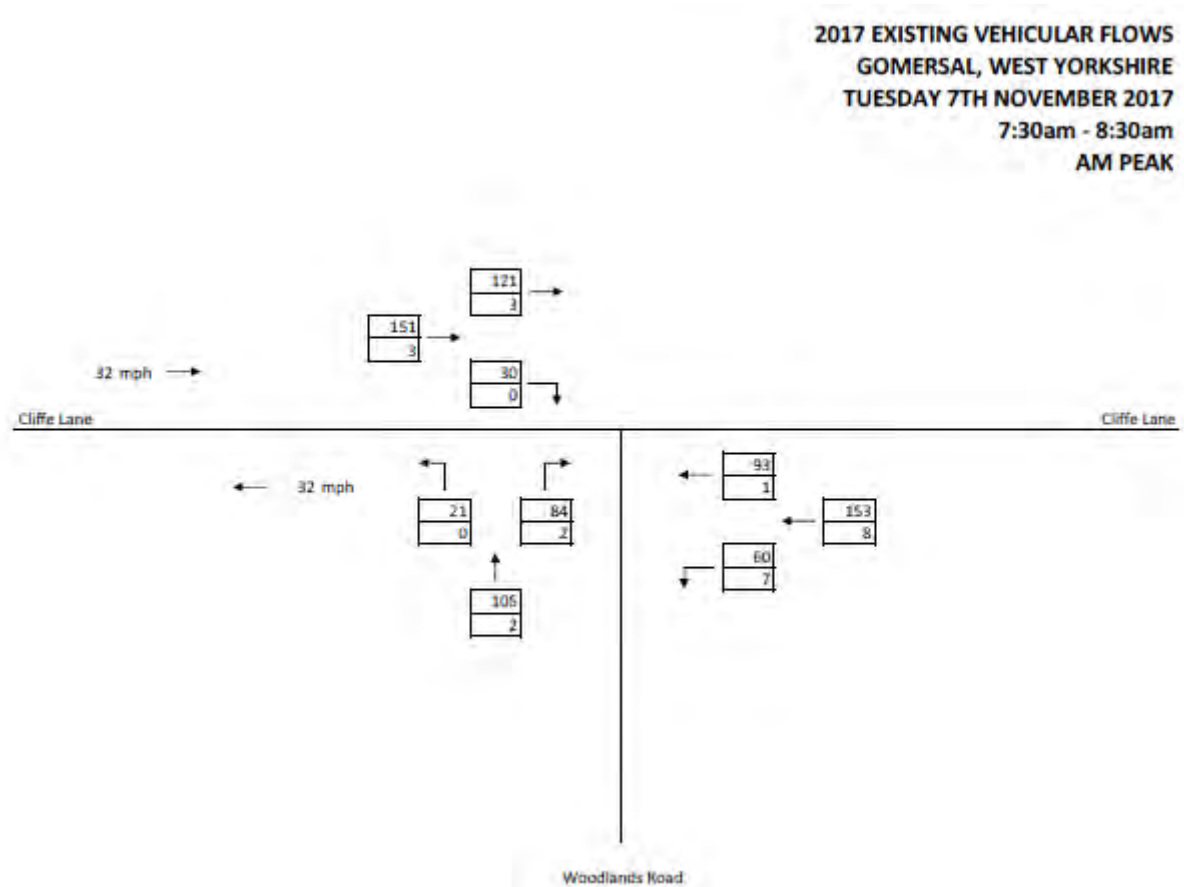
- 1.2.2 It is understood that the access junction is proposed in association with a new residential development of around 100 dwellings.

1.3 Site Description

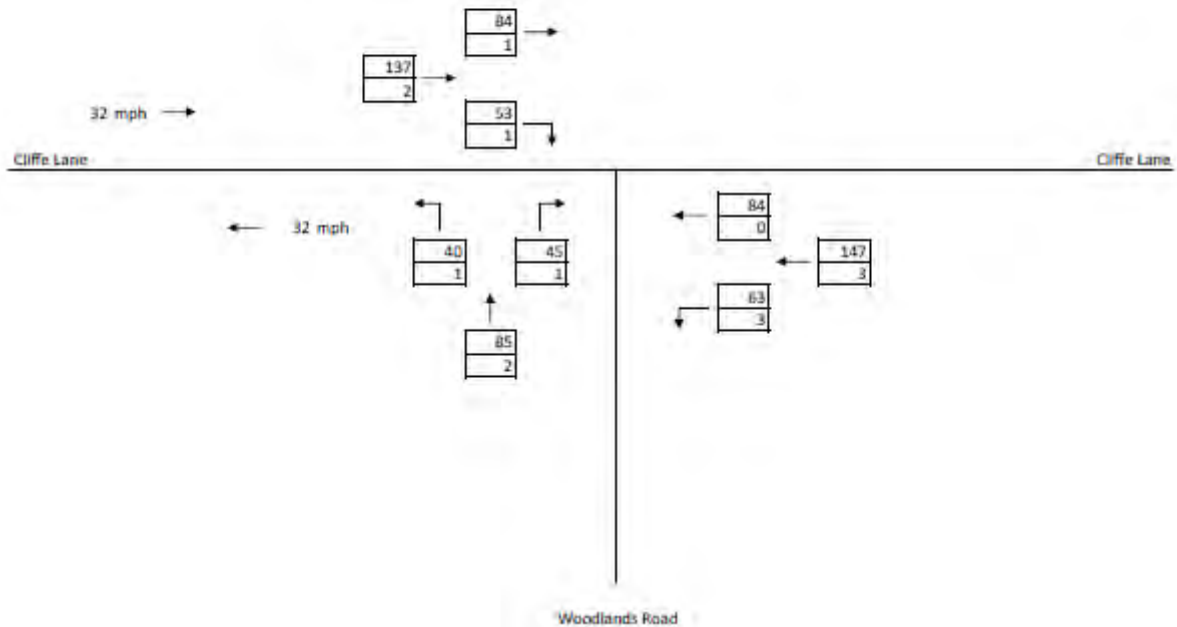
- 1.3.1 Cliffe Lane is a residential road with footways both sides and fronted by detached and semi-detached properties. It is subject to a 30mph speed limit by virtue of street lighting.

1.4 Traffic Information

- 1.4.1 Existing traffic flow and measured speeds were provided to the Road Safety Audit Team. The information from the AM peak hour is shown in the diagram below and the PM peak hour is shown on the diagram on the following page.



**2017 EXISTING VEHICULAR FLOWS
GOMERSAL, WEST YORKSHIRE
TUESDAY 7TH NOVEMBER 2017
4:45pm - 5:45pm
PM PEAK**



1.5 Collision Data

- 1.5.1 No collision information was provided to the Road Safety Audit Team. According to the CRASHMAP website, in the four year nine month period ending 30 September 2017, there were no reported injury collisions in Cliffe Lane.

1.6 Departures from Standard

- 1.6.1 No Departures from Standard have been indicated to the Road Safety Audit Team.

2 Items Raised At This Stage 1 Road Safety Audit

2.1 JUNCTIONS

2.1.1 Problem

LOCATION: Existing vehicle access road leading from Cliffe Lane to 'Holmfield'.

SUMMARY: Conflicts may occur should an existing vehicle crossover be retained directly adjacent to the new development access junction.

The drawing supplied is unclear if or how the existing vehicle access to 'Holmfield' will be closed to traffic at Cliffe Lane. Conflicts may occur should a vehicle crossover be retained directly adjacent to the new development access junction. Related to this point, it is also not obvious how the existing public footpath will be tied-in with the new junction in Cliffe Lane. Pedestrians may be struck by turning traffic at the new junction.

RECOMMENDATION

It is recommended that the 'Holmfield' vehicle access is taken from the development access road and that the existing vehicle access in Cliffe Lane is stopped up.



2.2 ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING

2.2.1 Problem

LOCATION: Development access road and vehicle access to 'Holmfield'.

SUMMARY: Potential for night time collisions.

The intended road lighting additions and improvements have not been indicated within the information supplied. Inadequate or inconsistent road lighting may contribute to darkness collisions, taking account of the additional pedestrians and cyclists and turning traffic at the new junction.

RECOMMENDATION

It is recommended that a road lighting review is undertaken and that appropriate road lighting is provided within the development and that, if required, the lighting is upgraded at the new junction in Cliffe Lane.

***** END OF IDENTIFIED PROBLEMS AND RECOMMENDATIONS MADE AT THIS
STAGE 1 ROAD SAFETY AUDIT *****

3 Audit Team Statement

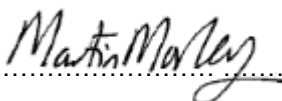
We certify that this Road Safety Audit has been carried out in accordance with HD 19/15.

ROAD SAFETY AUDIT TEAM LEADER

M Morley

Partner

Road Safety Initiatives LLP

.....Signed

24 September 2018

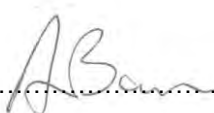
.....Date

ROAD SAFETY AUDIT TEAM MEMBER

A Bawn

Consultant

Road Safety Initiatives LLP

.....Signed

24 September 2018

.....Date

Appendices, Figures and Tables

roadsafetyini

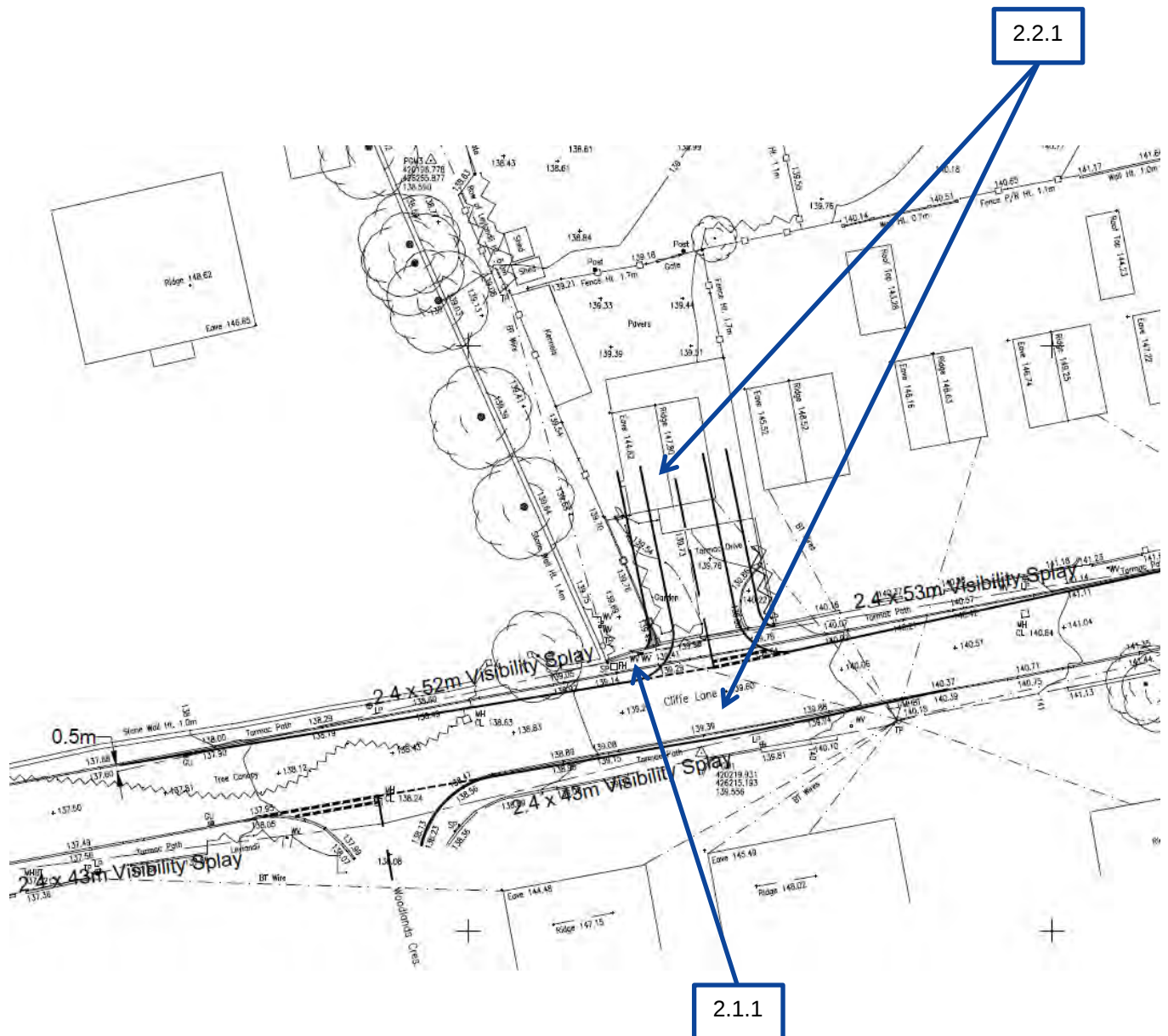
Appendix A: Scheme Documents Issued for Road Safety Audit

Drawing No.	Rev	Title
15/398/LOC/004	-	Location Plan
15/398/SKH/003	A	Proposed Access Arrangement

roadsafetyini

Numbers refer to problems identified in the text.

Numbers refer to problems identified in the text.





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c/o Harlands Accountants
The Greenhouse, Amos Drive
Greencroft Industrial Park
Annfield Plain, Stanley
County Durham, DH9 7XN

www.roadsafetyinitiatives.co.uk

STAGE 1 ROAD SAFETY AUDIT

PROPOSED SITE ACCESS JUNCTION, CLIFFE LANE, GOMERSAL

DESIGNER'S RESPONSE

The following table summarises the findings of the Stage 1 Road Safety Audit performed on the above scheme and provides the Designer's Response to each point raised by the audit team.

1	2	3	4	5
Point N ^o in Safety Audit	Point accepted (Yes/No)	Recommendation Accepted	If NO in Column 2 Give Reasons	If Yes in Column 2 Give Comments/Action
2.1.1	Yes	Yes	Access to Holmfield is to be provided via a new private access from the new site access road as recommended. The current access onto Cliffe Lane will be closed to vehicles, with access to be retained for pedestrians using the public footpath only. This is shown on the proposed site layout plan, which was not supplied to the audit team.	
2.2.1	Yes	Yes	Street lighting design will be carried out at the detailed design stage.	

NAME:	Robbie Donaldson
SIGNED:	<i>R. Donaldson</i>
POSITION:	Senior Engineer
DATE:	02/10/2018

APPENDIX BGH 22



Client:

KCS DEVELOPMENTS

BRYAN G HALL

CONSULTING CIVIL & TRANSPORTATION PLANNING ENGINEERS

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Lighterman House

26/36 Wharfedale Road

LONDON | N1 9RY

T 0203 553 2336

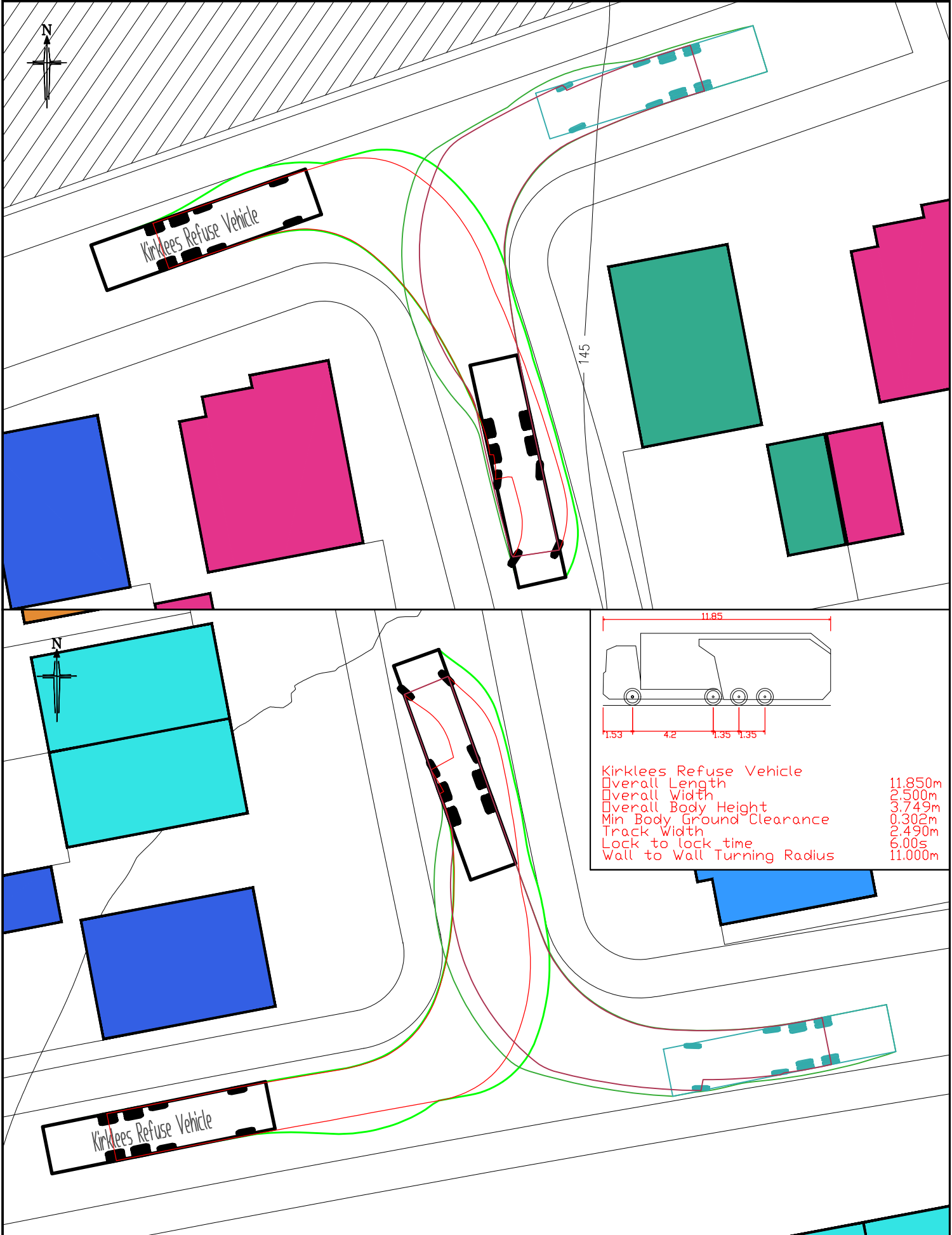
Project:

CLIFFE LANE, GOMERSAL

Title

SWEPT PATH ANALYSIS OF KIRKLEES REFUSE VEHICLE
(BASED ON 15/398/SKH/003 REV A)

Rev:	Amendment:	Drn:	Chk:	Date:			
Job No:	15-398	Drawn:	RD	Checked:	GB	Date:	05-11-2018
Scale:	1:250	Drawing No:	Revision:				
A3 - 420 x 297		15/398/ATR/001					



BRYAN G HALL CONSULTING CIVIL & TRANSPORTATION PLANNING ENGINEERS Copyright Reserved Bryan G Hall Ltd. E highways@bryanghall.co.uk W www.bryanghall.co.uk Suite E15 Josephs Well Hanover Walk LEEDS LS3 1AB T 0113 246 1555 F 0113 234 2201 Lighterman House 26/36 Wharfedale Road LONDON N1 9RY T 0203 533 2336 Client: KCS DEVELOPMENTS Project: CLIFFE LANE, GOMERSAL Title: SWEPT PATH ANALYSIS OF KIRKLEES REFUSE VEHICLE (BASED ON PROPOSED SITE PLAN 1332 SK 16C) Rev: Amendment: DRN: CHK: Date: Status: Drawing No: 15/398/ATR/002 Date: 04-01-2019 Scale: 1:250 A4 - 297 x 210 Job No: 15-398 Revision: Drawn: RD Checked: GB	
--	--

APPENDIX BGH 23

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED

VEHICLESSelected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	KC KENT	1 days
03	SOUTH WEST	
	DV DEVON	2 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	2 days
	SY SOUTH YORKSHIRE	1 days
09	NORTH	
	DH DURHAM	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
 Actual Range: 50 to 116 (units:)
 Range Selected by User: 50 to 150 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 27/11/17

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	4 days
Tuesday	1 days
Wednesday	1 days
Thursday	1 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	9
------------------------------------	---

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	9
------------------	---

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:Use Class:

C3	9 days
----	--------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	3 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	1 days
75,001 to 100,000	3 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	8 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	9 days
-----------------	--------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	DH-03-A-01	SEMI DETACHED	DURHAM
	GREENFIELDS ROAD		
	BISHOP AUCKLAND		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	50	
	Survey date: TUESDAY	28/03/17	Survey Type: MANUAL
2	DV-03-A-02	HOUSES & BUNGALOWS	DEVON
	MILLHEAD ROAD		
	HONITON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	116	
	Survey date: FRIDAY	25/09/15	Survey Type: MANUAL
3	DV-03-A-03	TERRACED & SEMI DETACHED	DEVON
	LOWER BRAND LANE		
	HONITON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	70	
	Survey date: MONDAY	28/09/15	Survey Type: MANUAL
4	HC-03-A-19	HOUSES & FLATS	HAMPSHIRE
	CANADA WAY		
	LIPHOOK		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	62	
	Survey date: MONDAY	27/11/17	Survey Type: MANUAL
5	KC-03-A-03	MIXED HOUSES & FLATS	KENT
	HYTHE ROAD		
	WILLESBOROUGH		
	ASHFORD		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	51	
	Survey date: THURSDAY	14/07/16	Survey Type: MANUAL
6	NF-03-A-02	HOUSES & FLATS	NORFOLK
	DEREHAM ROAD		
	NORWICH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	98	
	Survey date: MONDAY	22/10/12	Survey Type: MANUAL
7	NY-03-A-06	BUNGALOWS & SEMI DET.	NORTH YORKSHIRE
	HORSEFAIR		
	BOROUGHBRIDGE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	115	
	Survey date: FRIDAY	14/10/11	Survey Type: MANUAL
8	NY-03-A-09	MIXED HOUSING	NORTH YORKSHIRE
	GRAMMAR SCHOOL LANE		
	NORTHALLERTON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	52	
	Survey date: MONDAY	16/09/13	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	SY-03-A-01	SEMI DETACHED HOUSES	SOUTH YORKSHIRE
	A19 BENTLEY ROAD		
	BENTLEY RISE		
	DONCASTER		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	54	
	Survey date: WEDNESDAY	18/09/13	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Ranking Type: TOTALS Time Range: 08:00-09:00
WARNING: Using 85th and 15th percentile highlighted trip rates in data sets of under 20 surveys is not recommended by TRICS and may be misleading.
15th Percentile = No. 8 DV-03-A-02 Tot: 0.344
85th Percentile = No. 2 DV-03-A-03 Tot: 0.615

Median Values		Mean Values	
Arrivals:	0.122	Arrivals:	0.103
Departures:	0.347	Departures:	0.361
Totals:	0.469	Totals:	0.464

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	KC-03-A-03	MIXED HOUSES &	ASHFORD	KENT	51	Thu	14/07/16	0.157	0.588	0.745	2.16
2	DV-03-A-03	TERRACED & SEM	HONITON	DEVON	70	Mon	28/09/15	0.086	0.529	0.615	1.66
3	HC-03-A-19	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Mon	27/11/17	0.113	0.403	0.516	2.19
4	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.096	0.400	0.496	3.50
5	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.122	0.347	0.469	2.24
6	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.056	0.389	0.445	1.13
7	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.173	0.212	0.385	2.60
8	DV-03-A-02	HOUSES & BUNGA	HONITON	DEVON	116	Fri	25/09/15	0.103	0.241	0.344	2.25
9	DH-03-A-01	SEMI DETACHED	BISHOP AUCKLAND	DURHAM	50	Tue	28/03/17	0.020	0.140	0.160	1.74

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED

VEHICLESSelected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	KC KENT	1 days
03	SOUTH WEST	
	DV DEVON	2 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	2 days
	SY SOUTH YORKSHIRE	1 days
09	NORTH	
	DH DURHAM	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
 Actual Range: 50 to 116 (units:)
 Range Selected by User: 50 to 150 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 27/11/17

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	4 days
Tuesday	1 days
Wednesday	1 days
Thursday	1 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	9
------------------------------------	---

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	9
------------------	---

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:Use Class:

C3	9 days
----	--------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	3 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	1 days
75,001 to 100,000	3 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	8 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	9 days
-----------------	--------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	DH-03-A-01	SEMI DETACHED	DURHAM
	GREENFIELDS ROAD		
	BISHOP AUCKLAND		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	50	
	Survey date: TUESDAY	28/03/17	Survey Type: MANUAL
2	DV-03-A-02	HOUSES & BUNGALOWS	DEVON
	MILLHEAD ROAD		
	HONITON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	116	
	Survey date: FRIDAY	25/09/15	Survey Type: MANUAL
3	DV-03-A-03	TERRACED & SEMI DETACHED	DEVON
	LOWER BRAND LANE		
	HONITON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	70	
	Survey date: MONDAY	28/09/15	Survey Type: MANUAL
4	HC-03-A-19	HOUSES & FLATS	HAMPSHIRE
	CANADA WAY		
	LIPHOOK		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	62	
	Survey date: MONDAY	27/11/17	Survey Type: MANUAL
5	KC-03-A-03	MIXED HOUSES & FLATS	KENT
	HYTHE ROAD		
	WILLESBOROUGH		
	ASHFORD		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	51	
	Survey date: THURSDAY	14/07/16	Survey Type: MANUAL
6	NF-03-A-02	HOUSES & FLATS	NORFOLK
	DEREHAM ROAD		
	NORWICH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	98	
	Survey date: MONDAY	22/10/12	Survey Type: MANUAL
7	NY-03-A-06	BUNGALOWS & SEMI DET.	NORTH YORKSHIRE
	HORSEFAIR		
	BOROUGHBRIDGE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	115	
	Survey date: FRIDAY	14/10/11	Survey Type: MANUAL
8	NY-03-A-09	MIXED HOUSING	NORTH YORKSHIRE
	GRAMMAR SCHOOL LANE		
	NORTHALLERTON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	52	
	Survey date: MONDAY	16/09/13	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	SY-03-A-01	SEMI DETACHED HOUSES	SOUTH YORKSHIRE
	A19 BENTLEY ROAD		
	BENTLEY RISE		
	DONCASTER		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	54	
	Survey date: WEDNESDAY	18/09/13	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Ranking Type: TOTALS Time Range: 17:00-18:00
WARNING: Using 85th and 15th percentile highlighted trip rates in data sets of under 20 surveys is not recommended by TRICS and may be misleading.
15th Percentile = No. 8 SY-03-A-01 Tot: 0.334
85th Percentile = No. 2 DV-03-A-02 Tot: 0.621

Median Values		Mean Values	
Arrivals:	0.269	Arrivals:	0.320
Departures:	0.192	Departures:	0.151
Totals:	0.461	Totals:	0.472

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	KC-03-A-03	MIXED HOUSES &	ASHFORD	KENT	51	Thu	14/07/16	0.569	0.314	0.883	2.16
2	DV-03-A-02	HOUSES & BUNGA	HONITON	DEVON	116	Fri	25/09/15	0.388	0.233	0.621	2.25
3	DV-03-A-03	TERRACED & SEM	HONITON	DEVON	70	Mon	28/09/15	0.371	0.100	0.471	1.66
4	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.296	0.174	0.470	3.50
5	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.269	0.192	0.461	2.60
6	HC-03-A-19	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Mon	27/11/17	0.258	0.129	0.387	2.19
7	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.235	0.143	0.378	2.24
8	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.278	0.056	0.334	1.13
9	DH-03-A-01	SEMI DETACHED	BISHOP AUCKLAND	DURHAM	50	Tue	28/03/17	0.220	0.020	0.240	1.74

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

APPENDIX BGH 24

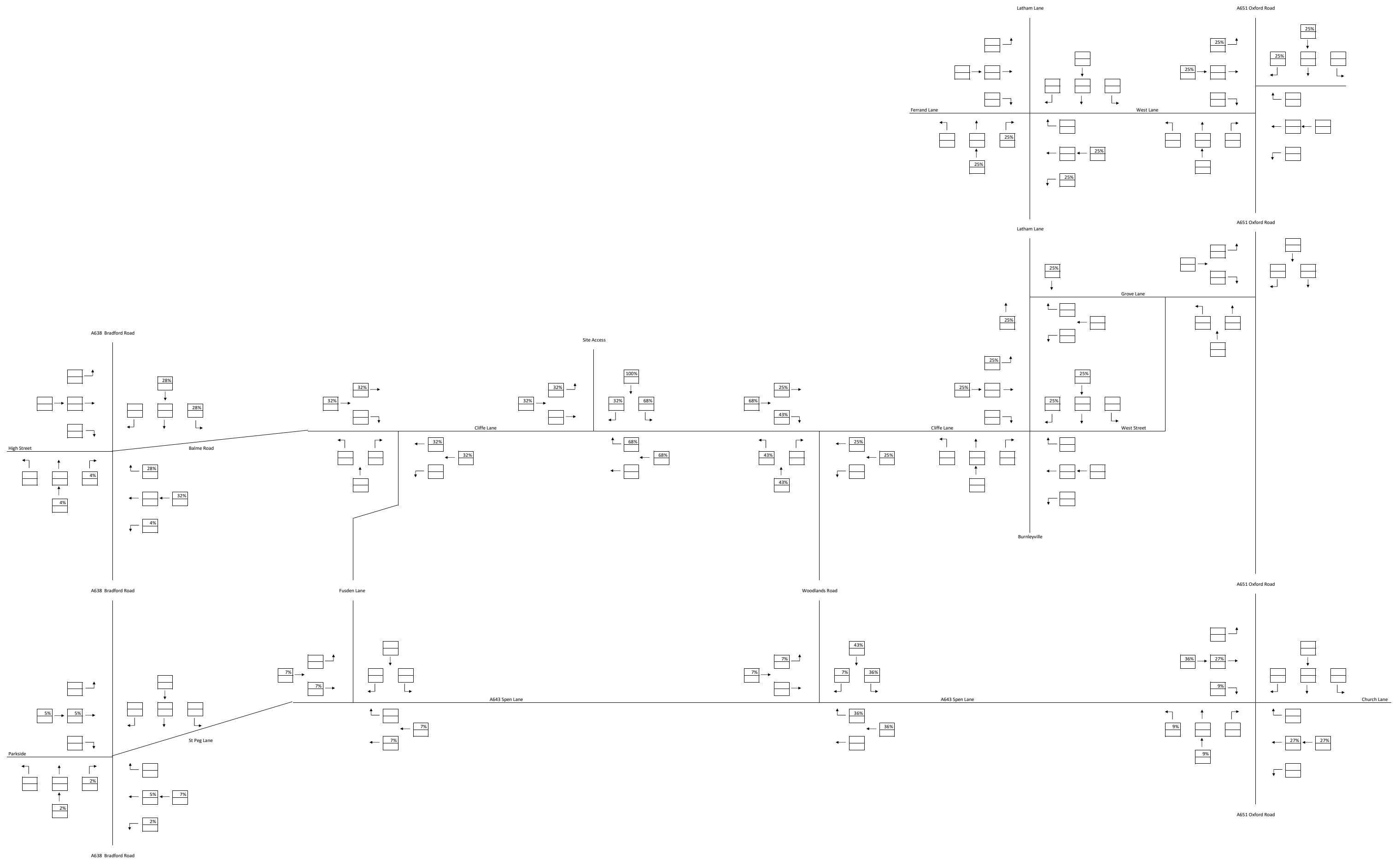
Junction	Route	%age Assigned
A	A651 Oxford Rd (North)	25%
B	A643 Church Lane (East)	27%
C	A651 Oxford Rd (South)	9%
D	A638 Bradford Rd (North)	28%
E	B6120 Scott Ln	4%
F	Parkside/Westgate	5%
G	A638 Dewsbury Rd (South)	2%

MSOA of Work	Total Working in MSOA (Car Driver)	%age Working in MSOA (Car Driver)	A	B	C	D	E	F	G	Total
E02002272 : Kirklees 002	119	5.8%	25%	75%						100%
E02002275 : Kirklees 005	110	5.4%					50%	50%		100%
E02006875 : Leeds 111	108	5.3%	40%	30%		30%				100%
E02002274 : Kirklees 004	69	3.4%	20%	40%	40%					100%
E02002279 : Kirklees 009	60	2.9%			30%				70%	100%
E02002273 : Kirklees 003	55	2.7%				60%	40%			100%
E02002221 : Bradford 039	53	2.6%	50%			50%				100%
E02002239 : Bradford 057	51	2.5%	100%							100%
E02002285 : Kirklees 015	51	2.5%			100%					100%
E02002271 : Kirklees 001	50	2.4%	100%							100%
E02002281 : Kirklees 011	45	2.2%		50%	50%					100%
E02002299 : Kirklees 029	45	2.2%				100%				100%
E02002287 : Kirklees 017	44	2.1%		100%						100%
E02002242 : Bradford 060	43	2.1%				100%				100%
E02002280 : Kirklees 010	43	2.1%		100%						100%
E02002286 : Kirklees 016	35	1.7%		50%	50%					100%
E02006876 : Leeds 112	33	1.6%	40%	30%		30%				100%
E02002251 : Calderdale 008	32	1.6%				50%		50%		100%
E02002226 : Bradford 044	28	1.4%	50%			50%				100%
E02002227 : Bradford 045	28	1.4%	50%			50%				100%
E02002422 : Leeds 093	27	1.3%	40%	60%						100%
E02002435 : Leeds 106	26	1.3%		100%						100%
E02002419 : Leeds 090	25	1.2%	40%	30%		30%				100%
E02002424 : Leeds 095	25	1.2%	50%	50%						100%
E02002433 : Leeds 104	25	1.2%	40%	60%						100%
E02002294 : Kirklees 024	23	1.1%		50%	50%					100%
E02002411 : Leeds 082	23	1.1%	40%	30%		30%				100%
E02002276 : Kirklees 006	21	1.0%		100%						100%
E02002283 : Kirklees 013	21	1.0%		100%						100%
E02002312 : Kirklees 042	20	1.0%				100%				100%
E02002400 : Leeds 071	20	1.0%	40%	30%		30%				100%
E02002219 : Bradford 037	19	0.9%	40%			60%				100%
E02002425 : Leeds 096	18	0.9%	100%							100%
E02002235 : Bradford 053	17	0.8%	40%			60%				100%
E02002258 : Calderdale 015	17	0.8%				50%		50%		100%
E02002392 : Leeds 063	17	0.8%	40%	30%		30%				100%
E02002451 : Wakefield 014	17	0.8%		80%		20%				100%
E02002454 : Wakefield 017	17	0.8%		80%		20%				100%
E02002228 : Bradford 046	16	0.8%	70%			30%				100%
E02002293 : Kirklees 023	16	0.8%			100%					100%
E02002431 : Leeds 102	16	0.8%	50%	50%						100%
E02002262 : Calderdale 019	15	0.7%				50%		50%		100%
E02002412 : Leeds 083	15	0.7%	70%			30%				100%
E02002202 : Bradford 020	14	0.7%	50%			50%				100%
E02002277 : Kirklees 007	14	0.7%		100%						100%
E02002295 : Kirklees 025	14	0.7%				100%				100%
E02002296 : Kirklees 026	14	0.7%			100%					100%
E02002420 : Leeds 091	14	0.7%	40%	30%		30%				100%
E02002230 : Bradford 048	13	0.6%				100%				100%
E02002292 : Kirklees 022	13	0.6%				100%				100%
E02002303 : Kirklees 033	13	0.6%				100%				100%
E02002357 : Leeds 028	12	0.6%	50%			50%				100%
E02002416 : Leeds 087	12	0.6%	50%			50%				100%
E02002243 : Bradford 061	11	0.5%				50%	50%			100%
E02002284 : Kirklees 014	11	0.5%		100%						100%
E02002241 : Bradford 059	10	0.5%				70%	30%			100%
E02002268 : Calderdale 025	10	0.5%				100%				100%
E02002395 : Leeds 066	10	0.5%	70%			30%				100%
E02002289 : Kirklees 019	9	0.4%		50%	50%					100%
E02002399 : Leeds 070	9	0.4%	40%	30%		30%				100%
E02002220 : Bradford 038	8	0.4%	70%			30%				100%
E02002278 : Kirklees 008	8	0.4%						100%		100%
E02002291 : Kirklees 021	8	0.4%			100%					100%
E02002304 : Kirklees 034	8	0.4%				100%				100%
E02002393 : Leeds 064	8	0.4%	40%	30%		30%				100%
E02002396 : Leeds 067	8	0.4%	70%			30%				100%
E02002414 : Leeds 085	8	0.4%	40%	30%		30%				100%
E02002450 : Wakefield 013	8	0.4%	25%	25%		50%				100%
E02002446 : Wakefield 009	7	0.3%	25%	25%		50%				100%
E02002456 : Wakefield 019	7	0.3%		80%		20%				100%
E02002223 : Bradford 041	6	0.3%	50%			50%				100%
E02002238 : Bradford 056	6	0.3%	70%			30%				100%
E02002255 : Calderdale 012	6	0.3%				50%		50%		100%
E02002282 : Kirklees 012	6	0.3%		60%	40%					100%
E02002327 : Kirklees 057	6	0.3%				100%				100%
E02002336 : Leeds 007	6	0.3%	100%							100%
E02002384 : Leeds 055	6	0.3%	40%	30%		30%				100%
E02002408 : Leeds 079	6	0.3%	100%							100%
E02002442 : Wakefield 005	6	0.3%	25%	25%		50%				100%
E02002462 : Wakefield 025	6	0.3%		70%	30%					100%
E02002201 : Bradford 019	5	0.2%	70%			30%				100%
E02002216 : Bradford 034	5	0.2%	50%			50%				100%
E02002222 : Bradford 040	5	0.2%	30%			70%				100%
E02002237 : Bradford 055	5	0.2%				100%				100%
E02002386 : Leeds 057	5	0.2%	70%			30%				100%
E02002402 : Leeds 073	5	0.2%	70%			30%				100%
E02002404 : Leeds 075	5	0.2%	40%	30%		30%				100%
E02002452 : Wakefield 015	5	0.2%	25%	25%		50%				100%
E02002468 : Wakefield 031	5	0.2%		70%	30%					100%

MSOA of Work	Total Working in MSOA (Car Driver)	%age Working in MSOA (Car Driver)	A	B	C	D	E	F	G	Total
E02002186 : Bradford 004	4	0.2%	50%			50%				100%
E02002192 : Bradford 010	4	0.2%	50%			50%				100%
E02002197 : Bradford 015	4	0.2%	50%			50%				100%
E02002198 : Bradford 016	4	0.2%	50%			50%				100%
E02002199 : Bradford 017	4	0.2%	100%							100%
E02002200 : Bradford 018	4	0.2%	50%			50%				100%
E02002212 : Bradford 030	4	0.2%	50%			50%				100%
E02002224 : Bradford 042	4	0.2%	70%			30%				100%
E02002232 : Bradford 050	4	0.2%				100%				100%
E02002236 : Bradford 054	4	0.2%				100%				100%
E02002240 : Bradford 058	4	0.2%				60%		40%		100%
E02002244 : Calderdale 001	4	0.2%				50%		50%		100%
E02002254 : Calderdale 011	4	0.2%				50%		50%		100%
E02002269 : Calderdale 026	4	0.2%				100%				100%
E02002288 : Kirklees 018	4	0.2%		100%						100%
E02002301 : Kirklees 031	4	0.2%				100%				100%
E02002309 : Kirklees 039	4	0.2%				100%				100%
E02002320 : Kirklees 050	4	0.2%				100%				100%
E02002321 : Kirklees 051	4	0.2%				100%				100%
E02002331 : Leeds 002	4	0.2%				100%				100%
E02002359 : Leeds 030	4	0.2%				100%				100%
E02002364 : Leeds 035	4	0.2%				100%				100%
E02002373 : Leeds 044	4	0.2%	40%	30%		30%				100%
E02002387 : Leeds 058	4	0.2%	100%							100%
E02002391 : Leeds 062	4	0.2%	50%			50%				100%
E02002441 : Wakefield 004	4	0.2%	25%	25%		50%				100%
E02002458 : Wakefield 021	4	0.2%		70%	30%					100%
E02002467 : Wakefield 030	4	0.2%		50%		50%				100%
	2056	100.0%								

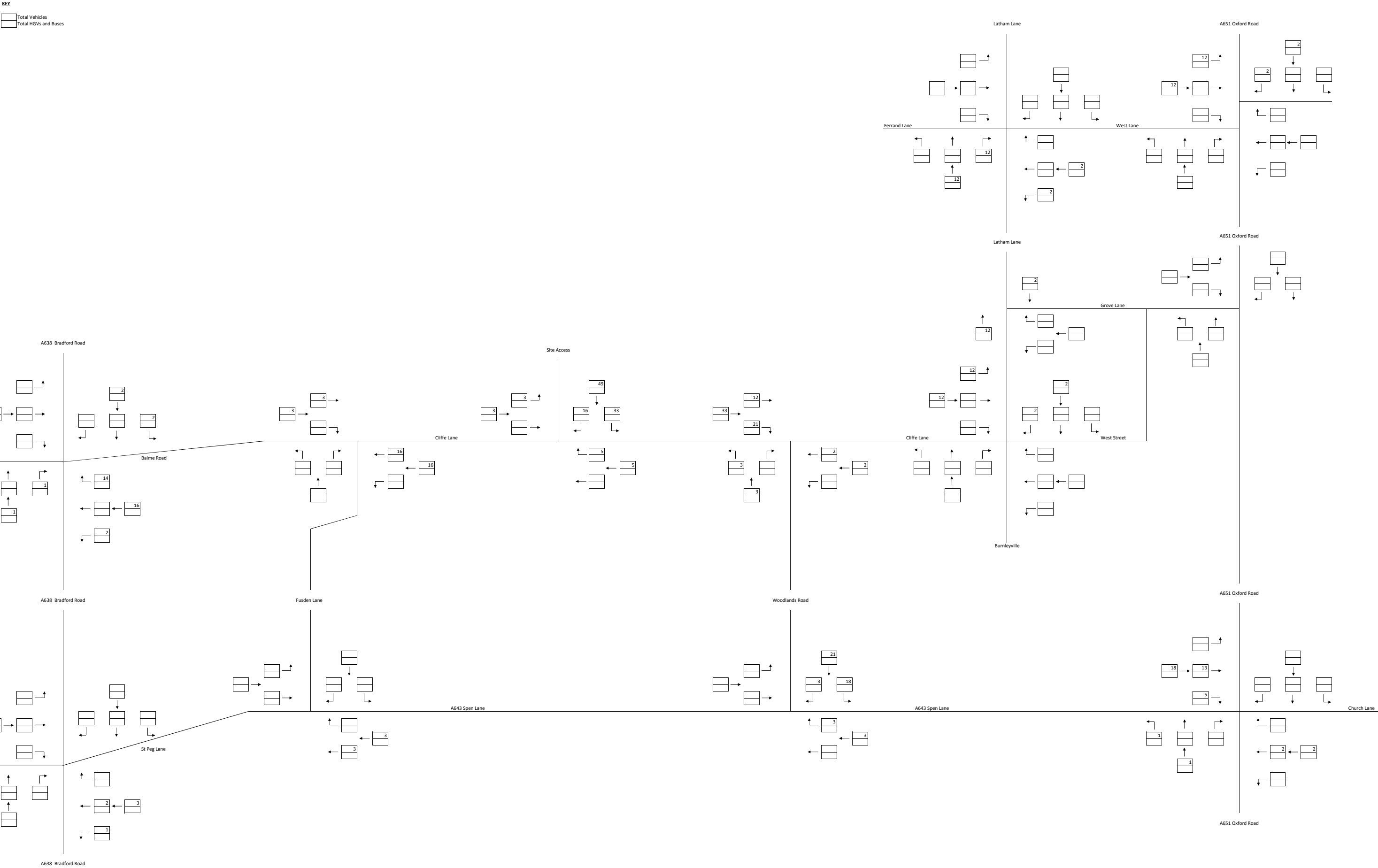
TRIP DISTRIBUTION

GOMERSAL, WEST YORKSHIRE

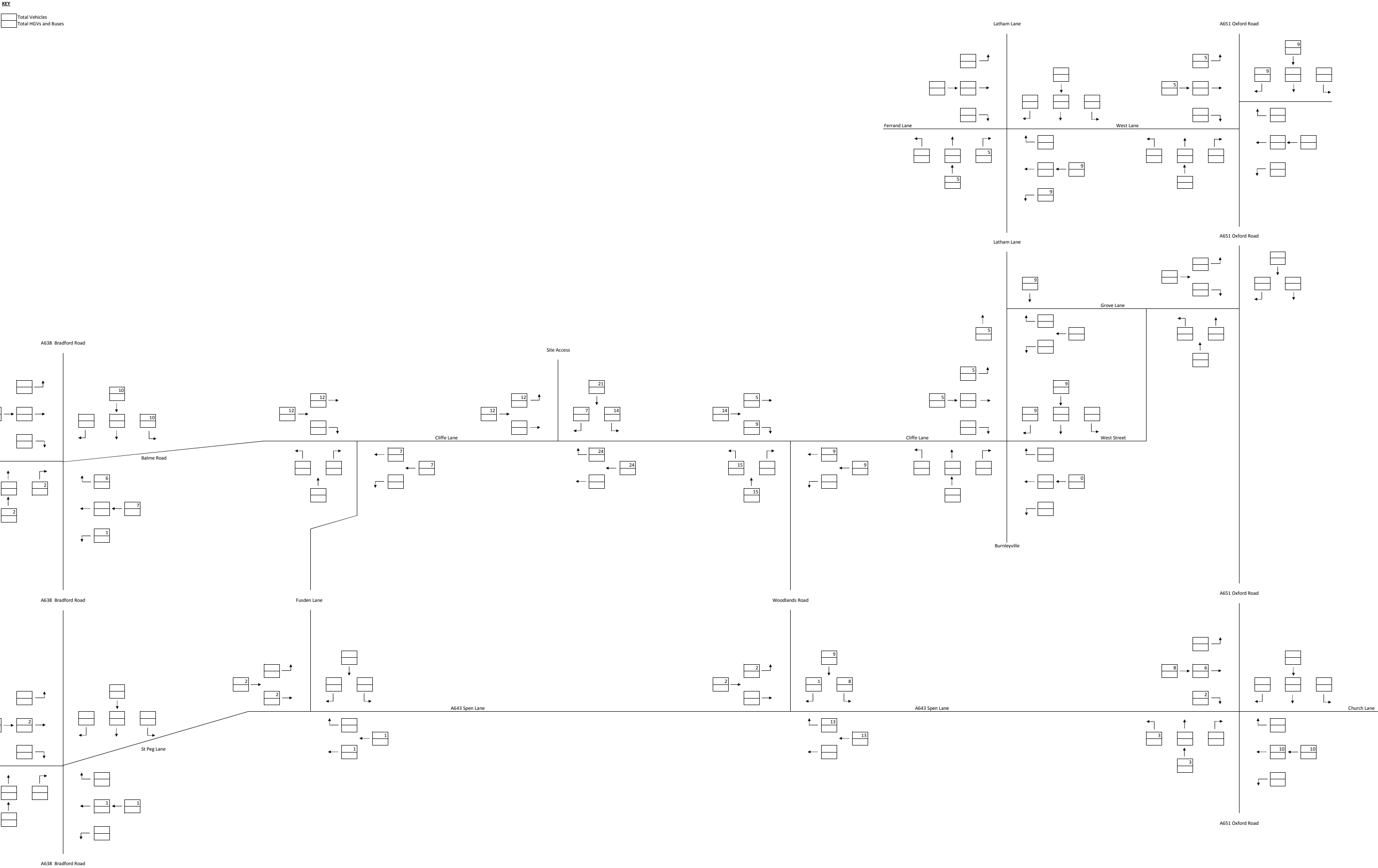


APPENDIX BGH 25

DEVELOPMENT GENERATED VEHICULAR FLOWS
GOMERSAL, WEST YORKSHIRE
07:30 - 08:30
AM PEAK
BASED ON TRICS DATA



DEVELOPMENT GENERATED VEHICULAR FLOWS
GOMERSAL, WEST YORKSHIRE
16:30 - 17:30
PM PEAK
BASED ON TRICS DATA



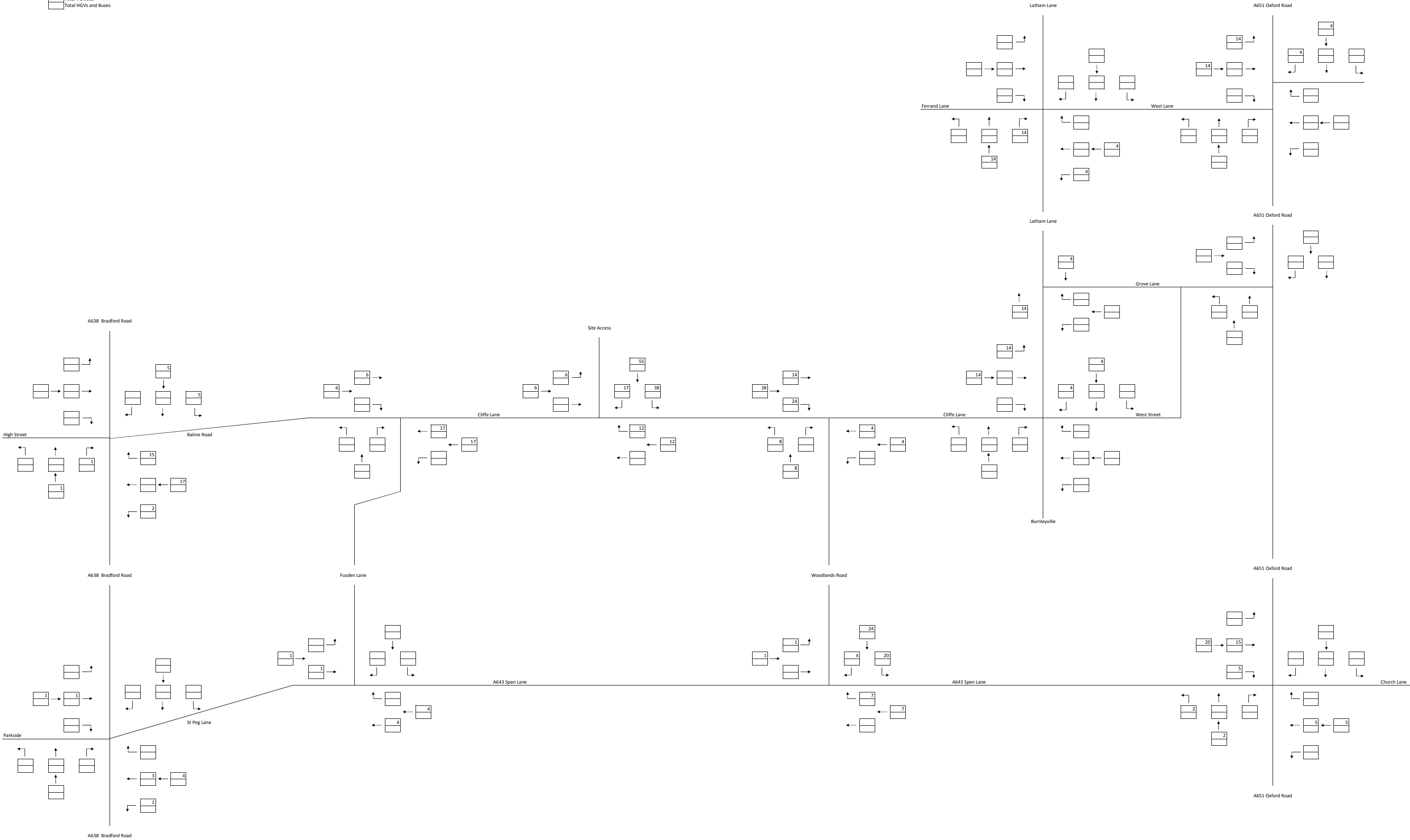
APPENDIX BGH 26

DEVELOPMENT GENERATED VEHICULAR FLOWS
GOMERSAL, WEST YORKSHIRE
07:30 - 08:30
AM PEAK
BASED ON KIRKLEES TRIP RATES

KEY

Total Vehicles

Total HGVs and Buses

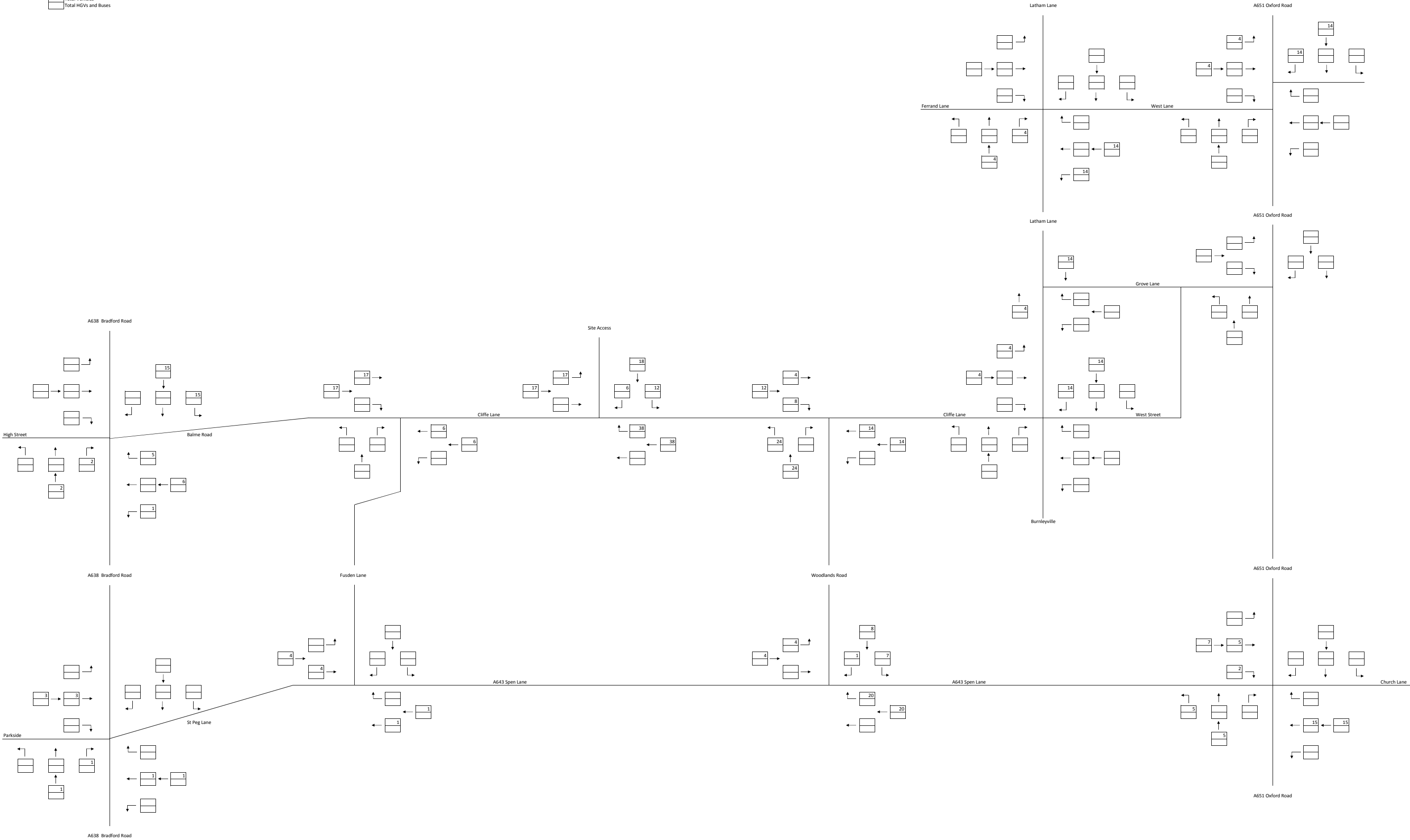


DEVELOPMENT GENERATED VEHICULAR FLOWS
GOMERSAL, WEST YORKSHIRE
16:30 - 17:30
PM PEAK
BASED ON KIRKLEES TRIP RATES

KEY

Total Vehicles

Total HGVs and Buses

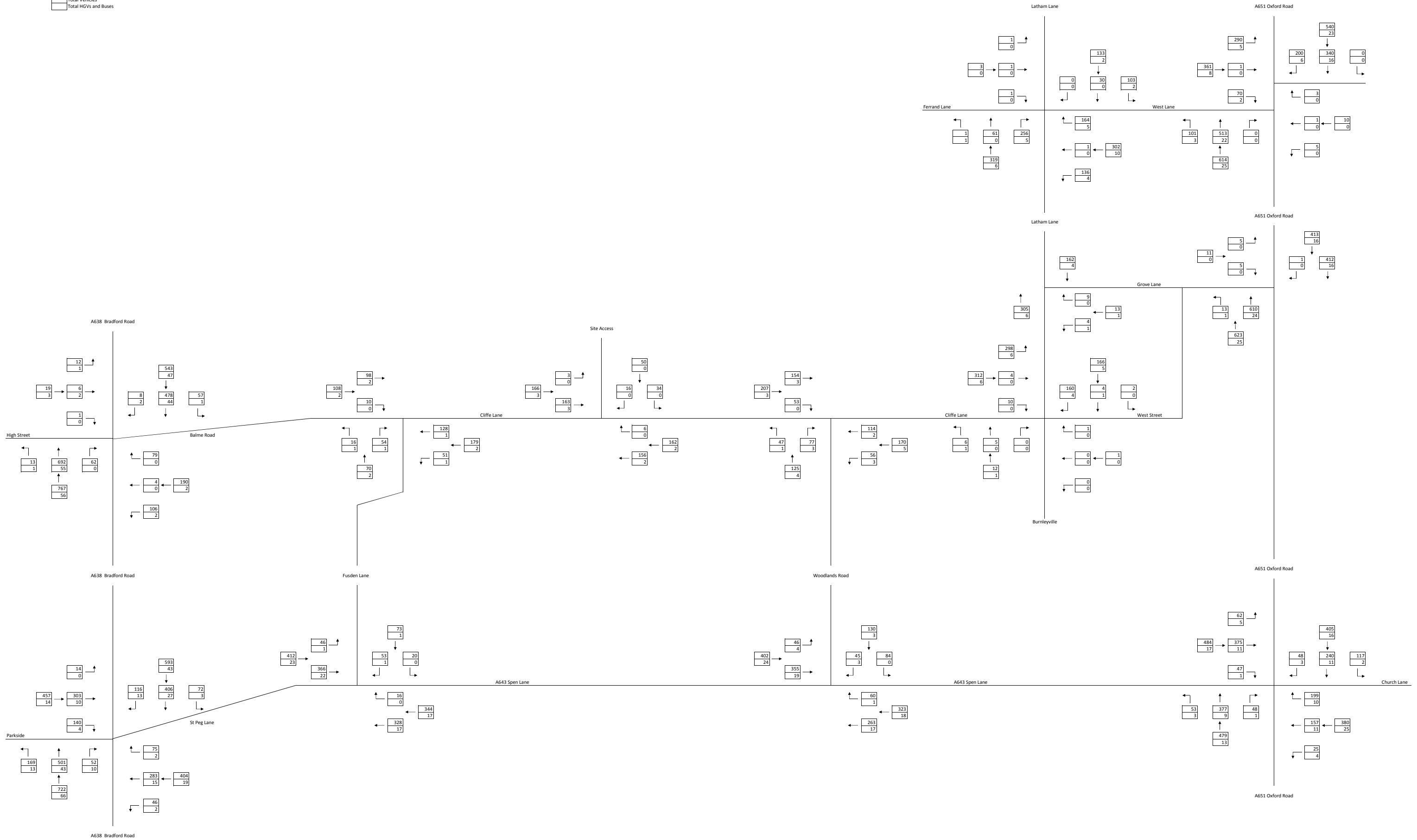


APPENDIX BGH 27

BASED ON TRICS DATA

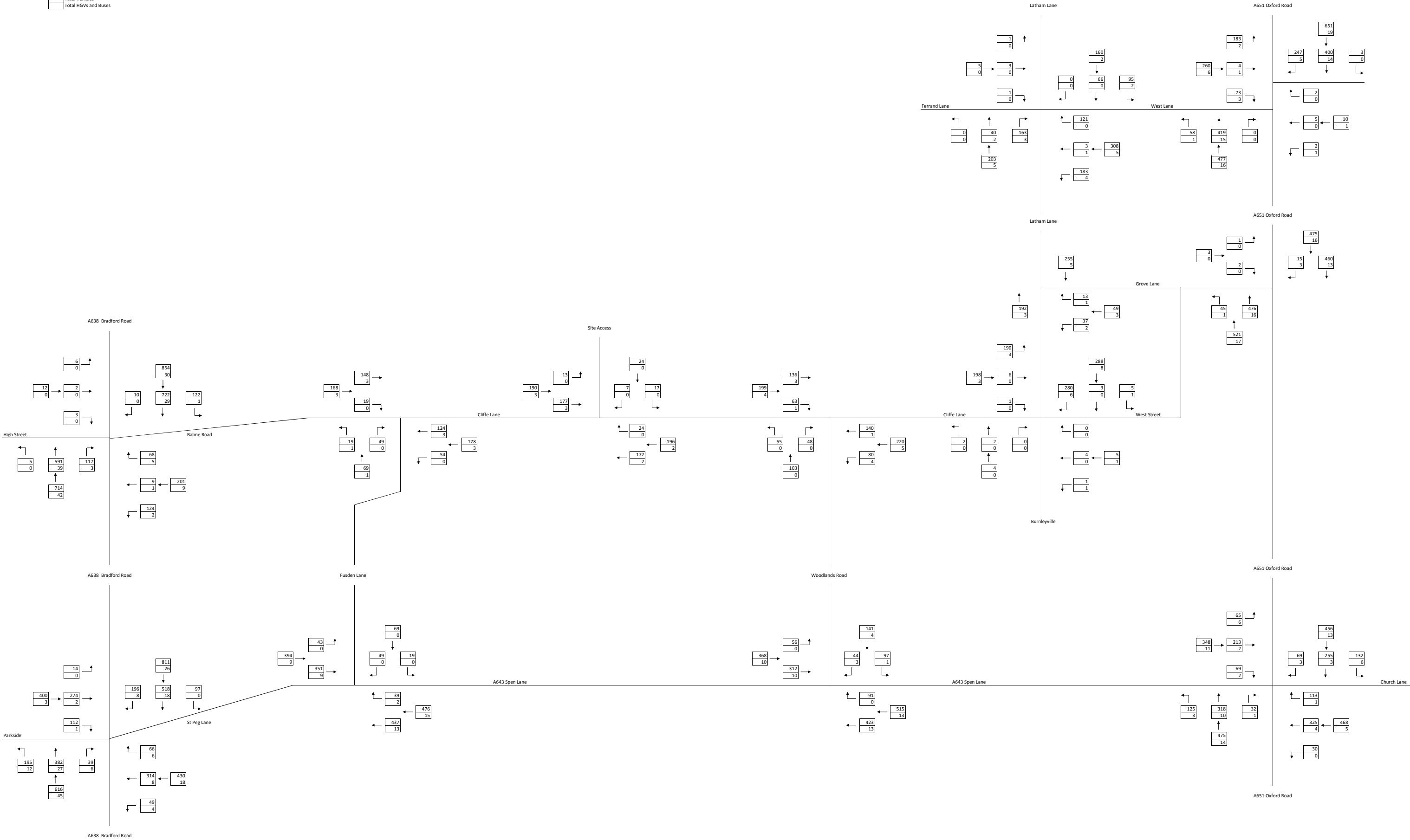
KEY

	Total Vehicles
	Total HGVs and Buses



2024 PREDICTED VEHICULAR FLOWS
GOMERSAL, WEST YORKSHIRE
16:30 - 17:30
PM PEAK
BASED ON TRICS DATA

KEY
Total Vehicles
Total HGVs and Buses



APPENDIX BGH 28

Junctions 8				
PICADY 8 - Priority Intersection Module				
Version: 8.0.5.523 [19102,19/06/2015] © Copyright TRL Limited, 2019				
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk				
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution				

Filename: Woodlands Rd-Cliffe Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Cliffe Ln

Report generation date: 04/01/2019 15:31:36

« Existing Layout - 2024 Predicted - TRICS Trip Rates, AM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - TRICS Trip Rates				
Stream B-C	0.08	5.77	0.08	A
Stream B-A	0.25	10.47	0.20	B
Stream C-AB	0.17	5.76	0.11	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:31:35

File summary

Title	Woodlands Road/Cliffe Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - TRICS Trip Rates, AM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - TRICS Trip Rates, AM Peak	2024 Predicted - TRICS Trip Rates	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.70	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Cliffe Lane (East)	A	Cliffe Lane (East)		Major
Woodlands Road	B	Woodlands Road		Minor
Cliffe Lane (West)	C	Cliffe Lane (West)		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)
Cliffe Lane (West)	6.50		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	3.65	2.75	2.75	2.75	✓	1.00	20	19

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	512.207	0.091	0.231	0.145	0.330
1	B-C	763.226	0.114	0.289	-	-
1	C-B	631.874	0.240	0.240	-	-

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 (%)
Cliffe Lane (East)	ONE HOUR	✓	175.00	100.000
Woodlands Road	ONE HOUR	✓	128.00	100.000
Cliffe Lane (West)	ONE HOUR	✓	210.00	100.000

Turning Proportions

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.000	59.000	116.000
	Woodlands Road	80.000	0.000	48.000
	Cliffe Lane (West)	157.000	53.000	0.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.00	0.34	0.66
	Woodlands Road	0.63	0.00	0.38
	Cliffe Lane (West)	0.75	0.25	0.00

Vehicle Mix

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	Cliffe Lane (West)	1.000	1.000	1.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	Cliffe Lane (West)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.08	5.77	0.08	A
B-A	0.20	10.47	0.25	B
C-AB	0.11	5.76	0.17	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	36.14	35.92	0.00	707.34	0.051	0.05	5.360	A
B-A	60.23	59.63	0.00	457.57	0.132	0.15	9.033	A
C-AB	48.08	47.69	0.00	678.78	0.071	0.10	5.702	A
C-A	110.02	110.02	0.00	-	-	-	-	-
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	87.33	87.33	0.00	-	-	-	-	-

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	43.15	43.10	0.00	694.87	0.062	0.07	5.523	A
B-A	71.92	71.76	0.00	446.76	0.161	0.19	9.595	A
C-AB	59.59	59.49	0.00	688.25	0.087	0.12	5.728	A
C-A	129.19	129.19	0.00	-	-	-	-	-
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	104.28	104.28	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	52.85	52.78	0.00	676.69	0.078	0.08	5.770	A
B-A	88.08	87.83	0.00	431.88	0.204	0.25	10.456	B
C-AB	76.71	76.54	0.00	701.43	0.109	0.16	5.761	A
C-A	154.51	154.51	0.00	-	-	-	-	-
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	127.72	127.72	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	52.85	52.85	0.00	676.53	0.078	0.08	5.771	A
B-A	88.08	88.07	0.00	431.83	0.204	0.25	10.472	B
C-AB	76.74	76.74	0.00	701.47	0.109	0.17	5.764	A
C-A	154.47	154.47	0.00	-	-	-	-	-
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	127.72	127.72	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	43.15	43.22	0.00	694.65	0.062	0.07	5.526	A
B-A	71.92	72.16	0.00	446.69	0.161	0.19	9.619	A
C-AB	59.64	59.80	0.00	688.31	0.087	0.13	5.730	A
C-A	129.15	129.15	0.00	-	-	-	-	-
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	104.28	104.28	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	36.14	36.19	0.00	706.97	0.051	0.05	5.366	A
B-A	60.23	60.39	0.00	457.42	0.132	0.15	9.070	A
C-AB	48.16	48.27	0.00	678.85	0.071	0.10	5.713	A
C-A	109.94	109.94	0.00	-	-	-	-	-
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	87.33	87.33	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Woodlands Rd-Cliffe Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Cliffe Ln

Report generation date: 04/01/2019 15:31:58

« Existing Layout - 2024 Predicted - TRICS Trip Rates, PM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - TRICS Trip Rates				
Stream B-C	0.11	6.74	0.10	A
Stream B-A	0.12	8.28	0.11	A
Stream C-AB	0.20	6.15	0.13	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:31:58

File summary

Title	Woodlands Road/Cliffe Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - TRICS Trip Rates, PM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - TRICS Trip Rates, PM Peak	2024 Predicted - TRICS Trip Rates	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.89	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Cliffe Lane (East)	A	Cliffe Lane (East)		Major
Woodlands Road	B	Woodlands Road		Minor
Cliffe Lane (West)	C	Cliffe Lane (West)		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)
Cliffe Lane (West)	6.50		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	3.65	2.75	2.75	2.75	✓	1.00	20	19

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	592.237	0.106	0.267	0.168	0.381
1	B-C	660.090	0.099	0.250	-	-
1	C-B	631.874	0.240	0.240	-	-

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 (%)
Cliffe Lane (East)	ONE HOUR	✓	225.00	100.000
Woodlands Road	ONE HOUR	✓	103.00	100.000
Cliffe Lane (West)	ONE HOUR	✓	203.00	100.000

Turning Proportions

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.000	84.000	141.000
	Woodlands Road	48.000	0.000	55.000
	Cliffe Lane (West)	139.000	64.000	0.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.00	0.37	0.63
	Woodlands Road	0.47	0.00	0.53
	Cliffe Lane (West)	0.68	0.32	0.00

Vehicle Mix

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	Cliffe Lane (West)	1.000	1.000	1.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	Cliffe Lane (West)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.10	6.74	0.11	A
B-A	0.11	8.28	0.12	A
C-AB	0.13	6.15	0.20	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

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	41.41	41.12	0.00	616.18	0.067	0.07	6.257	A
B-A	36.14	35.84	0.00	521.15	0.069	0.07	7.412	A
C-AB	57.02	56.56	0.00	661.35	0.086	0.11	5.949	A
C-A	95.81	95.81	0.00	-	-	-	-	-
A-B	63.24	63.24	0.00	-	-	-	-	-
A-C	106.15	106.15	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	49.44	49.38	0.00	607.19	0.081	0.09	6.453	A
B-A	43.15	43.08	0.00	507.09	0.085	0.09	7.757	A
C-AB	70.48	70.35	0.00	667.56	0.106	0.15	6.028	A
C-A	112.01	112.01	0.00	-	-	-	-	-
A-B	75.51	75.51	0.00	-	-	-	-	-
A-C	126.76	126.76	0.00	-	-	-	-	-

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	60.56	60.46	0.00	594.58	0.102	0.11	6.740	A
B-A	52.85	52.74	0.00	487.73	0.108	0.12	8.274	A
C-AB	91.13	90.92	0.00	676.92	0.135	0.20	6.144	A
C-A	132.38	132.38	0.00	-	-	-	-	-
A-B	92.49	92.49	0.00	-	-	-	-	-
A-C	155.24	155.24	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	60.56	60.55	0.00	594.54	0.102	0.11	6.741	A
B-A	52.85	52.85	0.00	487.67	0.108	0.12	8.279	A
C-AB	91.17	91.16	0.00	676.97	0.135	0.20	6.148	A
C-A	132.34	132.34	0.00	-	-	-	-	-
A-B	92.49	92.49	0.00	-	-	-	-	-
A-C	155.24	155.24	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	49.44	49.54	0.00	607.13	0.081	0.09	6.459	A
B-A	43.15	43.26	0.00	506.98	0.085	0.09	7.766	A
C-AB	70.53	70.74	0.00	667.63	0.106	0.15	6.037	A
C-A	111.96	111.96	0.00	-	-	-	-	-
A-B	75.51	75.51	0.00	-	-	-	-	-
A-C	126.76	126.76	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	41.41	41.47	0.00	616.05	0.067	0.07	6.267	A
B-A	36.14	36.21	0.00	520.94	0.069	0.08	7.427	A
C-AB	57.11	57.24	0.00	661.43	0.086	0.12	5.960	A
C-A	95.72	95.72	0.00	-	-	-	-	-
A-B	63.24	63.24	0.00	-	-	-	-	-
A-C	106.15	106.15	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Woodlands Rd-Spen Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Spen Ln

Report generation date: 04/01/2019 15:37:26

« Existing Layout - 2024 Predicted - TRICS Trip Rates, AM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - TRICS Trip Rates				
Stream B-C	0.20	7.65	0.16	A
Stream B-A	0.18	12.16	0.15	B
Stream C-AB	0.30	5.76	0.15	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:37:25

File summary

Title	Woodlands Road/Spenn Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - TRICS Trip Rates, AM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - TRICS Trip Rates, AM Peak	2024 Predicted - TRICS Trip Rates	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.80	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A643 Spen Lane (West)	A	A643 Spen Lane (West)		Major
Woodlands Road	B	Woodlands Road		Minor
A643 Spen Lane (East)	C	A643 Spen Lane (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)
A643 Spen Lane (East)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	4.60	3.20	2.80	2.80	✓	1.00	27	24

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	514.911	0.090	0.227	0.143	0.324
1	B-C	700.698	0.103	0.260	-	-
1	C-B	631.874	0.234	0.234	-	-

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 (%)
A643 Spen Lane (West)	ONE HOUR	✓	424.00	100.000
Woodlands Road	ONE HOUR	✓	132.00	100.000
A643 Spen Lane (East)	ONE HOUR	✓	341.00	100.000

Turning Proportions

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.000	50.000	374.000
	Woodlands Road	48.000	0.000	84.000
	A643 Spen Lane (East)	280.000	61.000	0.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.00	0.12	0.88
	Woodlands Road	0.36	0.00	0.64
	A643 Spen Lane (East)	0.82	0.18	0.00

Vehicle Mix

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	A643 Spen Lane (East)	1.000	1.000	1.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	A643 Spen Lane (East)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.16	7.65	0.20	A
B-A	0.15	12.16	0.18	B
C-AB	0.15	5.76	0.30	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

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	63.24	62.78	0.00	609.19	0.104	0.11	6.582	A
B-A	36.14	35.75	0.00	402.28	0.090	0.10	9.812	A
C-AB	64.54	63.94	0.00	700.91	0.092	0.15	5.649	A
C-A	192.18	192.18	0.00	-	-	-	-	-
A-B	37.64	37.64	0.00	-	-	-	-	-
A-C	281.57	281.57	0.00	-	-	-	-	-

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	75.51	75.39	0.00	590.23	0.128	0.15	6.990	A
B-A	43.15	43.04	0.00	380.01	0.114	0.13	10.680	B
C-AB	84.36	84.15	0.00	718.16	0.117	0.21	5.682	A
C-A	222.19	222.19	0.00	-	-	-	-	-
A-B	44.95	44.95	0.00	-	-	-	-	-
A-C	336.22	336.22	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	92.49	92.29	0.00	563.32	0.164	0.19	7.639	A
B-A	52.85	52.65	0.00	349.03	0.151	0.18	12.139	B
C-AB	114.64	114.27	0.00	740.63	0.155	0.30	5.751	A
C-A	260.81	260.81	0.00	-	-	-	-	-
A-B	55.05	55.05	0.00	-	-	-	-	-
A-C	411.78	411.78	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	92.49	92.48	0.00	563.17	0.164	0.20	7.647	A
B-A	52.85	52.84	0.00	348.96	0.151	0.18	12.156	B
C-AB	114.76	114.75	0.00	740.78	0.155	0.30	5.758	A
C-A	260.69	260.69	0.00	-	-	-	-	-
A-B	55.05	55.05	0.00	-	-	-	-	-
A-C	411.78	411.78	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	75.51	75.70	0.00	589.99	0.128	0.15	7.004	A
B-A	43.15	43.34	0.00	379.92	0.114	0.13	10.703	B
C-AB	84.52	84.87	0.00	718.38	0.118	0.21	5.690	A
C-A	222.04	222.04	0.00	-	-	-	-	-
A-B	44.95	44.95	0.00	-	-	-	-	-
A-C	336.22	336.22	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	63.24	63.36	0.00	608.81	0.104	0.12	6.603	A
B-A	36.14	36.26	0.00	402.14	0.090	0.10	9.843	A
C-AB	64.77	64.99	0.00	701.11	0.092	0.15	5.666	A
C-A	191.96	191.96	0.00	-	-	-	-	-
A-B	37.64	37.64	0.00	-	-	-	-	-
A-C	281.57	281.57	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Woodlands Rd-Spen Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Spen Ln

Report generation date: 04/01/2019 15:37:48

« Existing Layout - 2024 Predicted - TRICS Trip Rates, PM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - TRICS Trip Rates				
Stream B-C	0.23	7.63	0.19	A
Stream B-A	0.19	13.29	0.16	B
Stream C-AB	0.62	5.57	0.26	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:37:47

File summary

Title	Woodlands Road/Spenn Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - TRICS Trip Rates, PM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - TRICS Trip Rates, PM Peak	2024 Predicted - TRICS Trip Rates	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.31	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A643 Spen Lane (West)	A	A643 Spen Lane (West)		Major
Woodlands Road	B	Woodlands Road		Minor
A643 Spen Lane (East)	C	A643 Spen Lane (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)
A643 Spen Lane (East)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	4.60	3.20	2.80	2.80	✓	1.00	27	24

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	510.380	0.089	0.225	0.141	0.321
1	B-C	706.511	0.104	0.262	-	-
1	C-B	631.874	0.234	0.234	-	-

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 (%)
A643 Spen Lane (West)	ONE HOUR	✓	378.00	100.000
Woodlands Road	ONE HOUR	✓	145.00	100.000
A643 Spen Lane (East)	ONE HOUR	✓	527.00	100.000

Turning Proportions

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.000	56.000	322.000
	Woodlands Road	47.000	0.000	98.000
	A643 Spen Lane (East)	436.000	91.000	0.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.00	0.15	0.85
	Woodlands Road	0.32	0.00	0.68
	A643 Spen Lane (East)	0.83	0.17	0.00

Vehicle Mix

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	A643 Spen Lane (East)	1.000	1.000	1.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	A643 Spen Lane (East)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.19	7.63	0.23	A
B-A	0.16	13.29	0.19	B
C-AB	0.26	5.57	0.62	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

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	73.78	73.25	0.00	623.31	0.118	0.13	6.539	A
B-A	35.38	34.98	0.00	383.10	0.092	0.10	10.330	B
C-AB	116.29	115.17	0.00	789.29	0.147	0.28	5.338	A
C-A	280.46	280.46	0.00	-	-	-	-	-
A-B	42.16	42.16	0.00	-	-	-	-	-
A-C	242.42	242.42	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	88.10	87.96	0.00	605.54	0.145	0.17	6.953	A
B-A	42.25	42.13	0.00	357.80	0.118	0.13	11.399	B
C-AB	154.61	154.15	0.00	822.10	0.188	0.39	5.395	A
C-A	319.16	319.16	0.00	-	-	-	-	-
A-B	50.34	50.34	0.00	-	-	-	-	-
A-C	289.47	289.47	0.00	-	-	-	-	-

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	107.90	107.67	0.00	579.80	0.186	0.23	7.621	A
B-A	51.75	51.52	0.00	322.66	0.160	0.19	13.266	B
C-AB	222.55	221.66	0.00	871.20	0.255	0.62	5.555	A
C-A	357.69	357.69	0.00	-	-	-	-	-
A-B	61.66	61.66	0.00	-	-	-	-	-
A-C	354.53	354.53	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	107.90	107.90	0.00	579.60	0.186	0.23	7.631	A
B-A	51.75	51.74	0.00	322.50	0.160	0.19	13.295	B
C-AB	222.93	222.91	0.00	871.62	0.256	0.62	5.567	A
C-A	357.31	357.31	0.00	-	-	-	-	-
A-B	61.66	61.66	0.00	-	-	-	-	-
A-C	354.53	354.53	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	88.10	88.32	0.00	605.23	0.146	0.17	6.966	A
B-A	42.25	42.47	0.00	357.58	0.118	0.14	11.434	B
C-AB	155.04	155.90	0.00	822.71	0.188	0.41	5.416	A
C-A	318.72	318.72	0.00	-	-	-	-	-
A-B	50.34	50.34	0.00	-	-	-	-	-
A-C	289.47	289.47	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	73.78	73.93	0.00	622.88	0.118	0.14	6.561	A
B-A	35.38	35.52	0.00	382.81	0.092	0.10	10.371	B
C-AB	116.91	117.38	0.00	789.80	0.148	0.29	5.366	A
C-A	279.84	279.84	0.00	-	-	-	-	-
A-B	42.16	42.16	0.00	-	-	-	-	-
A-C	242.42	242.42	0.00	-	-	-	-	-

Junctions 8				
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Filename: Balme Rd-Bradford Rd-High Street.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Balme Rd-Bradford Rd-High Street

Report generation date: 04/01/2019 15:15:33

« Existing Layout - 2024 Predicted - TRICS Trip Rates, AM Peak

- » Junction Network
- » Arms
- » Traffic Flows
- » Entry Flows
- » Turning Proportions
- » Vehicle Mix
- » Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - TRICS Trip Rates				
Stream B-ACD	0.08	12.08	0.08	B
Stream A-BCD	0.91	4.47	0.26	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream D-AB	0.34	10.25	0.26	B
Stream D-BC	0.53	22.16	0.35	C
Stream C-ABD	0.05	4.62	0.04	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:15:33

File summary

Title	Balme Road/A638 Bradford Road/High Street Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Developments Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - TRICS Trip Rates, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - TRICS Trip Rates, AM Peak	2024 Predicted - TRICS Trip Rates	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	9.50	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A638 Bradford Road (South)	A	A638 Bradford Road (South)		Major
High Street	B	High Street		Minor
A638 Bradford Road (North)	C	A638 Bradford Road (North)		Major
Balme Road	D	Balme Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A638 Bradford Road (South)	8.35		0.00		2.20	100.00	✓	0.00
A638 Bradford Road (North)	8.35		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
High Street	One lane	3.20										17	17
Balme Road	One lane plus flare				10.00	5.20	4.00	3.80	3.80	✓	1.00	25	28

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	631.874	-	-	-	-	-	-	0.220	0.314	0.220	-	-	-
1	B-A	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	-	0.207	0.207	0.104
1	B-C	647.346	0.089	0.225	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	B-D, offside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	C-B	631.874	0.220	0.220	0.314	-	-	-	-	-	-	-	-	-
1	D-A	703.878	-	-	-	-	-	-	0.245	-	0.097	-	-	-
1	D-B, nearside lane	547.962	0.142	0.142	0.324	-	-	-	0.226	0.226	0.090	-	-	-
1	D-B, offside lane	530.945	0.138	0.138	0.313	-	-	-	0.219	0.219	0.087	-	-	-
1	D-C	530.945	-	0.138	0.313	0.110	0.219	0.219	0.219	0.219	0.087	-	-	-

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 (%)
A638 Bradford Road (South)	ONE HOUR	✓	823.00	100.000
High Street	ONE HOUR	✓	22.00	100.000
A638 Bradford Road (North)	ONE HOUR	✓	590.00	100.000
Balme Road	ONE HOUR	✓	191.00	100.000

Turning Proportions

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.000	14.000	747.000	62.000
	High Street	1.000	0.000	13.000	8.000
	A638 Bradford Road (North)	522.000	10.000	0.000	58.000
	Balme Road	108.000	4.000	79.000	0.000

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.00	0.02	0.91	0.08
	High Street	0.05	0.00	0.59	0.36
	A638 Bradford Road (North)	0.88	0.02	0.00	0.10
	Balme Road	0.57	0.02	0.41	0.00

Vehicle Mix

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	1.000	1.000	1.000	1.000
	High Street	1.000	1.000	1.000	1.000
	A638 Bradford Road (North)	1.000	1.000	1.000	1.000
	Balme Road	1.000	1.000	1.000	1.000

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.0	0.0	0.0	0.0
	High Street	0.0	0.0	0.0	0.0
	A638 Bradford Road (North)	0.0	0.0	0.0	0.0
	Balme Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.08	12.08	0.08	B
A-BCD	0.26	4.47	0.91	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.26	10.25	0.34	B
D-BC	0.35	22.16	0.53	C
C-ABD	0.04	4.62	0.05	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

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	16.56	16.40	0.00	409.21	0.040	0.04	9.161	A
A-BCD	115.21	114.03	0.00	927.69	0.124	0.30	4.425	A
A-B	9.28	9.28	0.00	-	-	-	-	-
A-C	495.11	495.11	0.00	-	-	-	-	-
D-AB	83.07	82.39	0.00	565.15	0.147	0.17	7.446	A
D-BC	60.72	59.87	0.00	342.14	0.177	0.21	12.716	B
C-ABD	15.13	15.04	0.00	794.41	0.019	0.02	4.619	A
C-D	42.91	42.91	0.00	-	-	-	-	-
C-A	386.15	386.15	0.00	-	-	-	-	-

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	19.78	19.72	0.00	373.75	0.053	0.06	10.167	B
A-BCD	171.60	170.75	0.00	997.13	0.172	0.51	4.364	A
A-B	10.45	10.45	0.00	-	-	-	-	-
A-C	557.81	557.81	0.00	-	-	-	-	-
D-AB	99.31	99.08	0.00	531.55	0.187	0.23	8.320	A
D-BC	72.40	72.02	0.00	304.33	0.238	0.31	15.471	C
C-ABD	20.74	20.70	0.00	827.17	0.025	0.03	4.463	A
C-D	50.97	50.97	0.00	-	-	-	-	-
C-A	458.69	458.69	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-ACD	24.22	24.12	0.00	322.66	0.075	0.08	12.054	B
A-BCD	281.67	280.09	0.00	1092.46	0.258	0.90	4.446	A
A-B	11.49	11.49	0.00	-	-	-	-	-
A-C	612.98	612.98	0.00	-	-	-	-	-
D-AB	121.87	121.42	0.00	474.37	0.257	0.34	10.186	B
D-BC	88.43	87.55	0.00	251.00	0.352	0.52	21.904	C
C-ABD	30.64	30.58	0.00	871.91	0.035	0.05	4.278	A
C-D	61.90	61.90	0.00	-	-	-	-	-
C-A	557.07	557.07	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-ACD	24.22	24.22	0.00	322.27	0.075	0.08	12.077	B
A-BCD	282.59	282.55	0.00	1093.39	0.258	0.91	4.465	A
A-B	11.47	11.47	0.00	-	-	-	-	-
A-C	612.07	612.07	0.00	-	-	-	-	-
D-AB	121.88	121.86	0.00	473.04	0.258	0.34	10.251	B
D-BC	88.42	88.38	0.00	250.70	0.353	0.53	22.162	C
C-ABD	30.68	30.68	0.00	871.69	0.035	0.05	4.282	A
C-D	61.89	61.89	0.00	-	-	-	-	-
C-A	557.03	557.03	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-ACD	19.78	19.87	0.00	373.17	0.053	0.06	10.193	B
A-BCD	172.60	174.14	0.00	998.51	0.173	0.53	4.388	A
A-B	10.44	10.44	0.00	-	-	-	-	-
A-C	556.82	556.82	0.00	-	-	-	-	-
D-AB	99.32	99.76	0.00	530.12	0.187	0.23	8.375	A
D-BC	72.39	73.25	0.00	303.98	0.238	0.32	15.660	C
C-ABD	20.79	20.85	0.00	826.80	0.025	0.03	4.468	A
C-D	50.96	50.96	0.00	-	-	-	-	-
C-A	458.65	458.65	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-ACD	16.56	16.62	0.00	408.74	0.041	0.04	9.183	A
A-BCD	116.27	117.15	0.00	928.59	0.125	0.31	4.449	A
A-B	9.26	9.26	0.00	-	-	-	-	-
A-C	494.07	494.07	0.00	-	-	-	-	-
D-AB	83.08	83.32	0.00	564.00	0.147	0.17	7.492	A
D-BC	60.71	61.11	0.00	341.79	0.178	0.22	12.843	B
C-ABD	15.19	15.23	0.00	794.05	0.019	0.02	4.624	A
C-D	42.90	42.90	0.00	-	-	-	-	-
C-A	386.09	386.09	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
Version: 8.0.5.523 [19102,19/06/2015] © Copyright TRL Limited, 2019				
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Filename: Balme Rd-Bradford Rd-High Street.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Balme Rd-Bradford Rd-High Street

Report generation date: 04/01/2019 15:15:55

« Existing Layout - 2024 Predicted - TRICS Trip Rates, PM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - TRICS Trip Rates				
Stream B-ACD	0.04	13.44	0.04	B
Stream A-BCD	2.35	8.00	0.52	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream D-AB	0.65	16.27	0.40	C
Stream D-BC	0.83	36.93	0.46	E
Stream C-ABD	0.07	3.95	0.05	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:15:55

File summary

Title	Balme Road/A638 Bradford Road/High Street Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Developments Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - TRICS Trip Rates, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - TRICS Trip Rates, PM Peak	2024 Predicted - TRICS Trip Rates	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	13.18	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A638 Bradford Road (South)	A	A638 Bradford Road (South)		Major
High Street	B	High Street		Minor
A638 Bradford Road (North)	C	A638 Bradford Road (North)		Major
Balme Road	D	Balme Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A638 Bradford Road (South)	8.35		0.00		2.20	100.00	✓	0.00
A638 Bradford Road (North)	8.35		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
High Street	One lane	3.20										17	17
Balme Road	One lane plus flare				10.00	5.20	4.00	3.80	3.80	✓	1.00	25	28

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	631.874	-	-	-	-	-	-	0.220	0.314	0.220	-	-	-
1	B-A	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	-	0.207	0.207	0.104
1	B-C	647.346	0.089	0.225	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	B-D, offside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	C-B	631.874	0.220	0.220	0.314	-	-	-	-	-	-	-	-	-
1	D-A	710.128	-	-	-	-	-	-	0.247	-	0.098	-	-	-
1	D-B, nearside lane	552.828	0.144	0.144	0.326	-	-	-	0.228	0.228	0.090	-	-	-
1	D-B, offside lane	526.079	0.137	0.137	0.311	-	-	-	0.217	0.217	0.086	-	-	-
1	D-C	526.079	-	0.137	0.311	0.109	0.217	0.217	0.217	0.217	0.086	-	-	-

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 (%)
A638 Bradford Road (South)	ONE HOUR	✓	755.00	100.000
High Street	ONE HOUR	✓	11.00	100.000
A638 Bradford Road (North)	ONE HOUR	✓	884.00	100.000
Balme Road	ONE HOUR	✓	209.00	100.000

Turning Proportions

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.000	5.000	630.000	120.000
	High Street	3.000	0.000	6.000	2.000
	A638 Bradford Road (North)	751.000	10.000	0.000	123.000
	Balme Road	126.000	10.000	73.000	0.000

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.00	0.01	0.83	0.16
	High Street	0.27	0.00	0.55	0.18
	A638 Bradford Road (North)	0.85	0.01	0.00	0.14
	Balme Road	0.60	0.05	0.35	0.00

Vehicle Mix

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	1.000	1.000	1.000	1.000
	High Street	1.000	1.000	1.000	1.000
	A638 Bradford Road (North)	1.000	1.000	1.000	1.000
	Balme Road	1.000	1.000	1.000	1.000

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.0	0.0	0.0	0.0
	High Street	0.0	0.0	0.0	0.0
	A638 Bradford Road (North)	0.0	0.0	0.0	0.0
	Balme Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	13.44	0.04	B
A-BCD	0.52	8.00	2.35	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.40	16.27	0.65	C
D-BC	0.46	36.93	0.83	E
C-ABD	0.05	3.95	0.07	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

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	8.28	8.19	0.00	385.54	0.021	0.02	9.538	A
A-BCD	210.25	207.69	0.00	832.89	0.252	0.64	5.758	A
A-B	2.82	2.82	0.00	-	-	-	-	-
A-C	355.34	355.34	0.00	-	-	-	-	-
D-AB	99.32	98.36	0.00	511.90	0.194	0.24	8.686	A
D-BC	58.03	57.08	0.00	296.70	0.196	0.24	14.968	B
C-ABD	19.22	19.12	0.00	931.81	0.021	0.02	3.944	A
C-D	90.96	90.96	0.00	-	-	-	-	-
C-A	555.35	555.35	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	9.89	9.86	0.00	343.67	0.029	0.03	10.785	B
A-BCD	303.56	301.90	0.00	880.56	0.345	1.05	6.250	A
A-B	2.95	2.95	0.00	-	-	-	-	-
A-C	372.21	372.21	0.00	-	-	-	-	-
D-AB	118.94	118.53	0.00	463.06	0.257	0.34	10.436	B
D-BC	68.95	68.42	0.00	249.70	0.276	0.37	19.799	C
C-ABD	27.00	26.96	0.00	983.75	0.027	0.03	3.761	A
C-D	108.04	108.04	0.00	-	-	-	-	-
C-A	659.66	659.66	0.00	-	-	-	-	-

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	12.11	12.05	0.00	281.45	0.043	0.04	13.360	B
A-BCD	493.39	488.46	0.00	953.22	0.518	2.29	7.827	A
A-B	2.66	2.66	0.00	-	-	-	-	-
A-C	335.22	335.22	0.00	-	-	-	-	-
D-AB	146.56	145.39	0.00	371.80	0.394	0.63	15.819	C
D-BC	83.55	81.85	0.00	181.75	0.460	0.80	35.447	E
C-ABD	51.17	51.04	0.00	1108.62	0.046	0.07	3.403	A
C-D	129.77	129.77	0.00	-	-	-	-	-
C-A	792.36	792.36	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-ACD	12.11	12.11	0.00	279.92	0.043	0.04	13.441	B
A-BCD	497.16	496.90	0.00	956.16	0.520	2.35	8.004	A
A-B	2.63	2.63	0.00	-	-	-	-	-
A-C	331.48	331.48	0.00	-	-	-	-	-
D-AB	146.62	146.55	0.00	367.68	0.399	0.65	16.268	C
D-BC	83.49	83.36	0.00	180.52	0.463	0.83	36.932	E
C-ABD	51.33	51.33	0.00	1108.09	0.046	0.07	3.408	A
C-D	129.75	129.75	0.00	-	-	-	-	-
C-A	792.22	792.22	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-ACD	9.89	9.95	0.00	341.74	0.029	0.03	10.851	B
A-BCD	306.84	311.77	0.00	884.47	0.347	1.12	6.391	A
A-B	2.93	2.93	0.00	-	-	-	-	-
A-C	368.96	368.96	0.00	-	-	-	-	-
D-AB	118.99	120.17	0.00	459.74	0.259	0.35	10.637	B
D-BC	68.90	70.63	0.00	248.44	0.277	0.40	20.433	C
C-ABD	27.11	27.24	0.00	982.82	0.028	0.04	3.770	A
C-D	108.02	108.02	0.00	-	-	-	-	-
C-A	659.57	659.57	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-ACD	8.28	8.31	0.00	384.34	0.022	0.02	9.576	A
A-BCD	212.59	214.38	0.00	834.95	0.255	0.67	5.843	A
A-B	2.80	2.80	0.00	-	-	-	-	-
A-C	353.02	353.02	0.00	-	-	-	-	-
D-AB	99.34	99.78	0.00	510.20	0.195	0.24	8.780	A
D-BC	58.01	58.60	0.00	295.84	0.196	0.25	15.210	C
C-ABD	19.32	19.36	0.00	931.11	0.021	0.03	3.950	A
C-D	90.94	90.94	0.00	-	-	-	-	-
C-A	555.26	555.26	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\West Ln-Oxford Rd

Report generation date: 04/01/2019 15:26:11

« Existing Layout - 2024 Predicted - TRICS Trip Rates, AM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - TRICS Trip Rates				
Stream B-CD	2.65	30.74	0.74	D
Stream B-A	1.19	57.31	0.56	F
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	-	-	-	-
Stream AB-CD	0.00	3.86	0.00	A
Stream AB-C	-	-	-	-
Stream D-ABC	0.03	10.20	0.03	B
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	-	-	-	-
Stream CD-AB	2.54	12.96	0.63	B
Stream CD-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:26:10

File summary

Title	West Lane/A651 Oxford Road/Cambridge Chase Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - TRICS Trip Rates, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - TRICS Trip Rates, AM Peak	2024 Predicted - TRICS Trip Rates	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D	23.91	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A651 Oxford Road (South)	A	A651 Oxford Road (South)		Major
West Lane	B	West Lane		Minor
A651 Oxford Road (North)	C	A651 Oxford Road (North)		Major
Cambridge Chase	D	Cambridge Chase		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A651 Oxford Road (South)	7.00		0.00		2.20	100.00	✓	0.00
A651 Oxford Road (North)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
West Lane	One lane plus flare				7.50	4.80	3.90	3.50	3.00	✓	1.00	20	17
Cambridge Chase	One lane	3.16										19	17

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-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
1	AB-D	631.874	-	-	-	-	-	0.234	0.234	0.234	-	-
1	B-A	429.328	0.075	0.189	0.189	-	-	0.119	0.270	-	0.119	0.270
1	B-CD	725.526	0.106	0.269	0.269	-	-	-	-	-	-	-
1	CD-B	631.874	0.234	0.234	0.234	-	-	-	-	-	-	-
1	D-AB	644.805	-	-	-	-	-	0.239	0.239	0.095	-	-
1	D-C	500.020	-	0.139	0.315	0.139	0.315	0.220	0.220	0.087	-	-

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 (%)
A651 Oxford Road (South)	ONE HOUR	✓	639.00	100.000
West Lane	ONE HOUR	✓	368.00	100.000
A651 Oxford Road (North)	ONE HOUR	✓	562.00	100.000
Cambridge Chase	ONE HOUR	✓	9.00	100.000

Turning Proportions

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.000	104.000	535.000	0.000
	West Lane	72.000	0.000	295.000	1.000
	A651 Oxford Road (North)	356.000	206.000	0.000	0.000
	Cambridge Chase	5.000	1.000	3.000	0.000

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.00	0.16	0.84	0.00
	West Lane	0.20	0.00	0.80	0.00
	A651 Oxford Road (North)	0.63	0.37	0.00	0.00
	Cambridge Chase	0.56	0.11	0.33	0.00

Vehicle Mix

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	1.000	1.000	1.000	1.000
	West Lane	1.000	1.000	1.000	1.000
	A651 Oxford Road (North)	1.000	1.000	1.000	1.000
	Cambridge Chase	1.000	1.000	1.000	1.000

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

	To				
From		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
	A651 Oxford Road (South)	0.0	0.0	0.0	0.0
	West Lane	0.0	0.0	0.0	0.0
	A651 Oxford Road (North)	0.0	0.0	0.0	0.0
	Cambridge Chase	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.74	30.74	2.65	D
B-A	0.56	57.31	1.19	F
A-B	-	-	-	-
A-C	-	-	-	-
A-D	-	-	-	-
AB-CD	0.00	3.86	0.00	A
AB-C	-	-	-	-
D-ABC	0.03	10.20	0.03	B
C-D	-	-	-	-
C-A	-	-	-	-
C-B	-	-	-	-
CD-AB	0.63	12.96	2.54	B
CD-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	222.84	220.33	0.00	570.65	0.391	0.63	10.206	B
B-A	54.21	53.17	0.00	258.71	0.210	0.26	17.431	C
A-B	78.30	78.30	0.00	-	-	-	-	-
A-C	402.78	402.78	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	1.76	1.75	0.00	935.19	0.002	0.00	3.856	A
AB-C	621.35	621.35	0.00	-	-	-	-	-
D-ABC	6.78	6.71	0.00	440.99	0.015	0.02	8.288	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	268.02	268.02	0.00	-	-	-	-	-
C-B	155.09	155.09	0.00	-	-	-	-	-
CD-AB	250.83	247.82	0.00	712.01	0.352	0.75	7.735	A
CD-A	176.75	176.75	0.00	-	-	-	-	-

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-CD	266.10	264.66	0.00	528.02	0.504	0.99	13.593	B
B-A	64.73	64.10	0.00	215.45	0.300	0.41	23.686	C
A-B	93.49	93.49	0.00	-	-	-	-	-
A-C	480.95	480.95	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	2.43	2.43	0.00	988.33	0.002	0.00	3.650	A
AB-C	743.19	743.19	0.00	-	-	-	-	-
D-ABC	8.09	8.07	0.00	409.41	0.020	0.02	8.970	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	320.04	320.04	0.00	-	-	-	-	-
C-B	185.19	185.19	0.00	-	-	-	-	-
CD-AB	335.35	333.55	0.00	732.82	0.458	1.20	9.041	A
CD-A	175.26	175.26	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-CD	325.90	320.18	0.00	447.52	0.728	2.42	27.128	D
B-A	79.27	76.64	0.00	145.19	0.546	1.07	50.729	F
A-B	114.51	114.51	0.00	-	-	-	-	-
A-C	589.05	589.05	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	3.52	3.52	0.00	1053.57	0.003	0.00	3.427	A
AB-C	905.70	905.70	0.00	-	-	-	-	-
D-ABC	9.91	9.88	0.00	363.35	0.027	0.03	10.185	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	391.96	391.96	0.00	-	-	-	-	-
C-B	226.81	226.81	0.00	-	-	-	-	-
CD-AB	478.53	473.51	0.00	762.43	0.628	2.46	12.521	B
CD-A	146.83	146.83	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-CD	325.90	324.98	0.00	440.27	0.740	2.65	30.741	D
B-A	79.27	78.81	0.00	140.76	0.563	1.19	57.311	F
A-B	114.51	114.51	0.00	-	-	-	-	-
A-C	589.05	589.05	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	3.59	3.59	0.00	1055.84	0.003	0.00	3.423	A
AB-C	910.44	910.44	0.00	-	-	-	-	-
D-ABC	9.91	9.91	0.00	362.72	0.027	0.03	10.203	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	391.96	391.96	0.00	-	-	-	-	-
C-B	226.81	226.81	0.00	-	-	-	-	-
CD-AB	481.23	480.90	0.00	764.62	0.629	2.54	12.960	B
CD-A	144.15	144.15	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-CD	266.10	272.40	0.00	522.10	0.510	1.07	14.759	B
B-A	64.73	67.65	0.00	211.47	0.306	0.46	25.493	D
A-B	93.49	93.49	0.00	-	-	-	-	-
A-C	480.95	480.95	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	2.52	2.53	0.00	992.33	0.003	0.00	3.639	A
AB-C	750.83	750.83	0.00	-	-	-	-	-
D-ABC	8.09	8.12	0.00	408.63	0.020	0.02	8.988	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	320.04	320.04	0.00	-	-	-	-	-
C-B	185.19	185.19	0.00	-	-	-	-	-
CD-AB	338.11	343.14	0.00	735.83	0.460	1.28	9.357	A
CD-A	172.53	172.53	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-CD	222.84	224.50	0.00	568.46	0.392	0.66	10.515	B
B-A	54.21	54.94	0.00	256.90	0.211	0.27	17.890	C
A-B	78.30	78.30	0.00	-	-	-	-	-
A-C	402.78	402.78	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	1.80	1.80	0.00	937.50	0.002	0.00	3.847	A
AB-C	625.48	625.48	0.00	-	-	-	-	-
D-ABC	6.78	6.79	0.00	440.61	0.015	0.02	8.300	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	268.02	268.02	0.00	-	-	-	-	-
C-B	155.09	155.09	0.00	-	-	-	-	-
CD-AB	252.70	254.68	0.00	713.65	0.354	0.79	7.909	A
CD-A	174.94	174.94	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Report generation date: 04/01/2019 15:26:40

« Existing Layout - 2024 Predicted - TRICS Trip Rates, PM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - TRICS Trip Rates				
Stream B-CD	0.78	13.57	0.44	B
Stream B-A	0.77	34.05	0.44	D
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	-	-	-	-
Stream AB-CD	0.02	4.38	0.02	A
Stream AB-C	-	-	-	-
Stream D-ABC	0.03	9.38	0.03	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	-	-	-	-
Stream CD-AB	4.53	18.44	0.76	C
Stream CD-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:26:39

File summary

Title	West Lane/A651 Oxford Road/Cambridge Chase Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - TRICS Trip Rates, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - TRICS Trip Rates, PM Peak	2024 Predicted - TRICS Trip Rates	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D	18.44	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A651 Oxford Road (South)	A	A651 Oxford Road (South)		Major
West Lane	B	West Lane		Minor
A651 Oxford Road (North)	C	A651 Oxford Road (North)		Major
Cambridge Chase	D	Cambridge Chase		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A651 Oxford Road (South)	7.00		0.00		2.20	100.00	✓	0.00
A651 Oxford Road (North)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
West Lane	One lane plus flare				7.50	4.80	3.90	3.50	3.00	✓	1.00	20	17
Cambridge Chase	One lane	3.16										19	17

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-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
1	AB-D	631.874	-	-	-	-	-	0.234	0.234	0.234	-	-
1	B-A	439.985	0.077	0.194	0.194	-	-	0.122	0.277	-	0.122	0.277
1	B-D	711.792	0.104	0.264	0.264	-	-	-	-	-	-	-
1	D-B	631.874	0.234	0.234	0.234	-	-	-	-	-	-	-
1	D-AB	644.805	-	-	-	-	-	0.239	0.239	0.095	-	-
1	D-C	500.020	-	0.139	0.315	0.139	0.315	0.220	0.220	0.087	-	-

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 (%)
A651 Oxford Road (South)	ONE HOUR	✓	493.00	100.000
West Lane	ONE HOUR	✓	266.00	100.000
A651 Oxford Road (North)	ONE HOUR	✓	669.00	100.000
Cambridge Chase	ONE HOUR	✓	10.00	100.000

Turning Proportions

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.000	59.000	434.000	0.000
	West Lane	76.000	0.000	185.000	5.000
	A651 Oxford Road (North)	414.000	252.000	0.000	3.000
	Cambridge Chase	3.000	5.000	2.000	0.000

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.00	0.12	0.88	0.00
	West Lane	0.29	0.00	0.70	0.02
	A651 Oxford Road (North)	0.62	0.38	0.00	0.00
	Cambridge Chase	0.30	0.50	0.20	0.00

Vehicle Mix

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	1.000	1.000	1.000	1.000
	West Lane	1.000	1.000	1.000	1.000
	A651 Oxford Road (North)	1.000	1.000	1.000	1.000
	Cambridge Chase	1.000	1.000	1.000	1.000

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.0	0.0	0.0	0.0
	West Lane	0.0	0.0	0.0	0.0
	A651 Oxford Road (North)	0.0	0.0	0.0	0.0
	Cambridge Chase	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.44	13.57	0.78	B
B-A	0.44	34.05	0.77	D
A-B	-	-	-	-
A-C	-	-	-	-
A-D	-	-	-	-
AB-CD	0.02	4.38	0.02	A
AB-C	-	-	-	-
D-ABC	0.03	9.38	0.03	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	-	-	-	-
CD-AB	0.76	18.44	4.53	C
CD-A	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	143.04	141.76	0.00	583.27	0.245	0.32	8.131	A
B-A	57.22	56.20	0.00	277.28	0.206	0.25	16.213	C
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	326.74	326.74	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	7.57	7.53	0.00	829.29	0.009	0.01	4.380	A
AB-C	460.92	460.92	0.00	-	-	-	-	-
D-ABC	7.53	7.46	0.00	466.78	0.016	0.02	7.837	A
C-D	2.26	2.26	0.00	-	-	-	-	-
C-A	311.68	311.68	0.00	-	-	-	-	-
C-B	189.72	189.72	0.00	-	-	-	-	-
CD-AB	328.05	323.88	0.00	763.67	0.430	1.04	8.155	A
CD-A	179.32	179.32	0.00	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	170.81	170.30	0.00	547.08	0.312	0.45	9.543	A
B-A	68.32	67.81	0.00	242.16	0.282	0.38	20.585	C
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	390.16	390.16	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	10.37	10.35	0.00	867.89	0.012	0.01	4.197	A
AB-C	550.09	550.09	0.00	-	-	-	-	-
D-ABC	8.99	8.97	0.00	437.32	0.021	0.02	8.404	A
C-D	2.70	2.70	0.00	-	-	-	-	-
C-A	372.18	372.18	0.00	-	-	-	-	-
C-B	226.54	226.54	0.00	-	-	-	-	-
CD-AB	439.50	436.65	0.00	793.78	0.554	1.75	10.119	B
CD-A	166.39	166.39	0.00	-	-	-	-	-

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-CD	209.19	207.95	0.00	478.55	0.437	0.76	13.241	B
B-A	83.68	82.27	0.00	191.09	0.438	0.73	32.660	D
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	477.84	477.84	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	15.08	15.05	0.00	918.50	0.016	0.02	3.984	A
AB-C	670.72	670.72	0.00	-	-	-	-	-
D-ABC	11.01	10.98	0.00	395.00	0.028	0.03	9.374	A
C-D	3.30	3.30	0.00	-	-	-	-	-
C-A	455.82	455.82	0.00	-	-	-	-	-
C-B	277.46	277.46	0.00	-	-	-	-	-
CD-AB	630.12	620.28	0.00	836.43	0.753	4.22	16.718	C
CD-A	111.94	111.94	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-CD	209.19	209.12	0.00	474.19	0.441	0.78	13.573	B
B-A	83.68	83.55	0.00	188.96	0.443	0.77	34.053	D
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	477.84	477.84	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	15.18	15.18	0.00	919.15	0.017	0.02	3.982	A
AB-C	671.78	671.78	0.00	-	-	-	-	-
D-ABC	11.01	11.01	0.00	394.90	0.028	0.03	9.377	A
C-D	3.30	3.30	0.00	-	-	-	-	-
C-A	455.82	455.82	0.00	-	-	-	-	-
C-B	277.46	277.46	0.00	-	-	-	-	-
CD-AB	639.00	637.75	0.00	841.48	0.759	4.53	18.440	C
CD-A	103.09	103.09	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-CD	170.81	172.05	0.00	543.52	0.314	0.47	9.724	A
B-A	68.32	69.74	0.00	239.49	0.285	0.41	21.377	C
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	390.16	390.16	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	10.49	10.52	0.00	868.92	0.012	0.01	4.193	A
AB-C	551.71	551.71	0.00	-	-	-	-	-
D-ABC	8.99	9.02	0.00	437.19	0.021	0.02	8.408	A
C-D	2.70	2.70	0.00	-	-	-	-	-
C-A	372.18	372.18	0.00	-	-	-	-	-
C-B	226.54	226.54	0.00	-	-	-	-	-
CD-AB	445.60	456.03	0.00	799.62	0.557	1.92	10.936	B
CD-A	160.34	160.34	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-CD	143.04	143.58	0.00	581.25	0.246	0.33	8.236	A
B-A	57.22	57.79	0.00	275.74	0.208	0.27	16.560	C
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	326.74	326.74	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	7.69	7.70	0.00	830.40	0.009	0.01	4.375	A
AB-C	462.63	462.63	0.00	-	-	-	-	-
D-ABC	7.53	7.55	0.00	466.66	0.016	0.02	7.842	A
C-D	2.26	2.26	0.00	-	-	-	-	-
C-A	311.68	311.68	0.00	-	-	-	-	-
C-B	189.72	189.72	0.00	-	-	-	-	-
CD-AB	331.18	334.44	0.00	766.24	0.432	1.10	8.450	A
CD-A	176.26	176.26	0.00	-	-	-	-	-

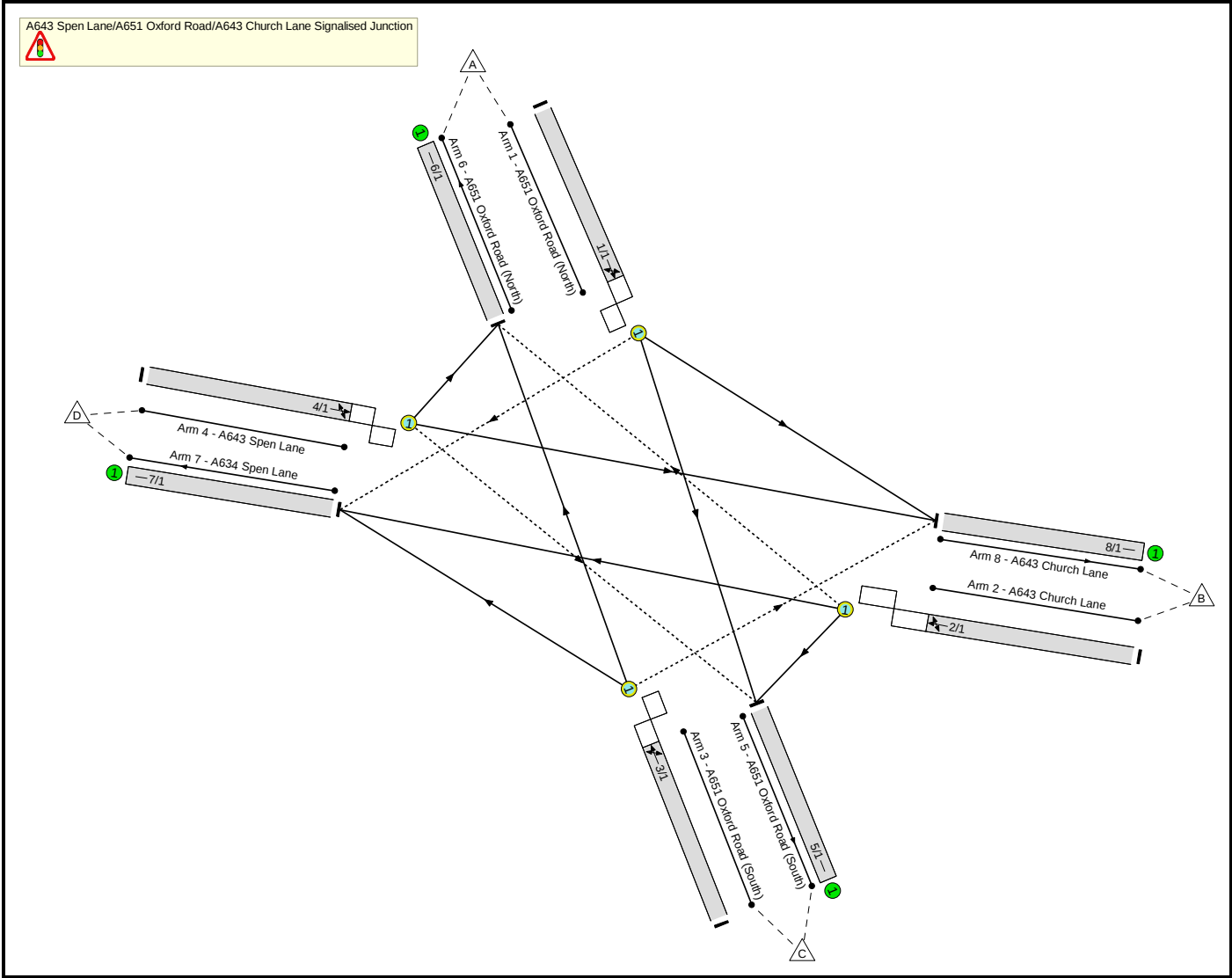
Full Input Data And Results

Full Input Data And Results

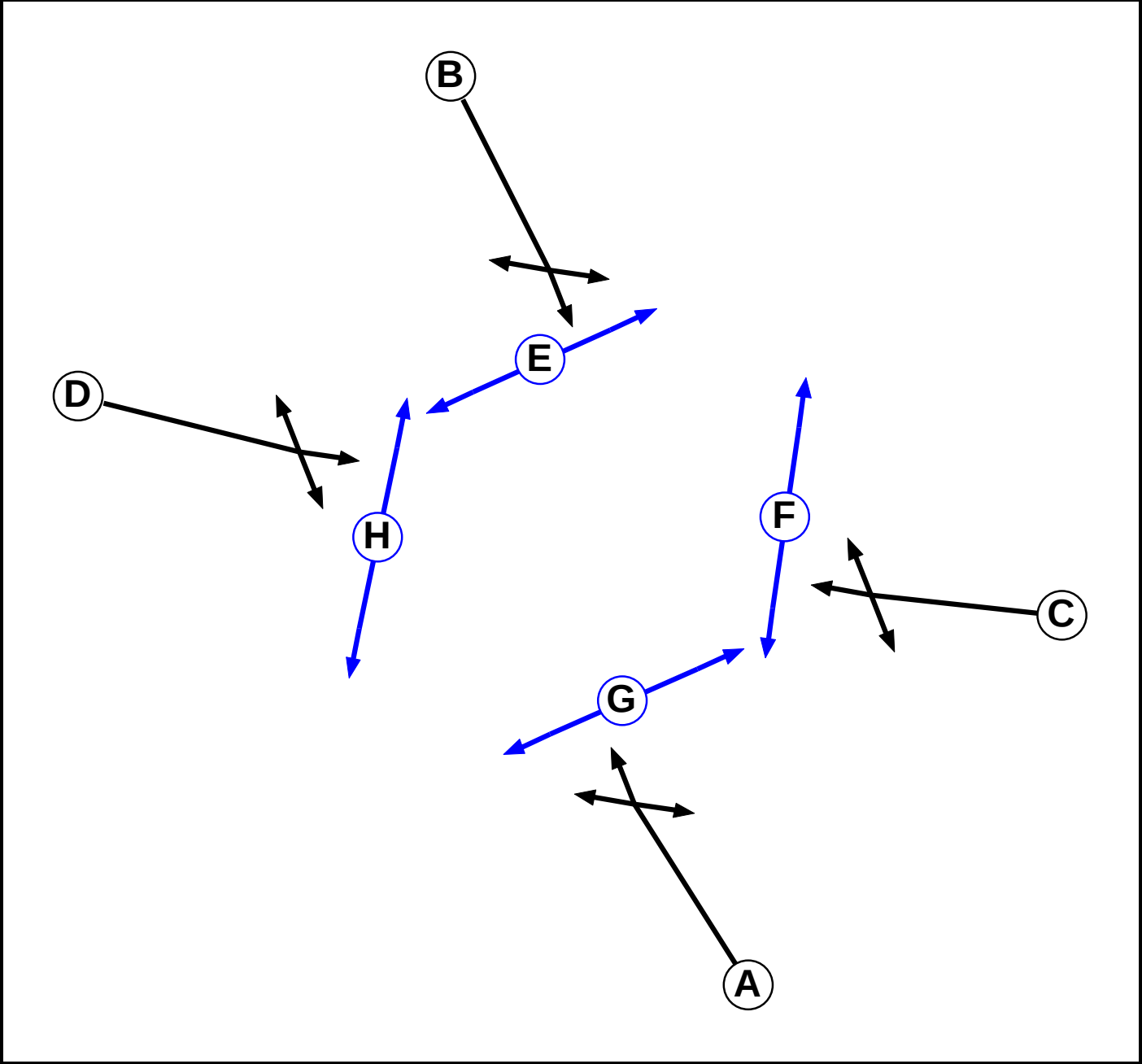
User and Project Details

Project:	Sykes Meadows, Cliffe Lane, Gomersal
Title:	A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction
Location:	Gomersal
File name:	Church Ln-Oxford Rd-Spen Ln Signals - TO KIRKLEES SIGNAL SPEC - 186s.lsg3x
Author:	R Donaldson
Company:	Bryan G Hall
Address:	
Notes:	2024 Predicted – TRICS Trip Rates - LinSig Output

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		10	10
B	Traffic		10	10
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		9	9
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		9	9

Full Input Data And Results

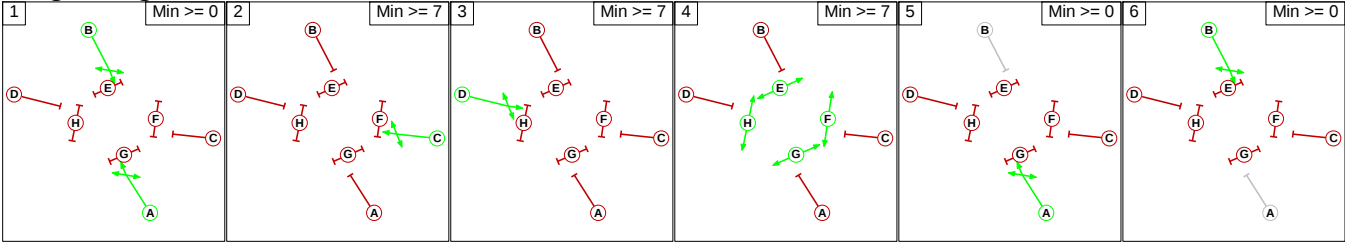
Phase Intergreens Matrix

Terminating Phase	Starting Phase								
		A	B	C	D	E	F	G	H
	A		-	8	8	14	14	7	14
	B	-		8	8	8	14	14	14
	C	8	8		7	13	5	13	10
	D	6	6	6		9	12	13	5
	E	5	11	5	5		-	-	-
	F	5	5	8	5	-		-	-
	G	8	5	5	5	-	-		-
	H	5	5	5	12	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage						
		1	2	3	4	5	6
	1		8	8	14	0	0
	2	8		7	13	8	8
	3	6	6		13	6	6
	4	11	8	12		8	11
	5	2	8	8	14		2
	6	2	8	8	14	2	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (A651 Oxford Road (North))	7/1 (Right)	1439	0	3/1	1.09	All	4.00	2.00	0.50	4	2.00
2/1 (A643 Church Lane)	6/1 (Right)	1439	0	4/1	1.09	All	6.00	3.00	0.50	6	2.00
3/1 (A651 Oxford Road (South))	8/1 (Right)	1439	0	1/1	1.09	All	4.00	2.00	0.50	4	2.00
4/1 (A643 Spen Lane)	5/1 (Right)	1439	0	2/1	1.09	All	4.00	2.00	0.50	4	2.00

Full Input Data And Results

Lane Input Data

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A651 Oxford Road (North))	O	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
											Arm 7 Right	10.00
											Arm 8 Left	10.00
											Arm 5 Left	12.50
2/1 (A643 Church Lane)	O	C	2	3	60.0	Geom	-	3.70	10.00	Y	Arm 6 Right	43.50
											Arm 7 Ahead	Inf
3/1 (A651 Oxford Road (South))	O	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Left	30.00
											Arm 8 Right	12.00
4/1 (A643 Spen Lane)	O	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Right	48.00
											Arm 6 Left	9.00
											Arm 8 Ahead	Inf
5/1 (A651 Oxford Road (South))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A651 Oxford Road (North))	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (A634 Spen Lane)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (A643 Church Lane)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
5: '2024 Predicted AM Peak - TRICS Trip Rates'	07:30	08:30	01:00	
6: '2024 Predicted PM Peak - TRICS Trip Rates'	16:30	17:30	01:00	

Scenario 5: '2024 Predicted AM Peak - TRICS Trip Rates' (FG5: '2024 Predicted AM Peak - TRICS Trip Rates', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	119	251	51	421
	B	209	0	29	168	406
	C	386	49	0	56	491
	D	67	386	48	0	501
	Tot.	662	554	328	275	1819

Traffic Lane Flows

Lane	Scenario 5: 2024 Predicted AM Peak - TRICS Trip Rates
Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	
1/1	421
2/1	406
3/1	491
4/1	501
5/1	328
6/1	662
7/1	275
8/1	554

Lane Saturation Flows

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A651 Oxford Road (North))	3.50	0.00	Y	Arm 5 Ahead	Inf	59.6 %	1853	1853
				Arm 7 Right	10.00	12.1 %		
				Arm 8 Left	10.00	28.3 %		
2/1 (A643 Church Lane)	3.70	10.00	Y	Arm 5 Left	12.50	7.1 %	1525	1525
				Arm 6 Right	43.50	51.5 %		
				Arm 7 Ahead	Inf	41.4 %		
3/1 (A651 Oxford Road (South))	3.50	0.00	Y	Arm 6 Ahead	Inf	78.6 %	1930	1930
				Arm 7 Left	30.00	11.4 %		
				Arm 8 Right	12.00	10.0 %		
4/1 (A643 Spen Lane)	3.00	0.00	Y	Arm 5 Right	48.00	9.6 %	1868	1868
				Arm 6 Left	9.00	13.4 %		
				Arm 8 Ahead	Inf	77.0 %		
5/1 (A651 Oxford Road (South) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A651 Oxford Road (North) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A634 Spen Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A643 Church Lane Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2024 Predicted PM Peak - TRICS Trip Rates' (FG6: '2024 Predicted PM Peak - TRICS Trip Rates', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	138	258	72	468
	B	114	0	30	329	473
	C	328	33	0	128	489
	D	71	215	71	0	357
	Tot.	513	386	359	529	1787

Traffic Lane Flows

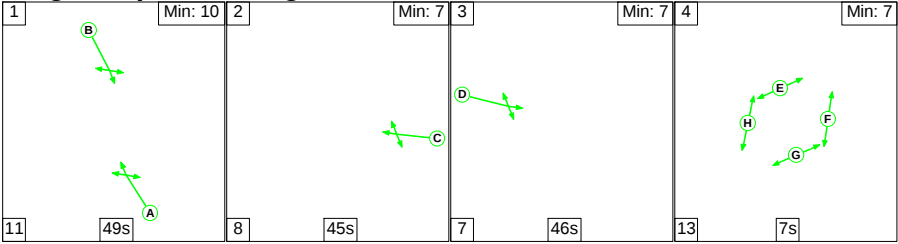
Lane	Scenario 6: 2024 Predicted PM Peak - TRICS Trip Rates
Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	
1/1	468
2/1	473
3/1	489
4/1	357
5/1	359
6/1	513
7/1	529
8/1	386

Lane Saturation Flows

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction									
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)	
1/1 (A651 Oxford Road (North))	3.50	0.00	Y	Arm 5 Ahead	Inf	55.1 %	1841	1841	
				Arm 7 Right	10.00	15.4 %			
				Arm 8 Left	10.00	29.5 %			
2/1 (A643 Church Lane)	3.70	10.00	Y	Arm 5 Left	12.50	6.3 %	1540	1540	
				Arm 6 Right	43.50	24.1 %			
				Arm 7 Ahead	Inf	69.6 %			
3/1 (A651 Oxford Road (South))	3.50	0.00	Y	Arm 6 Ahead	Inf	67.1 %	1924	1924	
				Arm 7 Left	30.00	26.2 %			
				Arm 8 Right	12.00	6.7 %			
	4/1 (A643 Spen Lane)	3.00	0.00	Y	Arm 5 Right	48.00	19.9 %	1842	1842
					Arm 6 Left	9.00	19.9 %		
				Arm 8 Ahead	Inf	60.2 %			
5/1 (A651 Oxford Road (South) Lane 1)	Infinite Saturation Flow						Inf	Inf	
6/1 (A651 Oxford Road (North) Lane 1)	Infinite Saturation Flow						Inf	Inf	
7/1 (A634 Spen Lane Lane 1)	Infinite Saturation Flow						Inf	Inf	
8/1 (A643 Church Lane Lane 1)	Infinite Saturation Flow						Inf	Inf	

Scenario 5: '2024 Predicted AM Peak - TRICS Trip Rates' (FG5: '2024 Predicted AM Peak - TRICS Trip Rates', Plan 1: 'Network Control Plan 1')

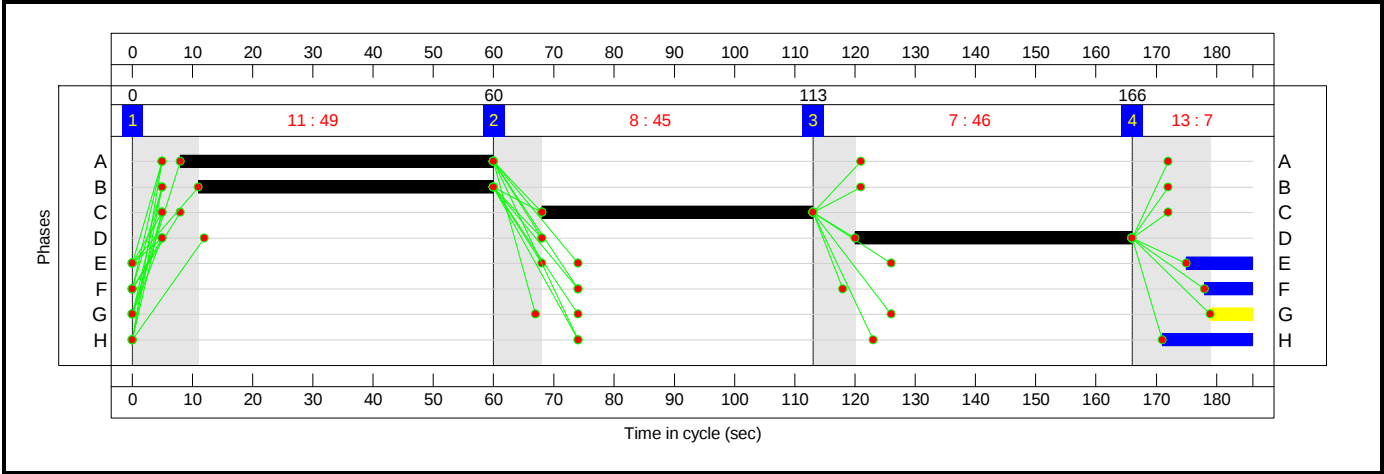
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	49	45	46	7
Change Point	0	60	113	166

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

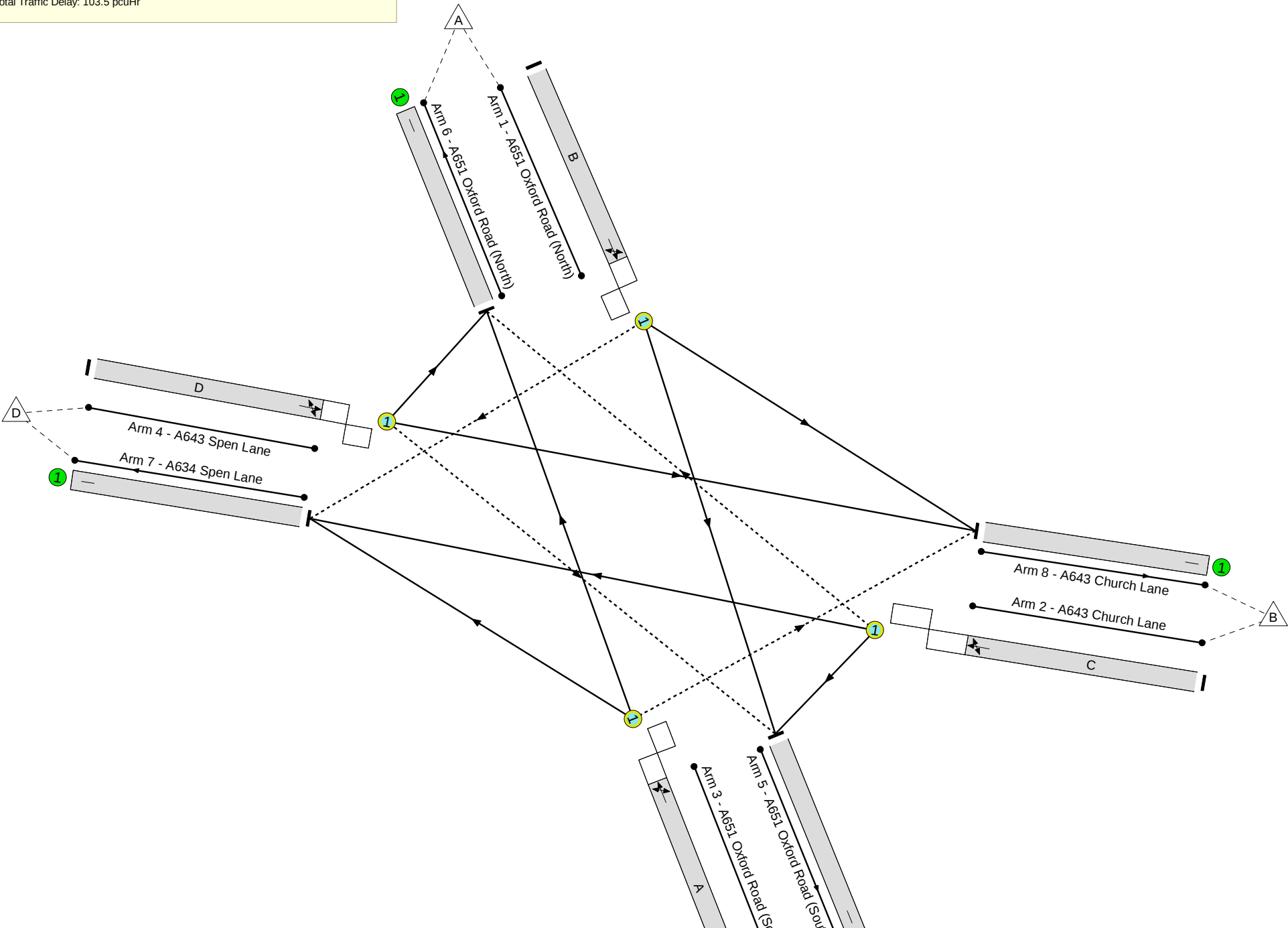
Full Input Data And Results



A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction

PRC: -19.6 %

Total Traffic Delay: 103.5 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	107.6%
A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	107.6%
1/1	A651 Oxford Road (North) Ahead Right Left	O	N/A	N/A	B		1	49	-	421	1853	398	105.8%
2/1	A643 Church Lane Left Right Ahead	O	N/A	N/A	C		1	45	-	406	1525	377	107.6%
3/1	A651 Oxford Road (South) Ahead Left Right	O	N/A	N/A	A		1	52	-	491	1930	526	93.3%
4/1	A643 Spen Lane Right Left Ahead	O	N/A	N/A	D		1	46	-	501	1868	472	106.1%
5/1	A651 Oxford Road (South)	U	N/A	N/A	-		-	-	-	328	Inf	Inf	0.0%
6/1	A651 Oxford Road (North)	U	N/A	N/A	-		-	-	-	662	Inf	Inf	0.0%
7/1	A634 Spen Lane	U	N/A	N/A	-		-	-	-	275	Inf	Inf	0.0%
8/1	A643 Church Lane	U	N/A	N/A	-		-	-	-	554	Inf	Inf	0.0%

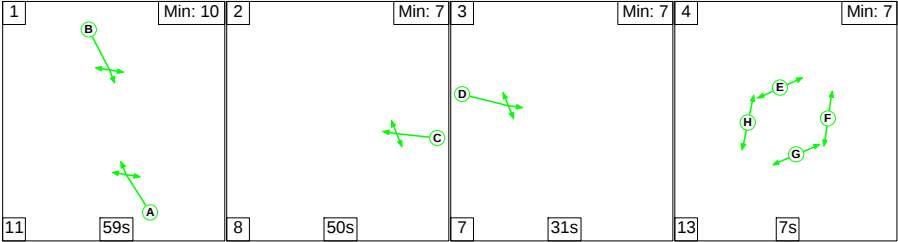
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction	-	-	69	210	58	40.0	63.0	0.5	103.5	-	-	-	-
A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	-	-	69	210	58	40.0	63.0	0.5	103.5	-	-	-	-
1/1	421	398	21	0	28	9.6	17.5	0.3	27.4	234.7	22.9	17.5	40.4
2/1	406	377	0	169	25	10.1	19.6	0.0	29.7	263.7	22.5	19.6	42.1
3/1	491	491	48	0	1	8.7	5.3	0.2	14.3	104.6	24.7	5.3	30.0
4/1	501	472	0	41	4	11.5	20.6	0.0	32.1	230.5	27.4	20.6	48.0
5/1	310	310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	643	643	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	260	260	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	525	525	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalised Lanes (%): -19.6 Total Delay for Signalised Lanes (pcuHr): 103.53 Cycle Time (s): 186 PRC Over All Lanes (%): -19.6 Total Delay Over All Lanes(pcuHr): 103.53													

Full Input Data And Results

Scenario 6: '2024 Predicted PM Peak - TRICS Trip Rates' (FG6: '2024 Predicted PM Peak - TRICS Trip Rates', Plan 1: 'Network Control Plan 1')

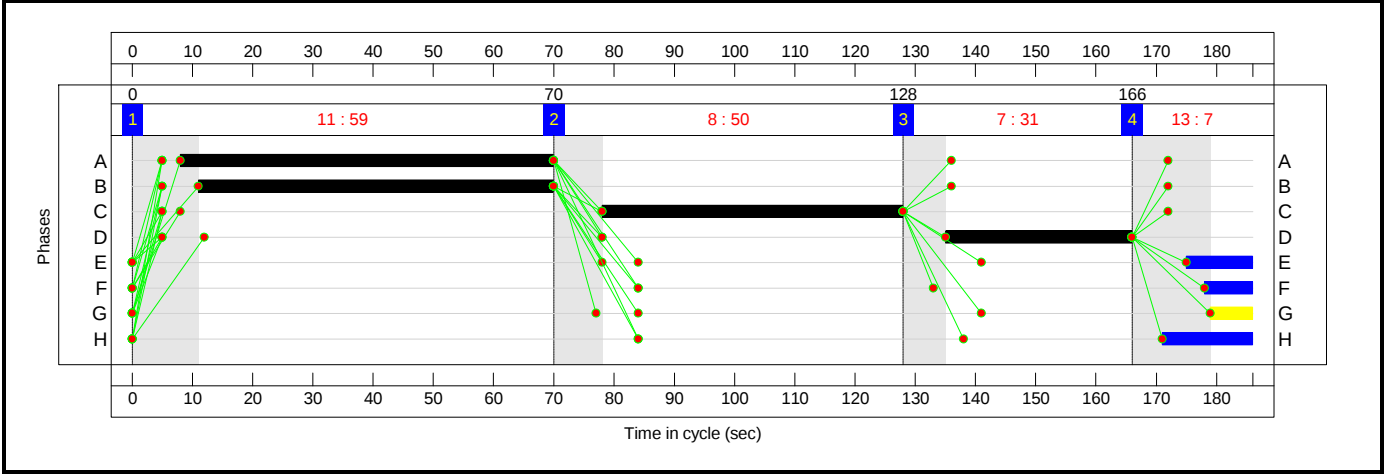
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	59	50	31	7
Change Point	0	70	128	166

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

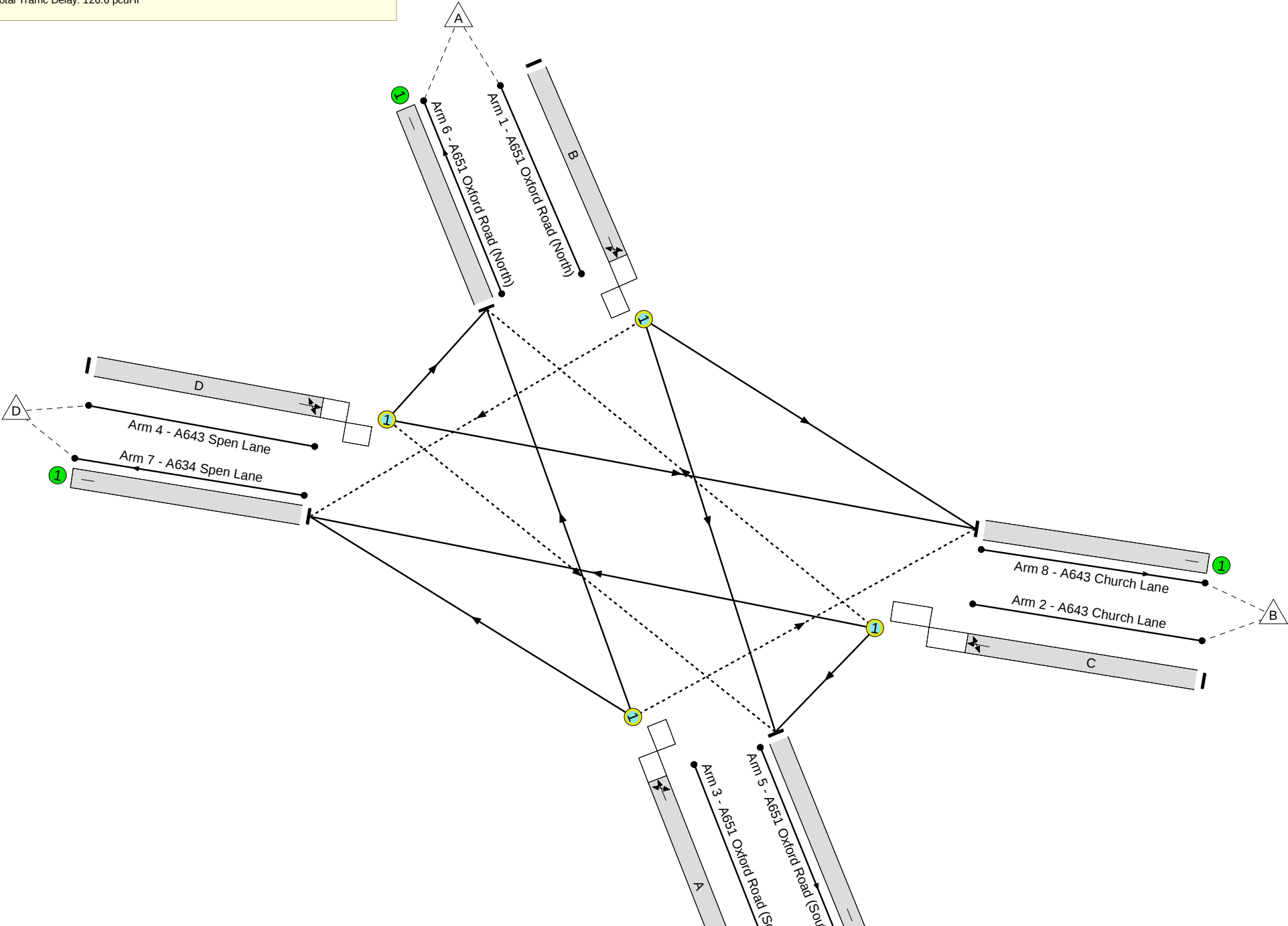
Full Input Data And Results



A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction

PRC: -25.2 %

Total Traffic Delay: 126.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	112.7%
A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	112.7%
1/1	A651 Oxford Road (North) Ahead Right Left	O	N/A	N/A	B		1	59	-	468	1841	419	111.7%
2/1	A643 Church Lane Left Right Ahead	O	N/A	N/A	C		1	50	-	473	1540	422	112.0%
3/1	A651 Oxford Road (South) Ahead Left Right	O	N/A	N/A	A		1	62	-	489	1924	639	76.5%
4/1	A643 Spen Lane Right Left Ahead	O	N/A	N/A	D		1	31	-	357	1842	317	112.7%
5/1	A651 Oxford Road (South)	U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
6/1	A651 Oxford Road (North)	U	N/A	N/A	-		-	-	-	513	Inf	Inf	0.0%
7/1	A634 Spen Lane	U	N/A	N/A	-		-	-	-	529	Inf	Inf	0.0%
8/1	A643 Church Lane	U	N/A	N/A	-		-	-	-	386	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction	-	-	92	142	28	42.8	83.4	0.5	126.6	-	-	-	-
A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	-	-	92	142	28	42.8	83.4	0.5	126.6	-	-	-	-
1/1	468	419	61	0	3	12.2	28.6	0.4	41.2	317.1	26.7	28.6	55.3
2/1	473	422	0	89	13	12.6	29.4	0.0	42.0	319.9	27.1	29.4	56.5
3/1	489	489	31	0	2	7.4	1.6	0.1	9.1	67.1	22.5	1.6	24.1
4/1	357	317	0	53	10	10.5	23.8	0.0	34.3	345.7	20.9	23.8	44.7
5/1	321	321	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	486	486	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	347	347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -25.2 Total Delay for Signalled Lanes (pcuHr): 126.65 Cycle Time (s): 186 PRC Over All Lanes (%): -25.2 Total Delay Over All Lanes(pcuHr): 126.65													

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Site Access-Cliffe Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Site Access-Cliffe Ln

Report generation date: 04/01/2019 15:19:57

« Proposed Layout - 2024 Predicted - TRICS Trip Rates, AM Peak

- » Junction Network
- » Arms
- » Traffic Flows
- » Entry Flows
- » Turning Proportions
- » Vehicle Mix
- » Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Proposed Layout - 2024 Predicted - TRICS Trip Rates				
Stream B-AC	0.11	7.53	0.10	A
Stream C-AB	0.01	5.34	0.01	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2024 Predicted - TRICS Trip Rates, AM Peak " model duration: 07:15 - 08:45

"D2 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:19:56

File summary

Title	Site Access/Cliffe Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - TRICS Trip Rates, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - TRICS Trip Rates, AM Peak	2024 Predicted - TRICS Trip Rates	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.25	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Cliffe Lane (West)	A	Cliffe Lane (West)		Major
Site Access	B	Site Access		Minor
Cliffe Lane (East)	C	Cliffe Lane (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)
Cliffe Lane (East)	6.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Site Access	One lane	3.20										16	15

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	500.017	0.091	0.230	0.145	0.329
1	B-C	646.062	0.099	0.250	-	-
1	C-B	631.874	0.245	0.245	-	-

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 (%)
Cliffe Lane (West)	ONE HOUR	✓	169.00	100.000
Site Access	ONE HOUR	✓	50.00	100.000
Cliffe Lane (East)	ONE HOUR	✓	164.00	100.000

Turning Proportions

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.000	3.000	166.000
	Site Access	16.000	0.000	34.000
	Cliffe Lane (East)	158.000	6.000	0.000

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.00	0.02	0.98
	Site Access	0.32	0.00	0.68
	Cliffe Lane (East)	0.96	0.04	0.00

Vehicle Mix

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	1.000	1.000	1.000
	Site Access	1.000	1.000	1.000
	Cliffe Lane (East)	1.000	1.000	1.000

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.0	0.0	0.0
	Site Access	0.0	0.0	0.0
	Cliffe Lane (East)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	7.53	0.11	A
C-AB	0.01	5.34	0.01	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

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	37.64	37.35	0.00	551.29	0.068	0.07	7.002	A
C-AB	5.45	5.41	0.00	679.65	0.008	0.01	5.339	A
C-A	118.02	118.02	0.00	-	-	-	-	-
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	124.97	124.97	0.00	-	-	-	-	-

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	44.95	44.88	0.00	543.52	0.083	0.09	7.219	A
C-AB	6.75	6.74	0.00	689.25	0.010	0.01	5.274	A
C-A	140.68	140.68	0.00	-	-	-	-	-
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	149.23	149.23	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	55.05	54.95	0.00	532.74	0.103	0.11	7.532	A
C-AB	8.69	8.68	0.00	702.63	0.012	0.01	5.187	A
C-A	171.87	171.87	0.00	-	-	-	-	-
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	182.77	182.77	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	55.05	55.05	0.00	532.74	0.103	0.11	7.535	A
C-AB	8.69	8.69	0.00	702.63	0.012	0.01	5.189	A
C-A	171.87	171.87	0.00	-	-	-	-	-
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	182.77	182.77	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	44.95	45.04	0.00	543.52	0.083	0.09	7.222	A
C-AB	6.76	6.77	0.00	689.25	0.010	0.01	5.276	A
C-A	140.68	140.68	0.00	-	-	-	-	-
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	149.23	149.23	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	37.64	37.71	0.00	551.28	0.068	0.07	7.009	A
C-AB	5.46	5.46	0.00	679.66	0.008	0.01	5.341	A
C-A	118.01	118.01	0.00	-	-	-	-	-
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	124.97	124.97	0.00	-	-	-	-	-

Junctions 8				
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Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Site Access-Cliffe Ln

Report generation date: 04/01/2019 15:20:19

« Proposed Layout - 2024 Predicted - TRICS Trip Rates, PM Peak

- » Junction Network
- » Arms
- » Traffic Flows
- » Entry Flows
- » Turning Proportions
- » Vehicle Mix
- » Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Proposed Layout - 2024 Predicted - TRICS Trip Rates				
Stream B-AC	0.05	7.16	0.05	A
Stream C-AB	0.08	5.45	0.05	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 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D2 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:20:19

File summary

Title	Site Access/Cliffe Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - TRICS Trip Rates, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - TRICS Trip Rates, PM Peak	2024 Predicted - TRICS Trip Rates	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.19	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Cliffe Lane (West)	A	Cliffe Lane (West)		Major
Site Access	B	Site Access		Minor
Cliffe Lane (East)	C	Cliffe Lane (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)
Cliffe Lane (East)	6.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Site Access	One lane	3.20										16	15

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	500.017	0.091	0.230	0.145	0.329
1	B-C	646.062	0.099	0.250	-	-
1	C-B	631.874	0.245	0.245	-	-

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 (%)
Cliffe Lane (West)	ONE HOUR	✓	193.00	100.000
Site Access	ONE HOUR	✓	24.00	100.000
Cliffe Lane (East)	ONE HOUR	✓	198.00	100.000

Turning Proportions

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.000	13.000	180.000
	Site Access	7.000	0.000	17.000
	Cliffe Lane (East)	174.000	24.000	0.000

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.00	0.07	0.93
	Site Access	0.29	0.00	0.71
	Cliffe Lane (East)	0.88	0.12	0.00

Vehicle Mix

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	1.000	1.000	1.000
	Site Access	1.000	1.000	1.000
	Cliffe Lane (East)	1.000	1.000	1.000

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.0	0.0	0.0
	Site Access	0.0	0.0	0.0
	Cliffe Lane (East)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.05	7.16	0.05	A
C-AB	0.05	5.45	0.08	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

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	18.07	17.93	0.00	550.26	0.033	0.03	6.761	A
C-AB	22.22	22.04	0.00	683.47	0.033	0.04	5.441	A
C-A	126.85	126.85	0.00	-	-	-	-	-
A-B	9.79	9.79	0.00	-	-	-	-	-
A-C	135.51	135.51	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	21.58	21.55	0.00	541.34	0.040	0.04	6.925	A
C-AB	27.65	27.60	0.00	693.90	0.040	0.06	5.402	A
C-A	150.35	150.35	0.00	-	-	-	-	-
A-B	11.69	11.69	0.00	-	-	-	-	-
A-C	161.82	161.82	0.00	-	-	-	-	-

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	26.42	26.38	0.00	528.95	0.050	0.05	7.162	A
C-AB	35.78	35.70	0.00	708.43	0.051	0.08	5.351	A
C-A	182.22	182.22	0.00	-	-	-	-	-
A-B	14.31	14.31	0.00	-	-	-	-	-
A-C	198.18	198.18	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	26.42	26.42	0.00	528.94	0.050	0.05	7.163	A
C-AB	35.80	35.80	0.00	708.45	0.051	0.08	5.354	A
C-A	182.20	182.20	0.00	-	-	-	-	-
A-B	14.31	14.31	0.00	-	-	-	-	-
A-C	198.18	198.18	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	21.58	21.62	0.00	541.32	0.040	0.04	6.929	A
C-AB	27.67	27.75	0.00	693.93	0.040	0.06	5.405	A
C-A	150.33	150.33	0.00	-	-	-	-	-
A-B	11.69	11.69	0.00	-	-	-	-	-
A-C	161.82	161.82	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	18.07	18.10	0.00	550.23	0.033	0.03	6.764	A
C-AB	22.26	22.31	0.00	683.50	0.033	0.04	5.447	A
C-A	126.81	126.81	0.00	-	-	-	-	-
A-B	9.79	9.79	0.00	-	-	-	-	-
A-C	135.51	135.51	0.00	-	-	-	-	-

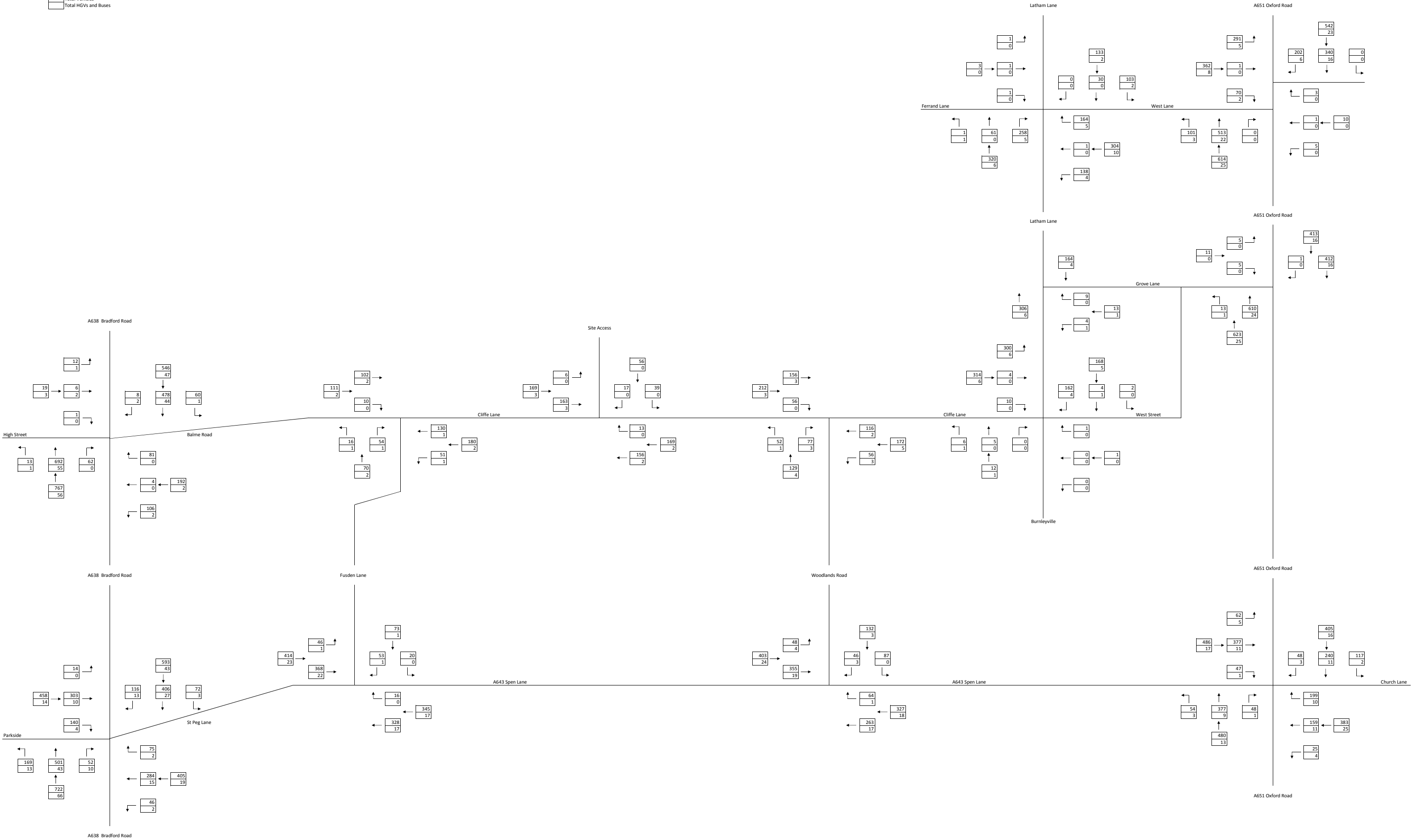
APPENDIX BGH 29

2024 PREDICTED VEHICULAR FLOWS
GOMERSAL, WEST YORKSHIRE
07:30 - 08:30
AM PEAK
BASED ON KIRKLEES TRIP RATES

KEY

Total Vehicles

Total HGVs and Buses

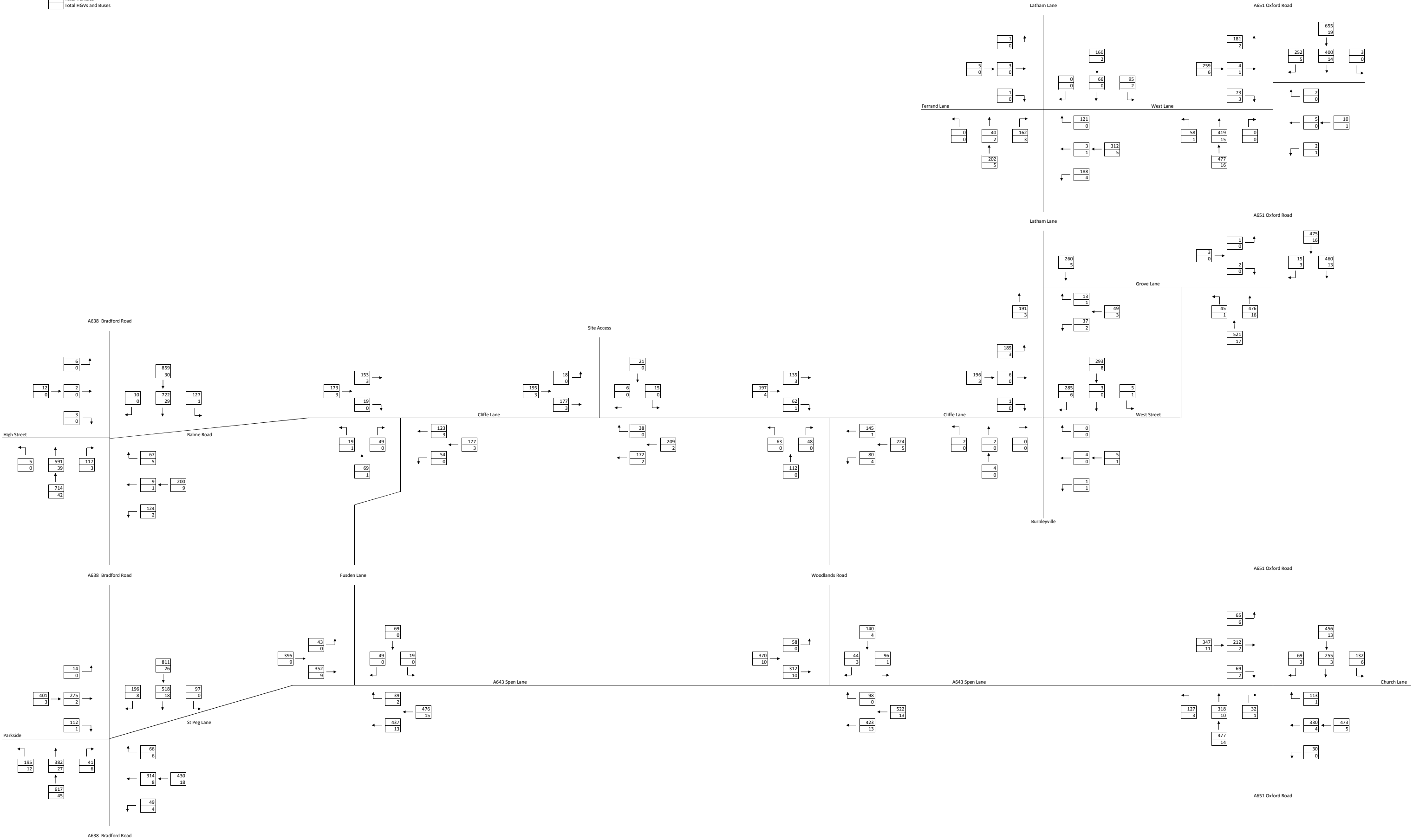


2024 PREDICTED VEHICULAR FLOWS
GOMERSAL, WEST YORKSHIRE
16:30 - 17:30
PM PEAK
BASED ON KIRKLEES TRIP RATES

KEY

Total Vehicles

Total HGVs and Buses



APPENDIX BGH 30

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Woodlands Rd-Cliffe Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Cliffe Ln

Report generation date: 04/01/2019 15:32:35

« Existing Layout - 2024 Predicted - Kirklees Trip Rates, AM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - Kirklees Trip Rates				
Stream B-C	0.09	5.83	0.09	A
Stream B-A	0.26	10.53	0.20	B
Stream C-AB	0.18	5.80	0.12	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak " model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:32:34

File summary

Title	Woodlands Road/Cliffe Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - Kirklees Trip Rates, AM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - Kirklees Trip Rates, AM Peak	2024 Predicted - Kirklees Trip Rates	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.66	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Cliffe Lane (East)	A	Cliffe Lane (East)		Major
Woodlands Road	B	Woodlands Road		Minor
Cliffe Lane (West)	C	Cliffe Lane (West)		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)
Cliffe Lane (West)	6.50		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	3.65	2.75	2.75	2.75	✓	1.00	20	19

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	512.207	0.091	0.231	0.145	0.330
1	B-C	763.226	0.114	0.289	-	-
1	C-B	631.874	0.240	0.240	-	-

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 (%)
Cliffe Lane (East)	ONE HOUR	✓	177.00	100.000
Woodlands Road	ONE HOUR	✓	133.00	100.000
Cliffe Lane (West)	ONE HOUR	✓	215.00	100.000

Turning Proportions

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.000	59.000	118.000
	Woodlands Road	80.000	0.000	53.000
	Cliffe Lane (West)	159.000	56.000	0.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.00	0.33	0.67
	Woodlands Road	0.60	0.00	0.40
	Cliffe Lane (West)	0.74	0.26	0.00

Vehicle Mix

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	Cliffe Lane (West)	1.000	1.000	1.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	Cliffe Lane (West)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.09	5.83	0.09	A
B-A	0.20	10.53	0.26	B
C-AB	0.12	5.80	0.18	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

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	39.90	39.66	0.00	706.83	0.056	0.06	5.395	A
B-A	60.23	59.63	0.00	456.23	0.132	0.15	9.063	A
C-AB	50.92	50.51	0.00	679.44	0.075	0.10	5.722	A
C-A	110.94	110.94	0.00	-	-	-	-	-
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	88.84	88.84	0.00	-	-	-	-	-

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	47.65	47.59	0.00	694.22	0.069	0.07	5.567	A
B-A	71.92	71.76	0.00	445.14	0.162	0.19	9.637	A
C-AB	63.14	63.03	0.00	689.04	0.092	0.13	5.753	A
C-A	130.14	130.14	0.00	-	-	-	-	-
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	106.08	106.08	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	58.35	58.27	0.00	675.82	0.086	0.09	5.829	A
B-A	88.08	87.83	0.00	429.85	0.205	0.25	10.518	B
C-AB	82.14	81.96	0.00	703.32	0.117	0.18	5.794	A
C-A	154.58	154.58	0.00	-	-	-	-	-
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	129.92	129.92	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	58.35	58.35	0.00	675.66	0.086	0.09	5.831	A
B-A	88.08	88.07	0.00	429.80	0.205	0.26	10.534	B
C-AB	82.18	82.18	0.00	703.37	0.117	0.18	5.800	A
C-A	154.54	154.54	0.00	-	-	-	-	-
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	129.92	129.92	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	47.65	47.73	0.00	694.00	0.069	0.07	5.570	A
B-A	71.92	72.16	0.00	445.05	0.162	0.20	9.660	A
C-AB	63.19	63.37	0.00	689.11	0.092	0.13	5.758	A
C-A	130.09	130.09	0.00	-	-	-	-	-
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	106.08	106.08	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	39.90	39.96	0.00	706.45	0.056	0.06	5.401	A
B-A	60.23	60.39	0.00	456.07	0.132	0.15	9.101	A
C-AB	51.01	51.12	0.00	679.51	0.075	0.10	5.731	A
C-A	110.85	110.85	0.00	-	-	-	-	-
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	88.84	88.84	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Woodlands Rd-Cliffe Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Cliffe Ln

Report generation date: 04/01/2019 15:32:54

« Existing Layout - 2024 Predicted - Kirklees Trip Rates, PM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - Kirklees Trip Rates				
Stream B-C	0.13	6.87	0.12	A
Stream B-A	0.12	8.30	0.11	A
Stream C-AB	0.20	6.15	0.13	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:32:53

File summary

Title	Woodlands Road/Cliffe Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - Kirklees Trip Rates, PM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - Kirklees Trip Rates, PM Peak	2024 Predicted - Kirklees Trip Rates	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

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

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Cliffe Lane (East)	A	Cliffe Lane (East)		Major
Woodlands Road	B	Woodlands Road		Minor
Cliffe Lane (West)	C	Cliffe Lane (West)		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)
Cliffe Lane (West)	6.50		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	3.65	2.75	2.75	2.75	✓	1.00	20	19

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	592.237	0.106	0.267	0.168	0.381
1	B-C	660.090	0.099	0.250	-	-
1	C-B	631.874	0.240	0.240	-	-

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 (%)
Cliffe Lane (East)	ONE HOUR	✓	230.00	100.000
Woodlands Road	ONE HOUR	✓	111.00	100.000
Cliffe Lane (West)	ONE HOUR	✓	201.00	100.000

Turning Proportions

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.000	84.000	146.000
	Woodlands Road	48.000	0.000	63.000
	Cliffe Lane (West)	138.000	63.000	0.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.00	0.37	0.63
	Woodlands Road	0.43	0.00	0.57
	Cliffe Lane (West)	0.69	0.31	0.00

Vehicle Mix

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	Cliffe Lane (West)	1.000	1.000	1.000

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

	To			
		Cliffe Lane (East)	Woodlands Road	Cliffe Lane (West)
From	Cliffe Lane (East)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	Cliffe Lane (West)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.12	6.87	0.13	A
B-A	0.11	8.30	0.12	A
C-AB	0.13	6.15	0.20	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

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	47.43	47.10	0.00	615.22	0.077	0.08	6.334	A
B-A	36.14	35.84	0.00	520.49	0.069	0.07	7.422	A
C-AB	56.08	55.63	0.00	660.00	0.085	0.11	5.953	A
C-A	95.24	95.24	0.00	-	-	-	-	-
A-B	63.24	63.24	0.00	-	-	-	-	-
A-C	109.92	109.92	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	56.64	56.56	0.00	606.04	0.093	0.10	6.551	A
B-A	43.15	43.08	0.00	506.26	0.085	0.09	7.771	A
C-AB	69.31	69.18	0.00	665.95	0.104	0.14	6.033	A
C-A	111.38	111.38	0.00	-	-	-	-	-
A-B	75.51	75.51	0.00	-	-	-	-	-
A-C	131.25	131.25	0.00	-	-	-	-	-

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	69.36	69.25	0.00	593.15	0.117	0.13	6.869	A
B-A	52.85	52.74	0.00	486.62	0.109	0.12	8.295	A
C-AB	89.59	89.39	0.00	674.96	0.133	0.20	6.149	A
C-A	131.71	131.71	0.00	-	-	-	-	-
A-B	92.49	92.49	0.00	-	-	-	-	-
A-C	160.75	160.75	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	69.36	69.36	0.00	593.10	0.117	0.13	6.872	A
B-A	52.85	52.85	0.00	486.56	0.109	0.12	8.300	A
C-AB	89.63	89.63	0.00	675.01	0.133	0.20	6.152	A
C-A	131.67	131.67	0.00	-	-	-	-	-
A-B	92.49	92.49	0.00	-	-	-	-	-
A-C	160.75	160.75	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	56.64	56.75	0.00	605.98	0.093	0.10	6.557	A
B-A	43.15	43.26	0.00	506.15	0.085	0.09	7.778	A
C-AB	69.36	69.56	0.00	666.02	0.104	0.15	6.039	A
C-A	111.33	111.33	0.00	-	-	-	-	-
A-B	75.51	75.51	0.00	-	-	-	-	-
A-C	131.25	131.25	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	47.43	47.51	0.00	615.10	0.077	0.08	6.342	A
B-A	36.14	36.21	0.00	520.28	0.069	0.08	7.440	A
C-AB	56.17	56.30	0.00	660.07	0.085	0.12	5.967	A
C-A	95.15	95.15	0.00	-	-	-	-	-
A-B	63.24	63.24	0.00	-	-	-	-	-
A-C	109.92	109.92	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Woodlands Rd-Spen Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Spen Ln

Report generation date: 04/01/2019 15:38:10

« Existing Layout - 2024 Predicted - Kirklees Trip Rates, AM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - Kirklees Trip Rates				
Stream B-C	0.20	7.71	0.17	A
Stream B-A	0.18	12.29	0.16	B
Stream C-AB	0.32	5.83	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak " model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:38:09

File summary

Title	Woodlands Road/Spen Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - Kirklees Trip Rates, AM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - Kirklees Trip Rates, AM Peak	2024 Predicted - Kirklees Trip Rates	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.85	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A643 Spen Lane (West)	A	A643 Spen Lane (West)		Major
Woodlands Road	B	Woodlands Road		Minor
A643 Spen Lane (East)	C	A643 Spen Lane (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)
A643 Spen Lane (East)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	4.60	3.20	2.80	2.80	✓	1.00	27	24

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	514.528	0.090	0.227	0.143	0.324
1	B-C	701.190	0.103	0.260	-	-
1	C-B	631.874	0.234	0.234	-	-

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 (%)
A643 Spen Lane (West)	ONE HOUR	✓	426.00	100.000
Woodlands Road	ONE HOUR	✓	136.00	100.000
A643 Spen Lane (East)	ONE HOUR	✓	345.00	100.000

Turning Proportions

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.000	52.000	374.000
	Woodlands Road	49.000	0.000	87.000
	A643 Spen Lane (East)	280.000	65.000	0.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.00	0.12	0.88
	Woodlands Road	0.36	0.00	0.64
	A643 Spen Lane (East)	0.81	0.19	0.00

Vehicle Mix

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	A643 Spen Lane (East)	1.000	1.000	1.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	A643 Spen Lane (East)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.17	7.71	0.20	A
B-A	0.16	12.29	0.18	B
C-AB	0.17	5.83	0.32	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

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	65.50	65.02	0.00	609.08	0.108	0.12	6.611	A
B-A	36.89	36.49	0.00	400.82	0.092	0.10	9.870	A
C-AB	69.79	69.14	0.00	702.16	0.099	0.16	5.685	A
C-A	189.95	189.95	0.00	-	-	-	-	-
A-B	39.15	39.15	0.00	-	-	-	-	-
A-C	281.57	281.57	0.00	-	-	-	-	-

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	78.21	78.08	0.00	589.94	0.133	0.15	7.031	A
B-A	44.05	43.93	0.00	378.30	0.116	0.13	10.763	B
C-AB	89.92	89.69	0.00	717.81	0.125	0.22	5.736	A
C-A	220.23	220.23	0.00	-	-	-	-	-
A-B	46.75	46.75	0.00	-	-	-	-	-
A-C	336.22	336.22	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	95.79	95.58	0.00	562.71	0.170	0.20	7.703	A
B-A	53.95	53.75	0.00	346.96	0.155	0.18	12.268	B
C-AB	122.21	121.81	0.00	740.22	0.165	0.32	5.828	A
C-A	257.65	257.65	0.00	-	-	-	-	-
A-B	57.25	57.25	0.00	-	-	-	-	-
A-C	411.78	411.78	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	95.79	95.78	0.00	562.55	0.170	0.20	7.712	A
B-A	53.95	53.94	0.00	346.88	0.156	0.18	12.288	B
C-AB	122.34	122.33	0.00	740.37	0.165	0.32	5.835	A
C-A	257.52	257.52	0.00	-	-	-	-	-
A-B	57.25	57.25	0.00	-	-	-	-	-
A-C	411.78	411.78	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	78.21	78.41	0.00	589.69	0.133	0.15	7.045	A
B-A	44.05	44.25	0.00	378.21	0.116	0.13	10.787	B
C-AB	90.09	90.47	0.00	718.04	0.125	0.23	5.745	A
C-A	220.06	220.06	0.00	-	-	-	-	-
A-B	46.75	46.75	0.00	-	-	-	-	-
A-C	336.22	336.22	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	65.50	65.63	0.00	608.70	0.108	0.12	6.632	A
B-A	36.89	37.01	0.00	400.67	0.092	0.10	9.904	A
C-AB	70.04	70.28	0.00	702.38	0.100	0.17	5.702	A
C-A	189.69	189.69	0.00	-	-	-	-	-
A-B	39.15	39.15	0.00	-	-	-	-	-
A-C	281.57	281.57	0.00	-	-	-	-	-

Junctions 8				
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Filename: Woodlands Rd-Spen Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Woodlands Rd-Spen Ln

Report generation date: 04/01/2019 15:38:34

« Existing Layout - 2024 Predicted - Kirklees Trip Rates, PM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - Kirklees Trip Rates				
Stream B-C	0.23	7.62	0.18	A
Stream B-A	0.19	13.42	0.16	B
Stream C-AB	0.68	5.72	0.28	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 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:38:34

File summary

Title	Woodlands Road/Spenn Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - Kirklees Trip Rates, PM Peak

Data Errors and Warnings

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

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - Kirklees Trip Rates, PM Peak	2024 Predicted - Kirklees Trip Rates	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.34	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A643 Spen Lane (West)	A	A643 Spen Lane (West)		Major
Woodlands Road	B	Woodlands Road		Minor
A643 Spen Lane (East)	C	A643 Spen Lane (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)
A643 Spen Lane (East)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Woodlands Road	One lane plus flare				10.00	4.60	3.20	2.80	2.80	✓	1.00	27	24

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	510.638	0.089	0.225	0.141	0.321
1	B-C	706.179	0.104	0.262	-	-
1	C-B	631.874	0.234	0.234	-	-

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 (%)
A643 Spen Lane (West)	ONE HOUR	✓	380.00	100.000
Woodlands Road	ONE HOUR	✓	144.00	100.000
A643 Spen Lane (East)	ONE HOUR	✓	534.00	100.000

Turning Proportions

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.000	58.000	322.000
	Woodlands Road	47.000	0.000	97.000
	A643 Spen Lane (East)	436.000	98.000	0.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.00	0.15	0.85
	Woodlands Road	0.33	0.00	0.67
	A643 Spen Lane (East)	0.82	0.18	0.00

Vehicle Mix

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	1.000	1.000	1.000
	Woodlands Road	1.000	1.000	1.000
	A643 Spen Lane (East)	1.000	1.000	1.000

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

	To			
		A643 Spen Lane (West)	Woodlands Road	A643 Spen Lane (East)
From	A643 Spen Lane (West)	0.0	0.0	0.0
	Woodlands Road	0.0	0.0	0.0
	A643 Spen Lane (East)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.18	7.62	0.23	A
B-A	0.16	13.42	0.19	B
C-AB	0.28	5.72	0.68	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

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	73.03	72.50	0.00	622.80	0.117	0.13	6.537	A
B-A	35.38	34.98	0.00	381.49	0.093	0.10	10.378	B
C-AB	125.27	124.06	0.00	789.00	0.159	0.30	5.412	A
C-A	276.75	276.75	0.00	-	-	-	-	-
A-B	43.67	43.67	0.00	-	-	-	-	-
A-C	242.42	242.42	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	87.20	87.06	0.00	604.96	0.144	0.17	6.949	A
B-A	42.25	42.12	0.00	355.81	0.119	0.13	11.471	B
C-AB	166.56	166.07	0.00	821.80	0.203	0.43	5.499	A
C-A	313.49	313.49	0.00	-	-	-	-	-
A-B	52.14	52.14	0.00	-	-	-	-	-
A-C	289.47	289.47	0.00	-	-	-	-	-

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	106.80	106.57	0.00	579.08	0.184	0.22	7.615	A
B-A	51.75	51.52	0.00	320.18	0.162	0.19	13.389	B
C-AB	239.81	238.82	0.00	870.86	0.275	0.67	5.709	A
C-A	348.14	348.14	0.00	-	-	-	-	-
A-B	63.86	63.86	0.00	-	-	-	-	-
A-C	354.53	354.53	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	106.80	106.79	0.00	578.86	0.185	0.23	7.625	A
B-A	51.75	51.74	0.00	320.01	0.162	0.19	13.419	B
C-AB	240.24	240.21	0.00	871.33	0.276	0.68	5.724	A
C-A	347.71	347.71	0.00	-	-	-	-	-
A-B	63.86	63.86	0.00	-	-	-	-	-
A-C	354.53	354.53	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	87.20	87.42	0.00	604.64	0.144	0.17	6.965	A
B-A	42.25	42.47	0.00	355.56	0.119	0.14	11.507	B
C-AB	167.05	168.00	0.00	822.47	0.203	0.44	5.520	A
C-A	313.01	313.01	0.00	-	-	-	-	-
A-B	52.14	52.14	0.00	-	-	-	-	-
A-C	289.47	289.47	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	73.03	73.17	0.00	622.36	0.117	0.13	6.556	A
B-A	35.38	35.52	0.00	381.16	0.093	0.10	10.420	B
C-AB	125.94	126.46	0.00	789.56	0.160	0.31	5.440	A
C-A	276.08	276.08	0.00	-	-	-	-	-
A-B	43.67	43.67	0.00	-	-	-	-	-
A-C	242.42	242.42	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
Version: 8.0.5.523 [19102,19/06/2015] © Copyright TRL Limited, 2019				
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Filename: Balme Rd-Bradford Rd-High Street.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Balme Rd-Bradford Rd-High Street

Report generation date: 04/01/2019 15:16:26

« Existing Layout - 2024 Predicted - Kirklees Trip Rates, AM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - Kirklees Trip Rates				
Stream B-ACD	0.08	12.09	0.08	B
Stream A-BCD	0.92	4.47	0.26	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream D-AB	0.35	10.36	0.26	B
Stream D-BC	0.56	22.47	0.36	C
Stream C-ABD	0.05	4.62	0.04	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak " model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:16:25

File summary

Title	Balme Road/A638 Bradford Road/High Street Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Developments Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - Kirklees Trip Rates, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - Kirklees Trip Rates, AM Peak	2024 Predicted - Kirklees Trip Rates	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	9.64	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A638 Bradford Road (South)	A	A638 Bradford Road (South)		Major
High Street	B	High Street		Minor
A638 Bradford Road (North)	C	A638 Bradford Road (North)		Major
Balme Road	D	Balme Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A638 Bradford Road (South)	8.35		0.00		2.20	100.00	✓	0.00
A638 Bradford Road (North)	8.35		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
High Street	One lane	3.20										17	17
Balme Road	One lane plus flare				10.00	5.20	4.00	3.80	3.80	✓	1.00	25	28

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	631.874	-	-	-	-	-	-	0.220	0.314	0.220	-	-	-
1	B-A	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	-	0.207	0.207	0.104
1	B-C	647.346	0.089	0.225	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	B-D, offside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	C-B	631.874	0.220	0.220	0.314	-	-	-	-	-	-	-	-	-
1	D-A	702.900	-	-	-	-	-	-	0.245	-	0.097	-	-	-
1	D-B, nearside lane	547.200	0.142	0.142	0.323	-	-	-	0.226	0.226	0.089	-	-	-
1	D-B, offside lane	531.707	0.138	0.138	0.314	-	-	-	0.220	0.220	0.087	-	-	-
1	D-C	531.707	-	0.138	0.314	0.110	0.220	0.220	0.220	0.220	0.087	-	-	-

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 (%)
A638 Bradford Road (South)	ONE HOUR	✓	823.00	100.000
High Street	ONE HOUR	✓	22.00	100.000
A638 Bradford Road (North)	ONE HOUR	✓	593.00	100.000
Balme Road	ONE HOUR	✓	193.00	100.000

Turning Proportions

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.000	14.000	747.000	62.000
	High Street	1.000	0.000	13.000	8.000
	A638 Bradford Road (North)	522.000	10.000	0.000	61.000
	Balme Road	108.000	4.000	81.000	0.000

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.00	0.02	0.91	0.08
	High Street	0.05	0.00	0.59	0.36
	A638 Bradford Road (North)	0.88	0.02	0.00	0.10
	Balme Road	0.56	0.02	0.42	0.00

Vehicle Mix

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	1.000	1.000	1.000	1.000
	High Street	1.000	1.000	1.000	1.000
	A638 Bradford Road (North)	1.000	1.000	1.000	1.000
	Balme Road	1.000	1.000	1.000	1.000

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

	To				
From		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
	A638 Bradford Road (South)	0.0	0.0	0.0	0.0
	High Street	0.0	0.0	0.0	0.0
	A638 Bradford Road (North)	0.0	0.0	0.0	0.0
	Balme Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.08	12.09	0.08	B
A-BCD	0.26	4.47	0.92	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.26	10.36	0.35	B
D-BC	0.36	22.47	0.56	C
C-ABD	0.04	4.62	0.05	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

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	16.56	16.40	0.00	409.01	0.040	0.04	9.165	A
A-BCD	115.28	114.10	0.00	927.34	0.124	0.30	4.427	A
A-B	9.28	9.28	0.00	-	-	-	-	-
A-C	495.04	495.04	0.00	-	-	-	-	-
D-AB	83.08	82.40	0.00	563.30	0.147	0.17	7.475	A
D-BC	62.22	61.35	0.00	342.41	0.182	0.22	12.769	B
C-ABD	15.17	15.08	0.00	795.85	0.019	0.02	4.610	A
C-D	45.12	45.12	0.00	-	-	-	-	-
C-A	386.15	386.15	0.00	-	-	-	-	-

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	19.78	19.72	0.00	373.50	0.053	0.06	10.174	B
A-BCD	171.73	170.89	0.00	996.77	0.172	0.51	4.368	A
A-B	10.45	10.45	0.00	-	-	-	-	-
A-C	557.68	557.68	0.00	-	-	-	-	-
D-AB	99.32	99.09	0.00	529.22	0.188	0.23	8.365	A
D-BC	74.18	73.80	0.00	304.47	0.244	0.32	15.578	C
C-ABD	20.81	20.77	0.00	828.85	0.025	0.03	4.454	A
C-D	53.60	53.60	0.00	-	-	-	-	-
C-A	458.69	458.69	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-ACD	24.22	24.12	0.00	322.32	0.075	0.08	12.068	B
A-BCD	282.00	280.41	0.00	1092.07	0.258	0.90	4.450	A
A-B	11.48	11.48	0.00	-	-	-	-	-
A-C	612.66	612.66	0.00	-	-	-	-	-
D-AB	121.89	121.43	0.00	470.82	0.259	0.34	10.290	B
D-BC	90.61	89.69	0.00	250.93	0.361	0.55	22.198	C
C-ABD	30.75	30.69	0.00	873.88	0.035	0.05	4.269	A
C-D	65.10	65.10	0.00	-	-	-	-	-
C-A	557.06	557.06	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-ACD	24.22	24.22	0.00	321.93	0.075	0.08	12.091	B
A-BCD	282.92	282.87	0.00	1093.00	0.259	0.92	4.469	A
A-B	11.47	11.47	0.00	-	-	-	-	-
A-C	611.75	611.75	0.00	-	-	-	-	-
D-AB	121.90	121.88	0.00	469.40	0.260	0.35	10.358	B
D-BC	90.60	90.56	0.00	250.62	0.362	0.56	22.472	C
C-ABD	30.79	30.79	0.00	873.66	0.035	0.05	4.272	A
C-D	65.09	65.09	0.00	-	-	-	-	-
C-A	557.02	557.02	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-ACD	19.78	19.87	0.00	372.92	0.053	0.06	10.199	B
A-BCD	172.74	174.29	0.00	998.15	0.173	0.53	4.392	A
A-B	10.43	10.43	0.00	-	-	-	-	-
A-C	556.69	556.69	0.00	-	-	-	-	-
D-AB	99.33	99.78	0.00	527.73	0.188	0.23	8.420	A
D-BC	74.18	75.08	0.00	304.12	0.244	0.33	15.777	C
C-ABD	20.85	20.92	0.00	828.47	0.025	0.03	4.458	A
C-D	53.60	53.60	0.00	-	-	-	-	-
C-A	458.65	458.65	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-ACD	16.56	16.62	0.00	408.54	0.041	0.04	9.188	A
A-BCD	116.34	117.22	0.00	928.25	0.125	0.31	4.452	A
A-B	9.26	9.26	0.00	-	-	-	-	-
A-C	494.00	494.00	0.00	-	-	-	-	-
D-AB	83.09	83.32	0.00	562.11	0.148	0.18	7.524	A
D-BC	62.21	62.63	0.00	342.06	0.182	0.23	12.901	B
C-ABD	15.23	15.27	0.00	795.49	0.019	0.02	4.615	A
C-D	45.12	45.12	0.00	-	-	-	-	-
C-A	386.09	386.09	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Balme Rd-Bradford Rd-High Street.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Balme Rd-Bradford Rd-High Street

Report generation date: 04/01/2019 15:17:12

« Existing Layout - 2024 Predicted - Kirklees Trip Rates, PM Peak

- » Junction Network
- » Arms
- » Traffic Flows
- » Entry Flows
- » Turning Proportions
- » Vehicle Mix
- » Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - Kirklees Trip Rates				
Stream B-ACD	0.04	13.45	0.04	B
Stream A-BCD	2.37	8.04	0.52	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream D-AB	0.65	16.17	0.40	C
Stream D-BC	0.81	36.71	0.46	E
Stream C-ABD	0.07	3.94	0.05	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak " model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:17:12

File summary

Title	Balme Road/A638 Bradford Road/High Street Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Developments Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - Kirklees Trip Rates, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - Kirklees Trip Rates, PM Peak	2024 Predicted - Kirklees Trip Rates	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	13.10	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A638 Bradford Road (South)	A	A638 Bradford Road (South)		Major
High Street	B	High Street		Minor
A638 Bradford Road (North)	C	A638 Bradford Road (North)		Major
Balme Road	D	Balme Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A638 Bradford Road (South)	8.35		0.00		2.20	100.00	✓	0.00
A638 Bradford Road (North)	8.35		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
High Street	One lane	3.20										17	17
Balme Road	One lane plus flare				10.00	5.20	4.00	3.80	3.80	✓	1.00	25	28

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	631.874	-	-	-	-	-	-	0.220	0.314	0.220	-	-	-
1	B-A	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	-	0.207	0.207	0.104
1	B-C	647.346	0.089	0.225	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	B-D, offside lane	501.337	0.082	0.207	0.207	-	-	-	0.130	0.296	0.130	-	-	-
1	C-B	631.874	0.220	0.220	0.314	-	-	-	-	-	-	-	-	-
1	D-A	710.612	-	-	-	-	-	-	0.247	-	0.098	-	-	-
1	D-B, nearside lane	553.205	0.144	0.144	0.327	-	-	-	0.229	0.229	0.090	-	-	-
1	D-B, offside lane	525.703	0.137	0.137	0.310	-	-	-	0.217	0.217	0.086	-	-	-
1	D-C	525.703	-	0.137	0.310	0.109	0.217	0.217	0.217	0.217	0.086	-	-	-

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 (%)
A638 Bradford Road (South)	ONE HOUR	✓	755.00	100.000
High Street	ONE HOUR	✓	11.00	100.000
A638 Bradford Road (North)	ONE HOUR	✓	889.00	100.000
Balme Road	ONE HOUR	✓	208.00	100.000

Turning Proportions

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.000	5.000	630.000	120.000
	High Street	3.000	0.000	6.000	2.000
	A638 Bradford Road (North)	751.000	10.000	0.000	128.000
	Balme Road	126.000	10.000	72.000	0.000

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.00	0.01	0.83	0.16
	High Street	0.27	0.00	0.55	0.18
	A638 Bradford Road (North)	0.84	0.01	0.00	0.14
	Balme Road	0.61	0.05	0.35	0.00

Vehicle Mix

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	1.000	1.000	1.000	1.000
	High Street	1.000	1.000	1.000	1.000
	A638 Bradford Road (North)	1.000	1.000	1.000	1.000
	Balme Road	1.000	1.000	1.000	1.000

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

	To				
		A638 Bradford Road (South)	High Street	A638 Bradford Road (North)	Balme Road
From	A638 Bradford Road (South)	0.0	0.0	0.0	0.0
	High Street	0.0	0.0	0.0	0.0
	A638 Bradford Road (North)	0.0	0.0	0.0	0.0
	Balme Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	13.45	0.04	B
A-BCD	0.52	8.04	2.37	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.40	16.17	0.65	C
D-BC	0.46	36.71	0.81	E
C-ABD	0.05	3.94	0.07	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

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	8.28	8.19	0.00	385.43	0.021	0.02	9.541	A
A-BCD	210.45	207.89	0.00	832.28	0.253	0.64	5.766	A
A-B	2.82	2.82	0.00	-	-	-	-	-
A-C	355.13	355.13	0.00	-	-	-	-	-
D-AB	99.31	98.36	0.00	512.33	0.194	0.24	8.676	A
D-BC	57.29	56.35	0.00	296.18	0.193	0.23	14.953	B
C-ABD	19.29	19.19	0.00	933.91	0.021	0.02	3.935	A
C-D	94.65	94.65	0.00	-	-	-	-	-
C-A	555.34	555.34	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	9.89	9.86	0.00	343.53	0.029	0.03	10.789	B
A-BCD	303.99	302.32	0.00	879.89	0.345	1.06	6.262	A
A-B	2.95	2.95	0.00	-	-	-	-	-
A-C	371.79	371.79	0.00	-	-	-	-	-
D-AB	118.93	118.52	0.00	463.66	0.257	0.34	10.417	B
D-BC	68.06	67.54	0.00	249.18	0.273	0.37	19.761	C
C-ABD	27.11	27.07	0.00	986.09	0.027	0.04	3.753	A
C-D	112.43	112.43	0.00	-	-	-	-	-
C-A	659.65	659.65	0.00	-	-	-	-	-

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	12.11	12.05	0.00	281.26	0.043	0.04	13.369	B
A-BCD	494.46	489.48	0.00	952.49	0.519	2.30	7.858	A
A-B	2.65	2.65	0.00	-	-	-	-	-
A-C	334.16	334.16	0.00	-	-	-	-	-
D-AB	146.54	145.38	0.00	373.03	0.393	0.63	15.739	C
D-BC	82.47	80.81	0.00	181.27	0.455	0.78	35.268	E
C-ABD	51.50	51.36	0.00	1111.75	0.046	0.07	3.394	A
C-D	135.04	135.04	0.00	-	-	-	-	-
C-A	792.28	792.28	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-ACD	12.11	12.11	0.00	279.73	0.043	0.04	13.451	B
A-BCD	498.27	498.00	0.00	955.46	0.521	2.37	8.039	A
A-B	2.62	2.62	0.00	-	-	-	-	-
A-C	330.38	330.38	0.00	-	-	-	-	-
D-AB	146.59	146.52	0.00	369.00	0.397	0.65	16.170	C
D-BC	82.42	82.29	0.00	180.04	0.458	0.81	36.709	E
C-ABD	51.65	51.65	0.00	1111.22	0.046	0.07	3.397	A
C-D	135.01	135.01	0.00	-	-	-	-	-
C-A	792.14	792.14	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-ACD	9.89	9.95	0.00	341.59	0.029	0.03	10.856	B
A-BCD	307.30	312.28	0.00	883.84	0.348	1.12	6.403	A
A-B	2.92	2.92	0.00	-	-	-	-	-
A-C	368.50	368.50	0.00	-	-	-	-	-
D-AB	118.97	120.15	0.00	460.41	0.258	0.35	10.615	B
D-BC	68.02	69.71	0.00	247.91	0.274	0.39	20.383	C
C-ABD	27.22	27.35	0.00	985.16	0.028	0.04	3.761	A
C-D	112.41	112.41	0.00	-	-	-	-	-
C-A	659.56	659.56	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-ACD	8.28	8.31	0.00	384.22	0.022	0.02	9.577	A
A-BCD	212.80	214.61	0.00	834.35	0.255	0.67	5.849	A
A-B	2.80	2.80	0.00	-	-	-	-	-
A-C	352.80	352.80	0.00	-	-	-	-	-
D-AB	99.33	99.77	0.00	510.66	0.195	0.24	8.770	A
D-BC	57.27	57.84	0.00	295.32	0.194	0.25	15.194	C
C-ABD	19.39	19.44	0.00	933.20	0.021	0.03	3.939	A
C-D	94.64	94.64	0.00	-	-	-	-	-
C-A	555.25	555.25	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: West Ln-Oxford Rd.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\West Ln-Oxford Rd

Report generation date: 04/01/2019 15:27:04

« Existing Layout - 2024 Predicted - Kirklees Trip Rates, AM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - Kirklees Trip Rates				
Stream B-CD	2.70	31.23	0.74	D
Stream B-A	1.21	58.36	0.57	F
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	-	-	-	-
Stream AB-CD	0.00	3.86	0.00	A
Stream AB-C	-	-	-	-
Stream D-ABC	0.03	10.22	0.03	B
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	-	-	-	-
Stream CD-AB	2.60	13.18	0.64	B
Stream CD-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:27:04

File summary

Title	West Lane/A651 Oxford Road/Cambridge Chase Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - Kirklees Trip Rates, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - Kirklees Trip Rates, AM Peak	2024 Predicted - Kirklees Trip Rates	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D	24.26	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A651 Oxford Road (South)	A	A651 Oxford Road (South)		Major
West Lane	B	West Lane		Minor
A651 Oxford Road (North)	C	A651 Oxford Road (North)		Major
Cambridge Chase	D	Cambridge Chase		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A651 Oxford Road (South)	7.00		0.00		2.20	100.00	✓	0.00
A651 Oxford Road (North)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
West Lane	One lane plus flare				7.50	4.80	3.90	3.50	3.00	✓	1.00	20	17
Cambridge Chase	One lane	3.16										19	17

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-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
1	AB-D	631.874	-	-	-	-	-	0.234	0.234	0.234	-	-
1	B-A	429.265	0.075	0.189	0.189	-	-	0.119	0.270	-	0.119	0.270
1	B-CD	725.607	0.106	0.269	0.269	-	-	-	-	-	-	-
1	CD-B	631.874	0.234	0.234	0.234	-	-	-	-	-	-	-
1	D-AB	644.805	-	-	-	-	-	0.239	0.239	0.095	-	-
1	D-C	500.020	-	0.139	0.315	0.139	0.315	0.220	0.220	0.087	-	-

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 (%)
A651 Oxford Road (South)	ONE HOUR	✓	639.00	100.000
West Lane	ONE HOUR	✓	369.00	100.000
A651 Oxford Road (North)	ONE HOUR	✓	564.00	100.000
Cambridge Chase	ONE HOUR	✓	9.00	100.000

Turning Proportions

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.000	104.000	535.000	0.000
	West Lane	72.000	0.000	296.000	1.000
	A651 Oxford Road (North)	356.000	208.000	0.000	0.000
	Cambridge Chase	5.000	1.000	3.000	0.000

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.00	0.16	0.84	0.00
	West Lane	0.20	0.00	0.80	0.00
	A651 Oxford Road (North)	0.63	0.37	0.00	0.00
	Cambridge Chase	0.56	0.11	0.33	0.00

Vehicle Mix

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	1.000	1.000	1.000	1.000
	West Lane	1.000	1.000	1.000	1.000
	A651 Oxford Road (North)	1.000	1.000	1.000	1.000
	Cambridge Chase	1.000	1.000	1.000	1.000

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.0	0.0	0.0	0.0
	West Lane	0.0	0.0	0.0	0.0
	A651 Oxford Road (North)	0.0	0.0	0.0	0.0
	Cambridge Chase	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.74	31.23	2.70	D
B-A	0.57	58.36	1.21	F
A-B	-	-	-	-
A-C	-	-	-	-
A-D	-	-	-	-
AB-CD	0.00	3.86	0.00	A
AB-C	-	-	-	-
D-ABC	0.03	10.22	0.03	B
C-D	-	-	-	-
C-A	-	-	-	-
C-B	-	-	-	-
CD-AB	0.64	13.18	2.60	B
CD-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	223.60	221.07	0.00	570.62	0.392	0.63	10.227	B
B-A	54.21	53.17	0.00	258.14	0.210	0.26	17.479	C
A-B	78.30	78.30	0.00	-	-	-	-	-
A-C	402.78	402.78	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	1.76	1.75	0.00	935.36	0.002	0.00	3.855	A
AB-C	622.08	622.08	0.00	-	-	-	-	-
D-ABC	6.78	6.71	0.00	440.56	0.015	0.02	8.297	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	268.02	268.02	0.00	-	-	-	-	-
C-B	156.59	156.59	0.00	-	-	-	-	-
CD-AB	253.25	250.20	0.00	712.01	0.356	0.76	7.774	A
CD-A	175.83	175.83	0.00	-	-	-	-	-

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-CD	267.00	265.55	0.00	527.85	0.506	0.99	13.646	B
B-A	64.73	64.10	0.00	214.71	0.301	0.42	23.801	C
A-B	93.49	93.49	0.00	-	-	-	-	-
A-C	480.95	480.95	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	2.44	2.43	0.00	988.52	0.002	0.00	3.649	A
AB-C	744.07	744.07	0.00	-	-	-	-	-
D-ABC	8.09	8.07	0.00	408.87	0.020	0.02	8.982	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	320.04	320.04	0.00	-	-	-	-	-
C-B	186.99	186.99	0.00	-	-	-	-	-
CD-AB	338.60	336.76	0.00	732.83	0.462	1.22	9.115	A
CD-A	173.81	173.81	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-CD	327.00	321.16	0.00	446.88	0.732	2.46	27.443	D
B-A	79.27	76.59	0.00	144.12	0.550	1.09	51.434	F
A-B	114.51	114.51	0.00	-	-	-	-	-
A-C	589.05	589.05	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	3.53	3.52	0.00	1053.74	0.003	0.00	3.427	A
AB-C	906.68	906.68	0.00	-	-	-	-	-
D-ABC	9.91	9.88	0.00	362.65	0.027	0.03	10.205	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	391.96	391.96	0.00	-	-	-	-	-
C-B	229.01	229.01	0.00	-	-	-	-	-
CD-AB	483.18	478.01	0.00	762.46	0.634	2.52	12.718	B
CD-A	144.38	144.38	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-CD	327.00	326.04	0.00	439.42	0.744	2.70	31.230	D
B-A	79.27	78.79	0.00	139.57	0.568	1.21	58.356	F
A-B	114.51	114.51	0.00	-	-	-	-	-
A-C	589.05	589.05	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	3.59	3.59	0.00	1056.04	0.003	0.00	3.422	A
AB-C	911.49	911.49	0.00	-	-	-	-	-
D-ABC	9.91	9.91	0.00	362.01	0.027	0.03	10.223	B
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	391.96	391.96	0.00	-	-	-	-	-
C-B	229.01	229.01	0.00	-	-	-	-	-
CD-AB	485.97	485.63	0.00	764.71	0.635	2.60	13.184	B
CD-A	141.61	141.61	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-CD	267.00	273.46	0.00	521.77	0.512	1.08	14.848	B
B-A	64.73	67.72	0.00	210.62	0.307	0.46	25.669	D
A-B	93.49	93.49	0.00	-	-	-	-	-
A-C	480.95	480.95	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	2.53	2.53	0.00	992.61	0.003	0.00	3.638	A
AB-C	751.89	751.89	0.00	-	-	-	-	-
D-ABC	8.09	8.12	0.00	408.08	0.020	0.02	9.002	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	320.04	320.04	0.00	-	-	-	-	-
C-B	186.99	186.99	0.00	-	-	-	-	-
CD-AB	341.44	346.63	0.00	735.92	0.464	1.30	9.447	A
CD-A	170.99	170.99	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-CD	223.60	225.28	0.00	568.41	0.393	0.66	10.543	B
B-A	54.21	54.95	0.00	256.30	0.211	0.27	17.942	C
A-B	78.30	78.30	0.00	-	-	-	-	-
A-C	402.78	402.78	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	1.80	1.80	0.00	937.69	0.002	0.00	3.846	A
AB-C	626.25	626.25	0.00	-	-	-	-	-
D-ABC	6.78	6.79	0.00	440.18	0.015	0.02	8.308	A
C-D	0.00	0.00	0.00	-	-	-	-	-
C-A	268.02	268.02	0.00	-	-	-	-	-
C-B	156.59	156.59	0.00	-	-	-	-	-
CD-AB	255.15	257.18	0.00	713.68	0.358	0.80	7.952	A
CD-A	173.98	173.98	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
Version: 8.0.5.523 [19102,19/06/2015] © Copyright TRL Limited, 2019				
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Filename: West Ln-Oxford Rd.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\West Ln-Oxford Rd

Report generation date: 04/01/2019 15:27:27

« Existing Layout - 2024 Predicted - Kirklees Trip Rates, PM Peak

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2024 Predicted - Kirklees Trip Rates				
Stream B-CD	0.77	13.53	0.44	B
Stream B-A	0.77	34.44	0.45	D
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream A-D	-	-	-	-
Stream AB-CD	0.02	4.39	0.02	A
Stream AB-C	-	-	-	-
Stream D-ABC	0.03	9.41	0.03	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-
Stream C-B	-	-	-	-
Stream CD-AB	4.87	19.70	0.77	C
Stream CD-A	-	-	-	-

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

"D1 - 2018 Existing, AM Peak" model duration: 07:15 - 08:45

"D2 - 2018 Existing, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Base, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Base, PM Peak" model duration: 16:15 - 17:45

"D5 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D6 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D7 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D8 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:27:26

File summary

Title	West Lane/A651 Oxford Road/Cambridge Chase Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - Kirklees Trip Rates, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - Kirklees Trip Rates, PM Peak	2024 Predicted - Kirklees Trip Rates	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D	19.30	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
A651 Oxford Road (South)	A	A651 Oxford Road (South)		Major
West Lane	B	West Lane		Minor
A651 Oxford Road (North)	C	A651 Oxford Road (North)		Major
Cambridge Chase	D	Cambridge Chase		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A651 Oxford Road (South)	7.00		0.00		2.20	100.00	✓	0.00
A651 Oxford Road (North)	7.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
West Lane	One lane plus flare				7.50	4.80	3.90	3.50	3.00	✓	1.00	20	17
Cambridge Chase	One lane	3.16										19	17

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-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
1	AB-D	631.874	-	-	-	-	-	0.234	0.234	0.234	-	-
1	B-A	440.241	0.077	0.194	0.194	-	-	0.122	0.277	-	0.122	0.277
1	B-D	711.462	0.104	0.264	0.264	-	-	-	-	-	-	-
1	D-B	631.874	0.234	0.234	0.234	-	-	-	-	-	-	-
1	D-AB	644.805	-	-	-	-	-	0.239	0.239	0.095	-	-
1	D-C	500.020	-	0.139	0.315	0.139	0.315	0.220	0.220	0.087	-	-

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 (%)
A651 Oxford Road (South)	ONE HOUR	✓	493.00	100.000
West Lane	ONE HOUR	✓	264.00	100.000
A651 Oxford Road (North)	ONE HOUR	✓	674.00	100.000
Cambridge Chase	ONE HOUR	✓	10.00	100.000

Turning Proportions

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.000	59.000	434.000	0.000
	West Lane	76.000	0.000	183.000	5.000
	A651 Oxford Road (North)	414.000	257.000	0.000	3.000
	Cambridge Chase	3.000	5.000	2.000	0.000

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	0.00	0.12	0.88	0.00
	West Lane	0.29	0.00	0.69	0.02
	A651 Oxford Road (North)	0.61	0.38	0.00	0.00
	Cambridge Chase	0.30	0.50	0.20	0.00

Vehicle Mix

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

	To				
		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
From	A651 Oxford Road (South)	1.000	1.000	1.000	1.000
	West Lane	1.000	1.000	1.000	1.000
	A651 Oxford Road (North)	1.000	1.000	1.000	1.000
	Cambridge Chase	1.000	1.000	1.000	1.000

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

	To				
From		A651 Oxford Road (South)	West Lane	A651 Oxford Road (North)	Cambridge Chase
	A651 Oxford Road (South)	0.0	0.0	0.0	0.0
	West Lane	0.0	0.0	0.0	0.0
	A651 Oxford Road (North)	0.0	0.0	0.0	0.0
	Cambridge Chase	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.44	13.53	0.77	B
B-A	0.45	34.44	0.77	D
A-B	-	-	-	-
A-C	-	-	-	-
A-D	-	-	-	-
AB-CD	0.02	4.39	0.02	A
AB-C	-	-	-	-
D-ABC	0.03	9.41	0.03	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	-	-	-	-
CD-AB	0.77	19.70	4.87	C
CD-A	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	141.54	140.27	0.00	582.89	0.243	0.32	8.111	A
B-A	57.22	56.20	0.00	276.52	0.207	0.26	16.268	C
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	326.74	326.74	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	7.57	7.53	0.00	827.70	0.009	0.01	4.389	A
AB-C	459.44	459.44	0.00	-	-	-	-	-
D-ABC	7.53	7.46	0.00	465.95	0.016	0.02	7.851	A
C-D	2.26	2.26	0.00	-	-	-	-	-
C-A	311.68	311.68	0.00	-	-	-	-	-
C-B	193.48	193.48	0.00	-	-	-	-	-
CD-AB	334.43	330.14	0.00	763.67	0.438	1.07	8.271	A
CD-A	176.70	176.70	0.00	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	169.01	168.51	0.00	546.56	0.309	0.44	9.510	A
B-A	68.32	67.81	0.00	241.24	0.283	0.38	20.695	C
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	390.16	390.16	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	10.36	10.35	0.00	866.07	0.012	0.01	4.206	A
AB-C	548.31	548.31	0.00	-	-	-	-	-
D-ABC	8.99	8.97	0.00	436.32	0.021	0.02	8.423	A
C-D	2.70	2.70	0.00	-	-	-	-	-
C-A	372.18	372.18	0.00	-	-	-	-	-
C-B	231.04	231.04	0.00	-	-	-	-	-
CD-AB	448.09	445.09	0.00	793.81	0.564	1.83	10.363	B
CD-A	162.30	162.30	0.00	-	-	-	-	-

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-CD	206.99	205.77	0.00	477.38	0.434	0.75	13.193	B
B-A	83.68	82.25	0.00	190.04	0.440	0.74	32.963	D
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	477.84	477.84	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	15.07	15.05	0.00	916.42	0.016	0.02	3.993	A
AB-C	668.54	668.54	0.00	-	-	-	-	-
D-ABC	11.01	10.98	0.00	393.77	0.028	0.03	9.404	A
C-D	3.30	3.30	0.00	-	-	-	-	-
C-A	455.82	455.82	0.00	-	-	-	-	-
C-B	282.96	282.96	0.00	-	-	-	-	-
CD-AB	642.51	631.78	0.00	836.53	0.768	4.51	17.630	C
CD-A	105.06	105.06	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-CD	206.99	206.91	0.00	472.78	0.438	0.77	13.533	B
B-A	83.68	83.54	0.00	187.76	0.446	0.77	34.440	D
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	477.84	477.84	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	15.17	15.17	0.00	917.05	0.017	0.02	3.993	A
AB-C	669.58	669.58	0.00	-	-	-	-	-
D-ABC	11.01	11.01	0.00	393.67	0.028	0.03	9.407	A
C-D	3.30	3.30	0.00	-	-	-	-	-
C-A	455.82	455.82	0.00	-	-	-	-	-
C-B	282.96	282.96	0.00	-	-	-	-	-
CD-AB	652.05	650.58	0.00	841.94	0.774	4.87	19.703	C
CD-A	95.54	95.54	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-CD	169.01	170.24	0.00	542.85	0.311	0.46	9.694	A
B-A	68.32	69.76	0.00	238.35	0.287	0.41	21.525	C
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	390.16	390.16	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	10.49	10.51	0.00	867.08	0.012	0.01	4.202	A
AB-C	549.91	549.91	0.00	-	-	-	-	-
D-ABC	8.99	9.02	0.00	436.20	0.021	0.02	8.429	A
C-D	2.70	2.70	0.00	-	-	-	-	-
C-A	372.18	372.18	0.00	-	-	-	-	-
C-B	231.04	231.04	0.00	-	-	-	-	-
CD-AB	454.78	466.25	0.00	800.16	0.568	2.01	11.304	B
CD-A	155.65	155.65	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-CD	141.54	142.07	0.00	580.84	0.244	0.33	8.216	A
B-A	57.22	57.80	0.00	274.92	0.208	0.27	16.626	C
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	326.74	326.74	0.00	-	-	-	-	-
A-D	0.00	0.00	0.00	-	-	-	-	-
AB-CD	7.68	7.69	0.00	828.80	0.009	0.01	4.384	A
AB-C	461.13	461.13	0.00	-	-	-	-	-
D-ABC	7.53	7.55	0.00	465.84	0.016	0.02	7.855	A
C-D	2.26	2.26	0.00	-	-	-	-	-
C-A	311.68	311.68	0.00	-	-	-	-	-
C-B	193.48	193.48	0.00	-	-	-	-	-
CD-AB	337.70	341.17	0.00	766.36	0.441	1.14	8.586	A
CD-A	173.50	173.50	0.00	-	-	-	-	-

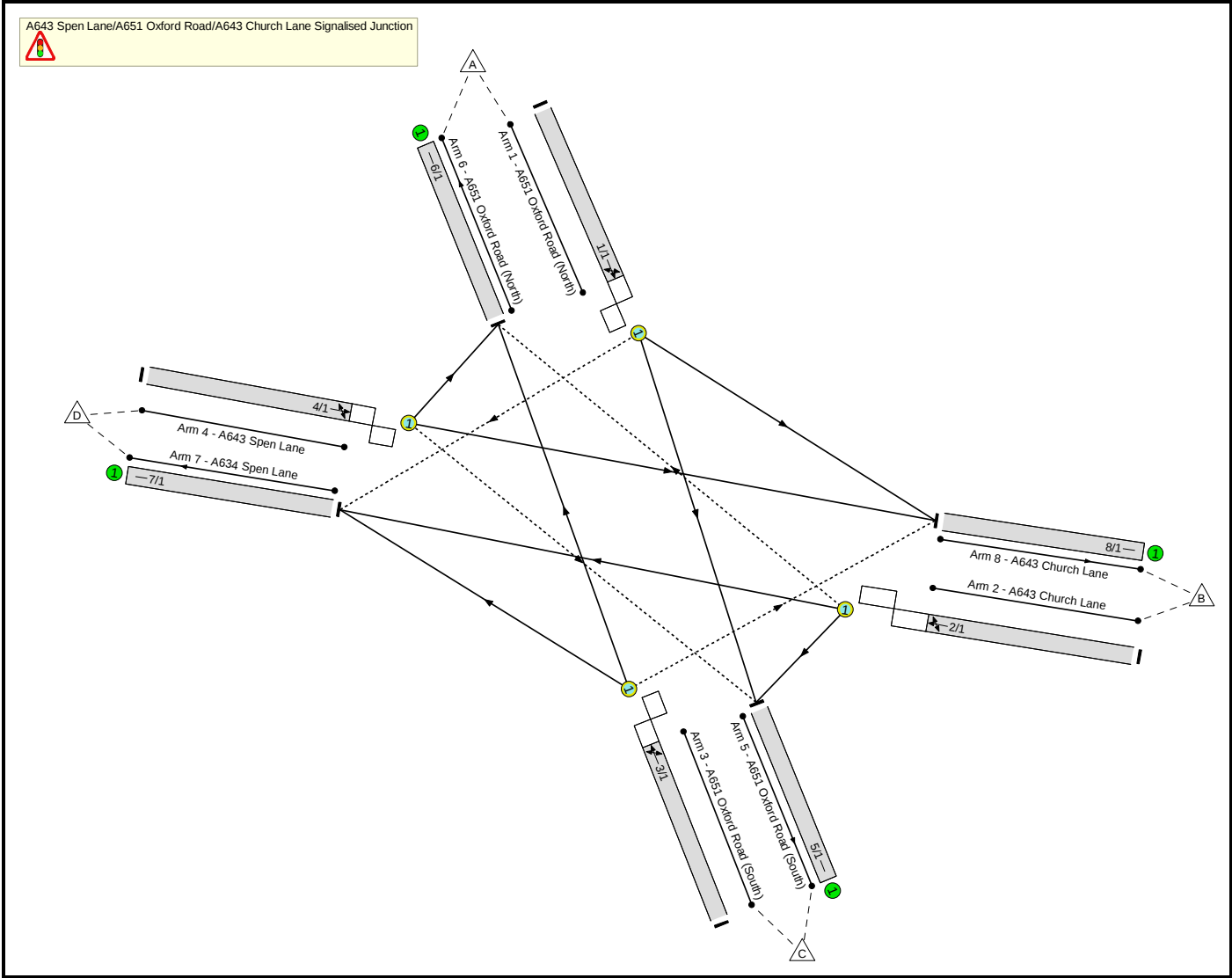
Full Input Data And Results

Full Input Data And Results

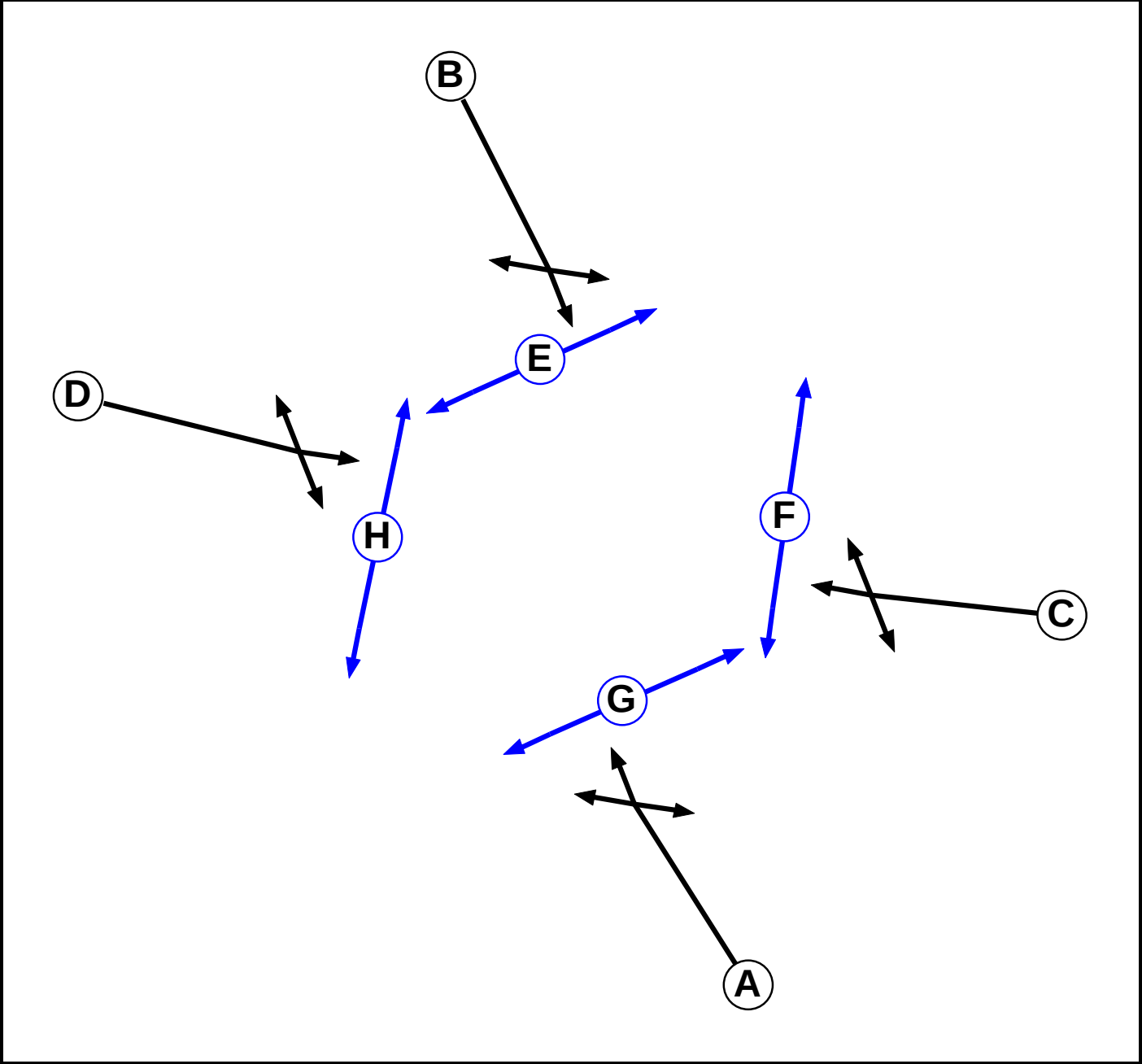
User and Project Details

Project:	Sykes Meadows, Cliffe Lane, Gomersal
Title:	A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction
Location:	Gomersal
File name:	Church Ln-Oxford Rd-Spen Ln Signals - TO KIRKLEES SIGNAL SPEC - 186s.lsg3x
Author:	R Donaldson
Company:	Bryan G Hall
Address:	
Notes:	2024 Predicted – Kirklees Trip Rates - LinSig Output

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		10	10
B	Traffic		10	10
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		9	9
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		9	9

Full Input Data And Results

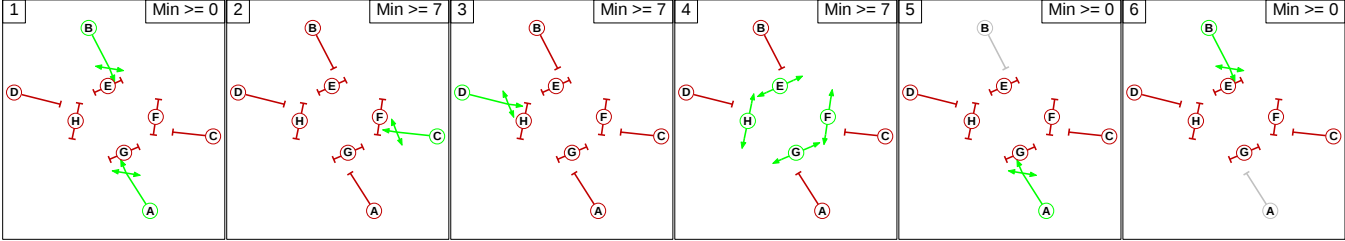
Phase Intergreens Matrix

Terminating Phase	Starting Phase								
		A	B	C	D	E	F	G	H
	A		-	8	8	14	14	7	14
	B	-		8	8	8	14	14	14
	C	8	8		7	13	5	13	10
	D	6	6	6		9	12	13	5
	E	5	11	5	5		-	-	-
	F	5	5	8	5	-		-	-
	G	8	5	5	5	-	-		-
	H	5	5	5	12	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage						
		1	2	3	4	5	6
	1		8	8	14	0	0
	2	8		7	13	8	8
	3	6	6		13	6	6
	4	11	8	12		8	11
	5	2	8	8	14		2
	6	2	8	8	14	2	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (A651 Oxford Road (North))	7/1 (Right)	1439	0	3/1	1.09	All	4.00	2.00	0.50	4	2.00
2/1 (A643 Church Lane)	6/1 (Right)	1439	0	4/1	1.09	All	6.00	3.00	0.50	6	2.00
3/1 (A651 Oxford Road (South))	8/1 (Right)	1439	0	1/1	1.09	All	4.00	2.00	0.50	4	2.00
4/1 (A643 Spen Lane)	5/1 (Right)	1439	0	2/1	1.09	All	4.00	2.00	0.50	4	2.00

Full Input Data And Results

Lane Input Data

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A651 Oxford Road (North))	O	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
											Arm 7 Right	10.00
											Arm 8 Left	10.00
											Arm 5 Left	12.50
2/1 (A643 Church Lane)	O	C	2	3	60.0	Geom	-	3.70	10.00	Y	Arm 6 Right	43.50
											Arm 7 Ahead	Inf
3/1 (A651 Oxford Road (South))	O	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Left	30.00
											Arm 8 Right	12.00
4/1 (A643 Spen Lane)	O	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Right	48.00
											Arm 6 Left	9.00
											Arm 8 Ahead	Inf
5/1 (A651 Oxford Road (South))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A651 Oxford Road (North))	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (A634 Spen Lane)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (A643 Church Lane)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
7: '2024 Predicted AM Peak - Kirklees Trip Rates'	07:30	08:30	01:00	
8: '2024 Predicted PM Peak - Kirklees Trip Rates'	16:30	17:30	01:00	

Scenario 7: '2024 Predicted AM Peak - Kirklees Trip Rates' (FG7: '2024 Predicted AM Peak - Kirklees Trip Rates', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	119	251	51	421
	B	209	0	29	170	408
	C	386	49	0	57	492
	D	67	388	48	0	503
	Tot.	662	556	328	278	1824

Traffic Lane Flows

Lane	Scenario 7: 2024 Predicted AM Peak - Kirklees Trip Rates
Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	
1/1	421
2/1	408
3/1	492
4/1	503
5/1	328
6/1	662
7/1	278
8/1	556

Lane Saturation Flows

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A651 Oxford Road (North))	3.50	0.00	Y	Arm 5 Ahead	Inf	59.6 %	1853	1853
				Arm 7 Right	10.00	12.1 %		
				Arm 8 Left	10.00	28.3 %		
2/1 (A643 Church Lane)	3.70	10.00	Y	Arm 5 Left	12.50	7.1 %	1525	1525
				Arm 6 Right	43.50	51.2 %		
				Arm 7 Ahead	Inf	41.7 %		
3/1 (A651 Oxford Road (South))	3.50	0.00	Y	Arm 6 Ahead	Inf	78.5 %	1930	1930
				Arm 7 Left	30.00	11.6 %		
				Arm 8 Right	12.00	10.0 %		
4/1 (A643 Spen Lane)	3.00	0.00	Y	Arm 5 Right	48.00	9.5 %	1868	1868
				Arm 6 Left	9.00	13.3 %		
				Arm 8 Ahead	Inf	77.1 %		
5/1 (A651 Oxford Road (South) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A651 Oxford Road (North) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A634 Spen Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A643 Church Lane Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2024 Predicted PM Peak - Kirklees Trip Rates' (FG8: '2024 Predicted PM Peak - Kirklees Trip Rates', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	138	258	72	468
	B	114	0	30	334	478
	C	328	33	0	130	491
	D	71	214	71	0	356
	Tot.	513	385	359	536	1793

Traffic Lane Flows

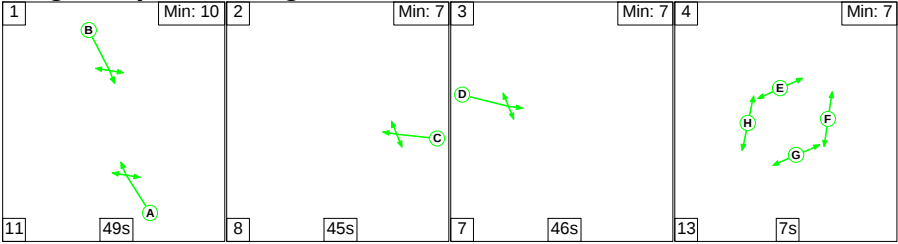
Lane	Scenario 8: 2024 Predicted PM Peak - Kirklees Trip Rates
Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	
1/1	468
2/1	478
3/1	491
4/1	356
5/1	359
6/1	513
7/1	536
8/1	385

Lane Saturation Flows

Junction: A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction									
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)	
1/1 (A651 Oxford Road (North))	3.50	0.00	Y	Arm 5 Ahead	Inf	55.1 %	1841	1841	
				Arm 7 Right	10.00	15.4 %			
				Arm 8 Left	10.00	29.5 %			
2/1 (A643 Church Lane)	3.70	10.00	Y	Arm 5 Left	12.50	6.3 %	1541	1541	
				Arm 6 Right	43.50	23.8 %			
				Arm 7 Ahead	Inf	69.9 %			
3/1 (A651 Oxford Road (South))	3.50	0.00	Y	Arm 6 Ahead	Inf	66.8 %	1923	1923	
				Arm 7 Left	30.00	26.5 %			
				Arm 8 Right	12.00	6.7 %			
	4/1 (A643 Spen Lane)	3.00	0.00	Y	Arm 5 Right	48.00	19.9 %	1842	1842
					Arm 6 Left	9.00	19.9 %		
					Arm 8 Ahead	Inf	60.1 %		
5/1 (A651 Oxford Road (South) Lane 1)	Infinite Saturation Flow						Inf	Inf	
6/1 (A651 Oxford Road (North) Lane 1)	Infinite Saturation Flow						Inf	Inf	
7/1 (A634 Spen Lane Lane 1)	Infinite Saturation Flow						Inf	Inf	
8/1 (A643 Church Lane Lane 1)	Infinite Saturation Flow						Inf	Inf	

Scenario 7: '2024 Predicted AM Peak - Kirklees Trip Rates' (FG7: '2024 Predicted AM Peak - Kirklees Trip Rates', Plan 1: 'Network Control Plan 1')

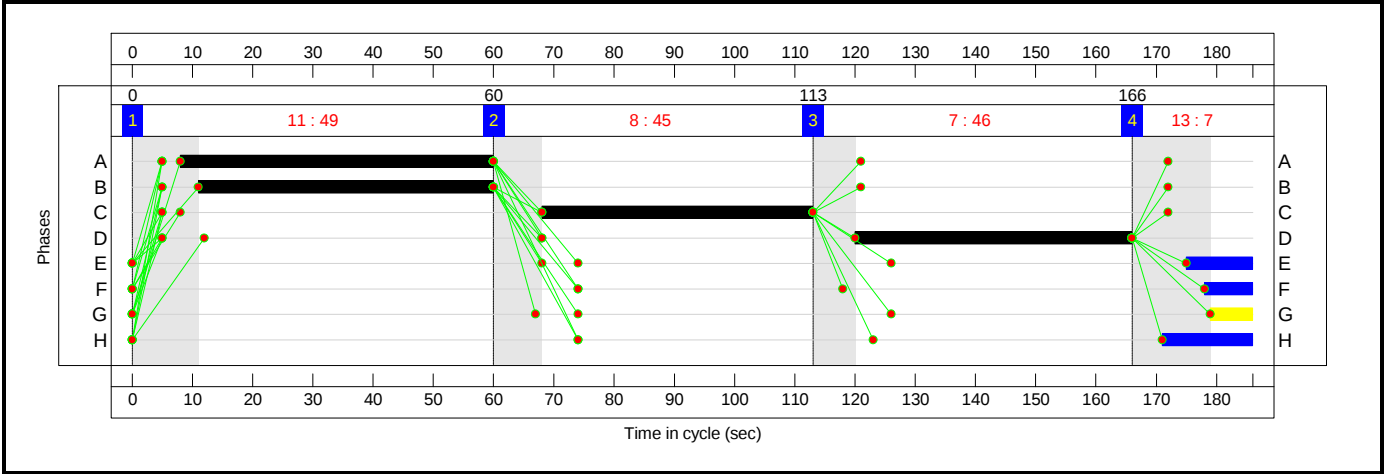
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	49	45	46	7
Change Point	0	60	113	166

Signal Timings Diagram



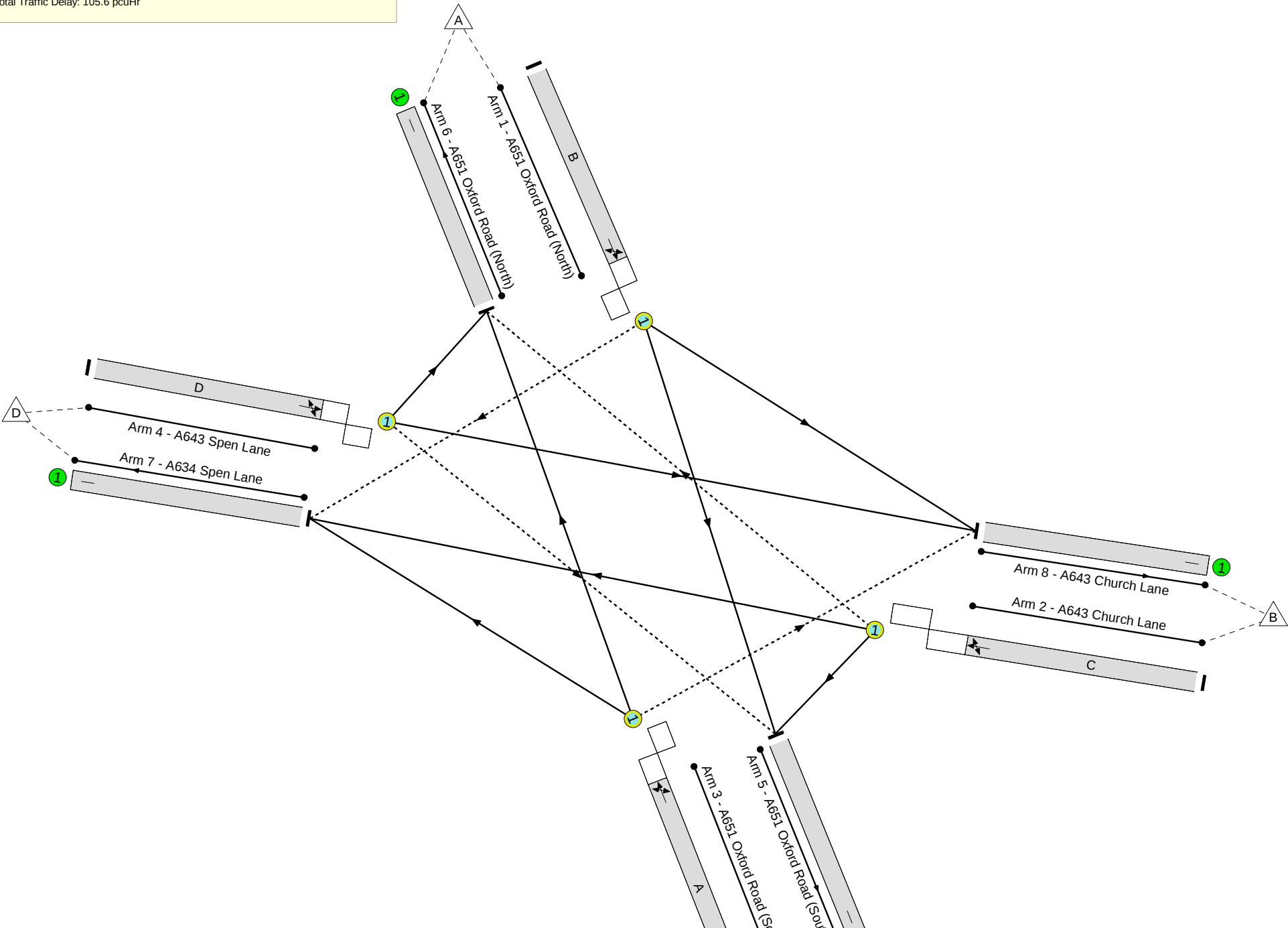
Full Input Data And Results



A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction

PRC: -20.2 %

Total Traffic Delay: 105.6 pcuHr



Full Input Data And Results

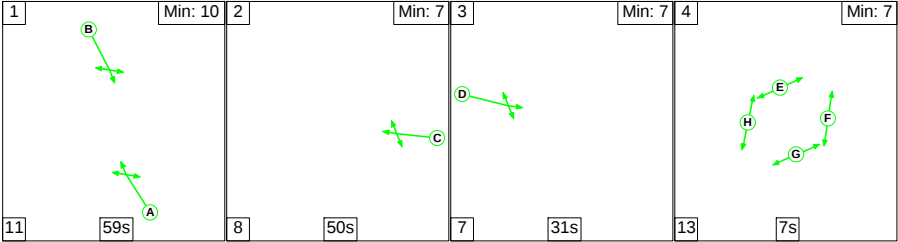
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	108.2%
A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	108.2%
1/1	A651 Oxford Road (North) Ahead Right Left	O	N/A	N/A	B		1	49	-	421	1853	398	105.8%
2/1	A643 Church Lane Left Right Ahead	O	N/A	N/A	C		1	45	-	408	1525	377	108.2%
3/1	A651 Oxford Road (South) Ahead Left Right	O	N/A	N/A	A		1	52	-	492	1930	526	93.5%
4/1	A643 Spen Lane Right Left Ahead	O	N/A	N/A	D		1	46	-	503	1868	472	106.6%
5/1	A651 Oxford Road (South)	U	N/A	N/A	-		-	-	-	328	Inf	Inf	0.0%
6/1	A651 Oxford Road (North)	U	N/A	N/A	-		-	-	-	662	Inf	Inf	0.0%
7/1	A634 Spen Lane	U	N/A	N/A	-		-	-	-	278	Inf	Inf	0.0%
8/1	A643 Church Lane	U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction	-	-	68	209	59	40.4	64.7	0.5	105.6	-	-	-	-
A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	-	-	68	209	59	40.4	64.7	0.5	105.6	-	-	-	-
1/1	421	398	20	0	28	9.6	17.5	0.3	27.4	234.7	22.9	17.5	40.4
2/1	408	377	0	168	25	10.3	20.4	0.0	30.7	271.3	22.7	20.4	43.1
3/1	492	492	48	0	1	8.8	5.4	0.2	14.4	105.3	24.7	5.4	30.2
4/1	503	472	0	41	4	11.7	21.4	0.0	33.0	236.5	27.6	21.4	49.0
5/1	309	309	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	642	642	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	262	262	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	526	526	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -20.2 Total Delay for Signalled Lanes (pcuHr): 105.62 Cycle Time (s): 186 PRC Over All Lanes (%): -20.2 Total Delay Over All Lanes(pcuHr): 105.62													

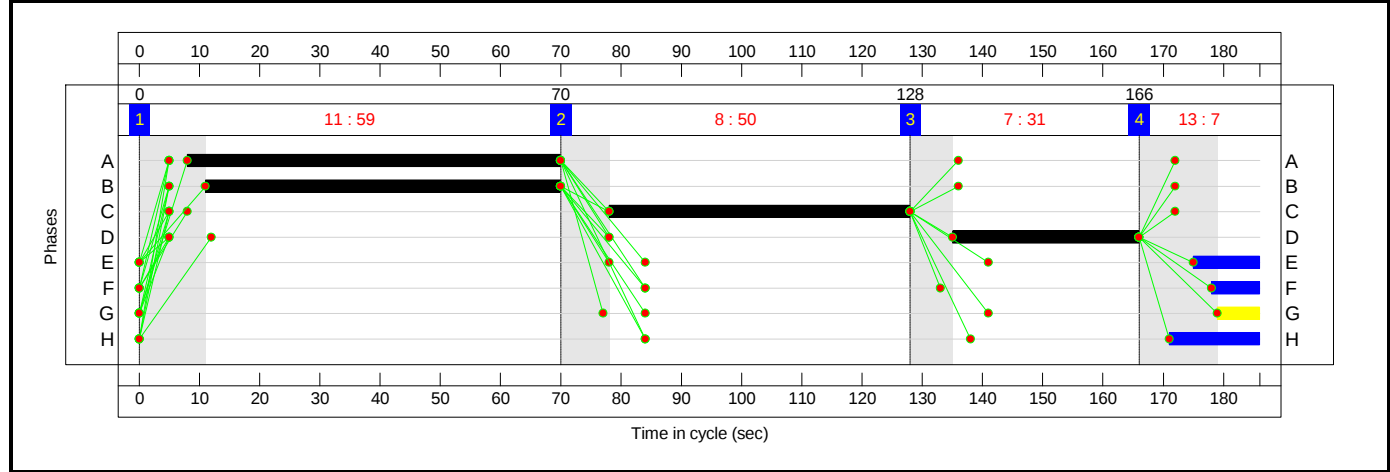
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	59	50	31	7
Change Point	0	70	128	166

Signal Timings Diagram



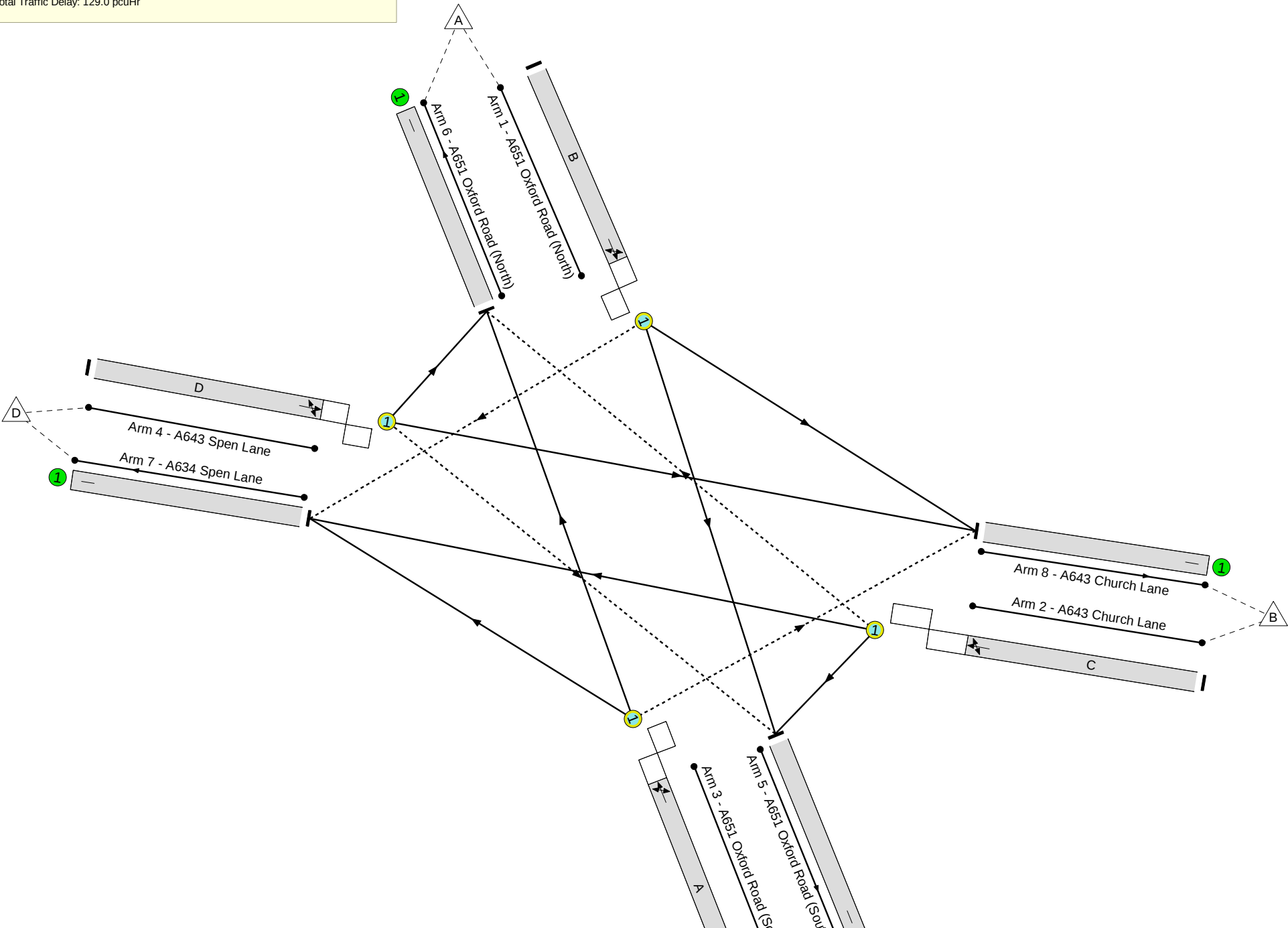
Full Input Data And Results



A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction

PRC: -25.7 %

Total Traffic Delay: 129.0 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	113.1%
A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	-	-	N/A	-	-		-	-	-	-	-	-	113.1%
1/1	A651 Oxford Road (North) Ahead Right Left	O	N/A	N/A	B		1	59	-	468	1841	418	111.9%
2/1	A643 Church Lane Left Right Ahead	O	N/A	N/A	C		1	50	-	478	1541	423	113.1%
3/1	A651 Oxford Road (South) Ahead Left Right	O	N/A	N/A	A		1	62	-	491	1923	651	75.4%
4/1	A643 Spen Lane Right Left Ahead	O	N/A	N/A	D		1	31	-	356	1842	317	112.3%
5/1	A651 Oxford Road (South)	U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
6/1	A651 Oxford Road (North)	U	N/A	N/A	-		-	-	-	513	Inf	Inf	0.0%
7/1	A634 Spen Lane	U	N/A	N/A	-		-	-	-	536	Inf	Inf	0.0%
8/1	A643 Church Lane	U	N/A	N/A	-		-	-	-	385	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A643 Spen Lane/A652 Oxford Road/A643 Church Lane Signalised Junction	-	-	92	142	27	43.1	85.3	0.5	129.0	-	-	-	-
A643 Spen Lane/A651 Oxford Road/A643 Church Lane Signalised Junction	-	-	92	142	27	43.1	85.3	0.5	129.0	-	-	-	-
1/1	468	419	61	0	3	12.2	28.9	0.4	41.6	319.9	26.7	28.9	55.7
2/1	478	423	0	88	13	13.1	31.5	0.0	44.6	336.0	27.6	31.5	59.1
3/1	491	491	31	0	2	7.5	1.5	0.1	9.1	66.4	22.6	1.5	24.1
4/1	356	317	0	54	10	10.3	23.4	0.0	33.7	340.9	20.8	23.4	44.1
5/1	321	321	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	490	490	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	347	347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -25.7 Total Delay for Signalled Lanes (pcuHr): 128.98 Cycle Time (s): 186 PRC Over All Lanes (%): -25.7 Total Delay Over All Lanes(pcuHr): 128.98													

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Site Access-Cliffe Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Site Access-Cliffe Ln

Report generation date: 04/01/2019 15:20:46

« Proposed Layout - 2024 Predicted - Kirklees Trip Rates, AM Peak

- » Junction Network
- » Arms
- » Traffic Flows
- » Entry Flows
- » Turning Proportions
- » Vehicle Mix
- » Results

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Proposed Layout - 2024 Predicted - Kirklees Trip Rates				
Stream B-AC	0.13	7.62	0.12	A
Stream C-AB	0.03	5.40	0.03	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 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D2 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Predicted - Kirklees Trip Rates, AM Peak " model duration: 07:15 - 08:45

"D4 - 2024 Predicted - Kirklees Trip Rates, PM Peak" model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:20:46

File summary

Title	Site Access/Cliffe Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - Kirklees Trip Rates, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - Kirklees Trip Rates, AM Peak	2024 Predicted - Kirklees Trip Rates	AM Peak		ONE HOUR	07:15	08:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.11	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Cliffe Lane (West)	A	Cliffe Lane (West)		Major
Site Access	B	Site Access		Minor
Cliffe Lane (East)	C	Cliffe Lane (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)
Cliffe Lane (East)	6.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Site Access	One lane	3.20										16	15

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	500.017	0.091	0.230	0.145	0.329
1	B-C	646.062	0.099	0.250	-	-
1	C-B	631.874	0.245	0.245	-	-

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 (%)
Cliffe Lane (West)	ONE HOUR	✓	172.00	100.000
Site Access	ONE HOUR	✓	56.00	100.000
Cliffe Lane (East)	ONE HOUR	✓	171.00	100.000

Turning Proportions

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.000	6.000	166.000
	Site Access	17.000	0.000	39.000
	Cliffe Lane (East)	158.000	13.000	0.000

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.00	0.03	0.97
	Site Access	0.30	0.00	0.70
	Cliffe Lane (East)	0.92	0.08	0.00

Vehicle Mix

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	1.000	1.000	1.000
	Site Access	1.000	1.000	1.000
	Cliffe Lane (East)	1.000	1.000	1.000

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.0	0.0	0.0
	Site Access	0.0	0.0	0.0
	Cliffe Lane (East)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	7.62	0.13	A
C-AB	0.03	5.40	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

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	42.16	41.83	0.00	553.20	0.076	0.08	7.035	A
C-AB	11.81	11.73	0.00	679.14	0.017	0.02	5.394	A
C-A	116.93	116.93	0.00	-	-	-	-	-
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	124.97	124.97	0.00	-	-	-	-	-

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	50.34	50.27	0.00	545.29	0.092	0.10	7.272	A
C-AB	14.63	14.61	0.00	688.65	0.021	0.03	5.340	A
C-A	139.09	139.09	0.00	-	-	-	-	-
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	149.23	149.23	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	61.66	61.54	0.00	534.29	0.115	0.13	7.612	A
C-AB	18.84	18.81	0.00	701.91	0.027	0.03	5.269	A
C-A	169.43	169.43	0.00	-	-	-	-	-
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	182.77	182.77	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	61.66	61.65	0.00	534.29	0.115	0.13	7.615	A
C-AB	18.85	18.85	0.00	701.92	0.027	0.03	5.270	A
C-A	169.43	169.43	0.00	-	-	-	-	-
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	182.77	182.77	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	50.34	50.45	0.00	545.28	0.092	0.10	7.278	A
C-AB	14.64	14.68	0.00	688.66	0.021	0.03	5.341	A
C-A	139.08	139.08	0.00	-	-	-	-	-
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	149.23	149.23	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	42.16	42.24	0.00	553.19	0.076	0.08	7.045	A
C-AB	11.82	11.85	0.00	679.15	0.017	0.02	5.396	A
C-A	116.91	116.91	0.00	-	-	-	-	-
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	124.97	124.97	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Filename: Site Access-Cliffe Ln.arc8

Path: Y:\2015\15-376 to 15-400\15-398 Cliffe Lane, Gomersal\Technical\Junction Models\PICADY\Site Access-Cliffe Ln

Report generation date: 04/01/2019 15:21:07

« Proposed Layout - 2024 Predicted - Kirklees Trip Rates, PM Peak

- » Junction Network
- » Arms
- » Traffic Flows
- » Entry Flows
- » Turning Proportions
- » Vehicle Mix
- » Results

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
Proposed Layout - 2024 Predicted - Kirklees Trip Rates				
Stream B-AC	0.05	7.14	0.04	A
Stream C-AB	0.13	5.56	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 - 2024 Predicted - TRICS Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D2 - 2024 Predicted - TRICS Trip Rates, PM Peak" model duration: 16:15 - 17:45

"D3 - 2024 Predicted - Kirklees Trip Rates, AM Peak" model duration: 07:15 - 08:45

"D4 - 2024 Predicted - Kirklees Trip Rates, PM Peak " model duration: 16:15 - 17:45

Run using Junctions 8.0.5.523 at 04/01/2019 15:21:07

File summary

Title	Site Access/Cliffe Lane Priority Junction
Location	Gomersal
Site Number	
Date	18/12/2018
Version	
Status	(new file)
Identifier	
Client	KCS Development Ltd
Jobnumber	15-398
Enumerator	RDONALDSON
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 - 2024 Predicted - Kirklees Trip Rates, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Predicted - Kirklees Trip Rates, PM Peak	2024 Predicted - Kirklees Trip Rates	PM Peak		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.03	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Cliffe Lane (West)	A	Cliffe Lane (West)		Major
Site Access	B	Site Access		Minor
Cliffe Lane (East)	C	Cliffe Lane (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)
Cliffe Lane (East)	6.00		0.00		2.20	100.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Site Access	One lane	3.20										16	15

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	500.017	0.091	0.230	0.145	0.329
1	B-C	646.062	0.099	0.250	-	-
1	C-B	631.874	0.245	0.245	-	-

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 (%)
Cliffe Lane (West)	ONE HOUR	✓	198.00	100.000
Site Access	ONE HOUR	✓	21.00	100.000
Cliffe Lane (East)	ONE HOUR	✓	212.00	100.000

Turning Proportions

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.000	18.000	180.000
	Site Access	6.000	0.000	15.000
	Cliffe Lane (East)	174.000	38.000	0.000

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.00	0.09	0.91
	Site Access	0.29	0.00	0.71
	Cliffe Lane (East)	0.82	0.18	0.00

Vehicle Mix

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	1.000	1.000	1.000
	Site Access	1.000	1.000	1.000
	Cliffe Lane (East)	1.000	1.000	1.000

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

	To			
		Cliffe Lane (West)	Site Access	Cliffe Lane (East)
From	Cliffe Lane (West)	0.0	0.0	0.0
	Site Access	0.0	0.0	0.0
	Cliffe Lane (East)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	7.14	0.05	A
C-AB	0.08	5.56	0.13	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

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	15.81	15.69	0.00	549.47	0.029	0.03	6.742	A
C-AB	35.19	34.90	0.00	682.62	0.052	0.07	5.557	A
C-A	124.42	124.42	0.00	-	-	-	-	-
A-B	13.55	13.55	0.00	-	-	-	-	-
A-C	135.51	135.51	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	18.85	0.00	540.16	0.035	0.04	6.905	A
C-AB	43.80	43.71	0.00	692.90	0.063	0.09	5.548	A
C-A	146.79	146.79	0.00	-	-	-	-	-
A-B	16.18	16.18	0.00	-	-	-	-	-
A-C	161.82	161.82	0.00	-	-	-	-	-

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	23.12	23.08	0.00	527.23	0.044	0.05	7.140	A
C-AB	56.69	56.56	0.00	707.25	0.080	0.13	5.535	A
C-A	176.72	176.72	0.00	-	-	-	-	-
A-B	19.82	19.82	0.00	-	-	-	-	-
A-C	198.18	198.18	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	23.12	23.12	0.00	527.21	0.044	0.05	7.140	A
C-AB	56.72	56.72	0.00	707.28	0.080	0.13	5.537	A
C-A	176.70	176.70	0.00	-	-	-	-	-
A-B	19.82	19.82	0.00	-	-	-	-	-
A-C	198.18	198.18	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	18.88	18.92	0.00	540.14	0.035	0.04	6.906	A
C-AB	43.83	43.96	0.00	692.96	0.063	0.10	5.549	A
C-A	146.75	146.75	0.00	-	-	-	-	-
A-B	16.18	16.18	0.00	-	-	-	-	-
A-C	161.82	161.82	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	15.81	15.84	0.00	549.42	0.029	0.03	6.749	A
C-AB	35.26	35.34	0.00	682.67	0.052	0.07	5.562	A
C-A	124.35	124.35	0.00	-	-	-	-	-
A-B	13.55	13.55	0.00	-	-	-	-	-
A-C	135.51	135.51	0.00	-	-	-	-	-

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