Appendix 14G

Junctions 10 Outputs

[THIS PAGE INTENTIONALLY LEFT BLANK]

Junctions 10

PICADY 10 - Priority Intersection Module

Filename: JTC 1- Rhode Crossroads, Offaly..j10
Path: L:\Legacy\UKBLF1FP002\V1TP\PROPOSALS\PROJECTS\Derrygreenagh CCGT\J10
Report generation date: 14/11/2023 13:03:05

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2023									
Stream B-ACD	D1	0.2	7.46	0.15	A	D2	0.2	7.39	0.15	A
Stream A-BCD		0.0	5.18	0.03	A		0.0	5.23	0.04	A
Stream D-ABC		0.4	10.08	0.27	B		0.5	11.08	0.33	B
Stream C-ABD		0.1	5.32	0.05	A		0.1	5.53	0.08	A
	2027									
Stream B-ACD	D3	0.2	7.56	0.16	A	D4	0.2	7.46	0.16	A
Stream A-BCD		0.0	5.18	0.03	A		0.0	5.24	0.04	A
Stream D-ABC		0.4	10.31	0.28	B		0.5	11.45	0.34	B
Stream C-ABD		0.1	5.30	0.05	A		0.1	5.52	0.08	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	Rhode Crossroads
Location	
Site number	
Date	01/11/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	NA\kim.burgess
Description	

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	AM	ONE HOUR	08:15	09:45	15	✓
D2	2023	PM	ONE HOUR	17:00	18:30	15	✓
D3	2027	AM	ONE HOUR	08:15	09:45	15	✓
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.99	A

Arms

Arms

Arm	Name	Description	Arm type
A	R400 S		Major
B	Marian Terrace		Minor
C	R400 N		Major
D	Edenderry Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	7.84			250.0	✓	0.00
C	7.84			91.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.59	27	20
D	One lane	3.89	28	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

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
A-D	719	-	-	-	-	-	-	0.256	0.366	0.256	-	-	-
B-A	575	0.096	0.243	0.243	-	-	-	0.153	0.348	-	0.243	0.243	0.122
B-C	738	0.104	0.263	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	575	0.096	0.243	0.243	-	-	-	0.153	0.348	0.153	-	-	-
B-D, offside lane	575	0.096	0.243	0.243	-	-	-	0.153	0.348	0.153	-	-	-
C-B	627	0.223	0.223	0.319	-	-	-	-	-	-	-	-	-
D-A	690	-	-	-	-	-	-	0.246	-	0.097	-	-	-
D-B, nearside lane	538	0.143	0.143	0.326	-	-	-	0.228	0.228	0.090	-	-	-
D-B, offside lane	538	0.143	0.143	0.326	-	-	-	0.228	0.228	0.090	-	-	-
D-C	538	-	0.143	0.326	0.114	0.228	0.228	0.228	0.228	0.090	-	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	AM	ONE HOUR	08:15	09:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	109	100.000
B		ONE HOUR	✓	79	100.000
C		ONE HOUR	✓	210	100.000
D		ONE HOUR	✓	118	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	20	70	19
	B	13	0	30	36
	C	99	24	0	87
	D	17	31	70	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.15	7.46	0.2	A	72	109
A-BCD	0.03	5.18	0.0	A	20	30
A-B					18	27
A-C					62	94
D-ABC	0.27	10.08	0.4	B	108	162
C-ABD	0.05	5.32	0.1	A	29	44
C-D					76	115
C-A					87	131

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	59	15	588	0.101	59	0.0	0.1	6.799	A
A-BCD	16	4	719	0.022	16	0.0	0.0	5.122	A
A-B	15	4			15				
A-C	52	13			52				
D-ABC	89	22	509	0.175	88	0.0	0.2	8.530	A
C-ABD	23	6	700	0.032	22	0.0	0.0	5.315	A
C-D	63	16			63				
C-A	72	18			72				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	71	18	580	0.122	71	0.1	0.1	7.066	A
A-BCD	19	5	719	0.027	19	0.0	0.0	5.145	A
A-B	17	4			17				
A-C	61	15			61				
D-ABC	106	27	500	0.212	106	0.2	0.3	9.132	A
C-ABD	28	7	714	0.039	28	0.0	0.1	5.248	A
C-D	75	19			75				
C-A	85	21			85				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	87	22	569	0.153	87	0.1	0.2	7.459	A
A-BCD	24	6	719	0.034	24	0.0	0.0	5.177	A
A-B	21	5			21				
A-C	74	19			74				
D-ABC	130	32	487	0.267	130	0.3	0.4	10.058	B
C-ABD	37	9	735	0.050	37	0.1	0.1	5.157	A
C-D	91	23			91				
C-A	104	26			104				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	87	22	569	0.153	87	0.2	0.2	7.463	A
A-BCD	24	6	719	0.034	24	0.0	0.0	5.178	A
A-B	21	5			21				
A-C	74	19			74				
D-ABC	130	32	487	0.267	130	0.4	0.4	10.080	B
C-ABD	37	9	735	0.050	37	0.1	0.1	5.159	A
C-D	91	23			91				
C-A	104	26			104				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	71	18	580	0.122	71	0.2	0.1	7.077	A
A-BCD	19	5	719	0.027	19	0.0	0.0	5.148	A
A-B	17	4			17				
A-C	61	15			61				
D-ABC	106	27	500	0.212	106	0.4	0.3	9.161	A
C-ABD	28	7	714	0.040	28	0.1	0.1	5.250	A
C-D	75	19			75				
C-A	85	21			85				

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	59	15	588	0.101	60	0.1	0.1	6.814	A
A-BCD	16	4	718	0.022	16	0.0	0.0	5.123	A
A-B	15	4			15				
A-C	52	13			52				
D-ABC	89	22	509	0.175	89	0.3	0.2	8.579	A
C-ABD	23	6	700	0.032	23	0.1	0.0	5.317	A
C-D	63	16			63				
C-A	72	18			72				

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.99	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	97	100.000
B		ONE HOUR	✓	81	100.000
C		ONE HOUR	✓	193	100.000
D		ONE HOUR	✓	143	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	21	56	20
	B	17	0	33	31
	C	80	38	0	75
	D	12	34	97	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.15	7.39	0.2	A	74	111
A-BCD	0.04	5.23	0.0	A	20	31
A-B					19	28
A-C					50	75
D-ABC	0.33	11.08	0.5	B	131	197
C-ABD	0.08	5.53	0.1	A	44	66
C-D					64	97
C-A					69	103

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	61	15	594	0.103	61	0.0	0.1	6.741	A
A-BCD	16	4	714	0.023	16	0.0	0.0	5.156	A
A-B	15	4			15				
A-C	41	10			41				
D-ABC	108	27	503	0.214	107	0.0	0.3	9.049	A
C-ABD	34	9	686	0.050	34	0.0	0.1	5.521	A
C-D	54	13			54				
C-A	57	14			57				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	73	18	586	0.124	73	0.1	0.1	7.004	A
A-BCD	20	5	714	0.028	20	0.0	0.0	5.187	A
A-B	18	5			18				
A-C	49	12			49				
D-ABC	129	32	494	0.260	128	0.3	0.3	9.824	A
C-ABD	43	11	698	0.061	43	0.1	0.1	5.494	A
C-D	63	16			63				
C-A	67	17			67				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	89	22	576	0.155	89	0.1	0.2	7.390	A
A-BCD	25	6	713	0.035	25	0.0	0.0	5.229	A
A-B	22	6			22				
A-C	59	15			59				
D-ABC	157	39	482	0.327	157	0.3	0.5	11.050	B
C-ABD	55	14	714	0.077	55	0.1	0.1	5.461	A
C-D	76	19			76				
C-A	81	20			81				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	89	22	576	0.155	89	0.2	0.2	7.393	A
A-BCD	25	6	713	0.035	25	0.0	0.0	5.230	A
A-B	22	6			22				
A-C	59	15			59				
D-ABC	157	39	482	0.327	157	0.5	0.5	11.084	B
C-ABD	55	14	714	0.077	55	0.1	0.1	5.461	A
C-D	76	19			76				
C-A	81	20			81				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	73	18	586	0.124	73	0.2	0.1	7.013	A
A-BCD	20	5	714	0.028	20	0.0	0.0	5.190	A
A-B	18	5			18				
A-C	49	12			49				
D-ABC	129	32	494	0.260	129	0.5	0.4	9.869	A
C-ABD	43	11	698	0.061	43	0.1	0.1	5.497	A
C-D	63	16			63				
C-A	67	17			67				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	61	15	594	0.103	61	0.1	0.1	6.757	A
A-BCD	16	4	714	0.023	16	0.0	0.0	5.157	A
A-B	15	4			15				
A-C	41	10			41				
D-ABC	108	27	503	0.214	108	0.4	0.3	9.117	A
C-ABD	35	9	686	0.050	35	0.1	0.1	5.526	A
C-D	54	13			54				
C-A	57	14			57				

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.04	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.04	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027	AM	ONE HOUR	08:15	09:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	113	100.000
B		ONE HOUR	✓	82	100.000
C		ONE HOUR	✓	220	100.000
D		ONE HOUR	✓	122	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	20	74	19
	B	14	0	31	37
	C	104	25	0	91
	D	17	32	73	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.16	7.56	0.2	A	75	113
A-BCD	0.03	5.18	0.0	A	20	30
A-B					18	27
A-C					66	99
D-ABC	0.28	10.31	0.4	B	112	168
C-ABD	0.05	5.30	0.1	A	31	46
C-D					80	120
C-A					91	137

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	62	15	586	0.105	61	0.0	0.1	6.855	A
A-BCD	16	4	719	0.022	16	0.0	0.0	5.123	A
A-B	15	4			15				
A-C	54	14			54				
D-ABC	92	23	506	0.181	91	0.0	0.2	8.648	A
C-ABD	24	6	704	0.034	24	0.0	0.0	5.292	A
C-D	66	17			66				
C-A	76	19			76				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	74	18	578	0.128	74	0.1	0.1	7.139	A
A-BCD	19	5	719	0.027	19	0.0	0.0	5.146	A
A-B	17	4			17				
A-C	65	16			65				
D-ABC	110	27	497	0.221	109	0.2	0.3	9.289	A
C-ABD	30	7	719	0.041	30	0.0	0.1	5.225	A
C-D	78	20			78				
C-A	90	22			90				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	90	23	566	0.159	90	0.1	0.2	7.558	A
A-BCD	24	6	720	0.034	24	0.0	0.0	5.178	A
A-B	21	5			21				
A-C	79	20			79				
D-ABC	134	34	483	0.278	134	0.3	0.4	10.288	B
C-ABD	39	10	740	0.052	39	0.1	0.1	5.131	A
C-D	95	24			95				
C-A	108	27			108				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	90	23	566	0.159	90	0.2	0.2	7.562	A
A-BCD	24	6	719	0.034	24	0.0	0.0	5.181	A
A-B	21	5			21				
A-C	79	20			79				
D-ABC	134	34	483	0.278	134	0.4	0.4	10.312	B
C-ABD	39	10	740	0.052	39	0.1	0.1	5.134	A
C-D	95	24			95				
C-A	108	27			108				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	74	18	578	0.128	74	0.2	0.1	7.147	A
A-BCD	19	5	719	0.027	19	0.0	0.0	5.147	A
A-B	17	4			17				
A-C	65	16			65				
D-ABC	110	27	497	0.221	110	0.4	0.3	9.321	A
C-ABD	30	7	719	0.041	30	0.1	0.1	5.227	A
C-D	78	20			78				
C-A	90	22			90				

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	62	15	586	0.105	62	0.1	0.1	6.874	A
A-BCD	16	4	718	0.022	16	0.0	0.0	5.126	A
A-B	15	4			15				
A-C	54	14			54				
D-ABC	92	23	506	0.181	92	0.3	0.2	8.697	A
C-ABD	24	6	704	0.034	24	0.1	0.0	5.298	A
C-D	66	17			66				
C-A	76	19			76				

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		5.11	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.11	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	102	100.000
B		ONE HOUR	✓	84	100.000
C		ONE HOUR	✓	202	100.000
D		ONE HOUR	✓	150	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	22	59	21
	B	17	0	35	32
	C	84	40	0	78
	D	13	36	101	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.16	7.46	0.2	A	77	116
A-BCD	0.04	5.24	0.0	A	22	32
A-B					20	29
A-C					52	79
D-ABC	0.34	11.45	0.5	B	138	206
C-ABD	0.08	5.52	0.1	A	47	70
C-D					67	100
C-A					72	108

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	63	16	594	0.106	63	0.0	0.1	6.772	A
A-BCD	17	4	715	0.024	17	0.0	0.0	5.162	A
A-B	16	4			16				
A-C	43	11			43				
D-ABC	113	28	502	0.225	112	0.0	0.3	9.210	A
C-ABD	37	9	689	0.053	36	0.0	0.1	5.517	A
C-D	56	14			56				
C-A	60	15			60				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	76	19	586	0.129	75	0.1	0.1	7.049	A
A-BCD	21	5	714	0.029	21	0.0	0.0	5.194	A
A-B	19	5			19				
A-C	51	13			51				
D-ABC	135	34	492	0.274	135	0.3	0.4	10.052	B
C-ABD	45	11	701	0.065	45	0.1	0.1	5.492	A
C-D	66	16			66				
C-A	71	18			71				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	92	23	575	0.161	92	0.1	0.2	7.456	A
A-BCD	26	7	713	0.037	26	0.0	0.0	5.239	A
A-B	23	6			23				
A-C	63	16			63				
D-ABC	165	41	479	0.344	165	0.4	0.5	11.411	B
C-ABD	59	15	718	0.082	59	0.1	0.1	5.457	A
C-D	79	20			79				
C-A	85	21			85				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	92	23	575	0.161	92	0.2	0.2	7.460	A
A-BCD	26	7	713	0.037	26	0.0	0.0	5.242	A
A-B	23	6			23				
A-C	63	16			63				
D-ABC	165	41	479	0.345	165	0.5	0.5	11.453	B
C-ABD	59	15	718	0.082	59	0.1	0.1	5.461	A
C-D	79	20			79				
C-A	85	21			85				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	76	19	586	0.129	76	0.2	0.1	7.057	A
A-BCD	21	5	714	0.029	21	0.0	0.0	5.198	A
A-B	19	5			19				
A-C	51	13			51				
D-ABC	135	34	492	0.274	135	0.5	0.4	10.107	B
C-ABD	45	11	701	0.065	46	0.1	0.1	5.495	A
C-D	66	16			66				
C-A	71	18			71				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	63	16	594	0.107	63	0.1	0.1	6.791	A
A-BCD	17	4	714	0.024	17	0.0	0.0	5.164	A
A-B	16	4			16				
A-C	43	11			43				
D-ABC	113	28	501	0.225	113	0.4	0.3	9.284	A
C-ABD	37	9	689	0.053	37	0.1	0.1	5.524	A
C-D	56	14			56				
C-A	60	15			60				

Junctions 10

ARCADY 10 - Roundabout Module

Filename: JTC 2- Coolcor Roundabout .j10
Path: L:\Legacy\UKBLF1FP002\V1TP\PROPOSALS\PROJECTS\Derrygreenagh CCGT\J10
Report generation date: 14/11/2023 15:17:14

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2023									
Arm 1	D1	0.0	2.61	0.02	A	D2	0.0	2.62	0.02	A
Arm 2		0.1	3.04	0.12	A		0.1	2.96	0.10	A
Arm 3		0.2	3.33	0.14	A		0.2	3.32	0.14	A
Arm 4		0.0	3.64	0.02	A		0.0	3.65	0.02	A
	2027									
Arm 1	D3	0.0	2.63	0.02	A	D4	0.0	2.64	0.02	A
Arm 2		0.1	3.06	0.12	A		0.1	2.98	0.10	A
Arm 3		0.2	3.35	0.15	A		0.2	3.35	0.15	A
Arm 4		0.0	3.66	0.02	A		0.0	3.66	0.02	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	Coolcor Roundabout
Location	
Site number	
Date	01/11/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	NA\GrahamS3
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:15	09:45	15
D2	2023	PM	ONE HOUR	17:00	18:30	15
D3	2027	AM	ONE HOUR	08:15	09:45	15
D4	2027	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.17	A

Arms

Arms

Arm	Name	Description	No give-way line
1	New Access Road		
2	R400 S		
3	R400 N		
4	L1009		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	3.87	6.19	5.6	30.0	37.0	29.3		
2	4.22	4.80	4.9	13.0	36.0	32.3		
3	4.30	4.53	3.0	13.0	37.0	41.3		
4	3.21	3.96	4.6	22.0	36.0	36.8		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.614	1504
2	0.570	1358
3	0.541	1270
4	0.523	1100

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	26	100.000
2		✓	144	100.000
3		✓	161	100.000
4		✓	17	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	3	23	0
	2	3	0	125	16
	3	29	130	0	2
	4	1	15	1	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.02	2.61	0.0	A
2	0.12	3.04	0.1	A
3	0.14	3.33	0.2	A
4	0.02	3.64	0.0	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	20	110	1437	0.014	20	0.0	2.540	A
2	108	18	1348	0.080	108	0.1	2.903	A
3	121	14	1262	0.096	121	0.1	3.155	A
4	13	122	1036	0.012	13	0.0	3.516	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	23	131	1423	0.016	23	0.0	2.571	A
2	129	22	1346	0.096	129	0.1	2.959	A
3	145	17	1260	0.115	145	0.1	3.225	A
4	15	146	1024	0.015	15	0.0	3.569	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	29	161	1405	0.020	29	0.0	2.614	A
2	159	26	1343	0.118	158	0.1	3.038	A
3	177	21	1258	0.141	177	0.2	3.329	A
4	19	178	1007	0.019	19	0.0	3.643	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	29	161	1405	0.020	29	0.0	2.614	A
2	159	26	1343	0.118	159	0.1	3.038	A
3	177	21	1258	0.141	177	0.2	3.329	A
4	19	178	1007	0.019	19	0.0	3.643	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	23	131	1423	0.016	23	0.0	2.571	A
2	129	22	1346	0.096	130	0.1	2.959	A
3	145	17	1260	0.115	145	0.1	3.226	A
4	15	146	1024	0.015	15	0.0	3.572	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	20	110	1436	0.014	20	0.0	2.540	A
2	108	18	1348	0.080	108	0.1	2.906	A
3	121	14	1262	0.096	121	0.1	3.158	A
4	13	122	1036	0.012	13	0.0	3.517	A

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.15	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	27	100.000
2		✓	121	100.000
3		✓	159	100.000
4		✓	18	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	11	16	0
	2	1	1	103	16
	3	26	133	0	0
	4	1	16	1	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.02	2.62	0.0	A
2	0.10	2.96	0.1	A
3	0.14	3.32	0.2	A
4	0.02	3.65	0.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	20	113	1434	0.014	20	0.0	2.545	A
2	91	13	1351	0.067	91	0.1	2.857	A
3	120	14	1262	0.095	119	0.1	3.149	A
4	14	121	1037	0.013	13	0.0	3.518	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24	136	1420	0.017	24	0.0	2.577	A
2	109	15	1349	0.081	109	0.1	2.901	A
3	143	16	1261	0.113	143	0.1	3.219	A
4	16	145	1024	0.016	16	0.0	3.570	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	30	166	1402	0.021	30	0.0	2.623	A
2	133	19	1347	0.099	133	0.1	2.964	A
3	175	20	1259	0.139	175	0.2	3.320	A
4	20	177	1007	0.020	20	0.0	3.645	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	30	166	1402	0.021	30	0.0	2.623	A
2	133	19	1347	0.099	133	0.1	2.964	A
3	175	20	1259	0.139	175	0.2	3.320	A
4	20	177	1007	0.020	20	0.0	3.645	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24	136	1420	0.017	24	0.0	2.580	A
2	109	15	1349	0.081	109	0.1	2.901	A
3	143	16	1261	0.113	143	0.1	3.222	A
4	16	145	1024	0.016	16	0.0	3.571	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	20	114	1434	0.014	20	0.0	2.546	A
2	91	13	1351	0.067	91	0.1	2.857	A
3	120	14	1262	0.095	120	0.1	3.150	A
4	14	121	1036	0.013	14	0.0	3.521	A

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.19	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.19	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	27	100.000
2		✓	150	100.000
3		✓	168	100.000
4		✓	18	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	3	24	0
	2	3	0	131	16
	3	30	136	0	2
	4	1	16	1	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.02	2.63	0.0	A
2	0.12	3.06	0.1	A
3	0.15	3.35	0.2	A
4	0.02	3.66	0.0	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	20	115	1433	0.014	20	0.0	2.547	A
2	113	19	1347	0.084	113	0.1	2.915	A
3	126	14	1262	0.100	126	0.1	3.169	A
4	14	127	1033	0.013	13	0.0	3.528	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24	137	1419	0.017	24	0.0	2.579	A
2	135	22	1345	0.100	135	0.1	2.973	A
3	151	17	1260	0.120	151	0.1	3.244	A
4	16	152	1020	0.016	16	0.0	3.584	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	30	168	1400	0.021	30	0.0	2.625	A
2	165	28	1342	0.123	165	0.1	3.057	A
3	185	21	1258	0.147	185	0.2	3.353	A
4	20	186	1003	0.020	20	0.0	3.662	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	30	168	1400	0.021	30	0.0	2.626	A
2	165	28	1342	0.123	165	0.1	3.057	A
3	185	21	1258	0.147	185	0.2	3.353	A
4	20	186	1002	0.020	20	0.0	3.662	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24	138	1419	0.017	24	0.0	2.580	A
2	135	22	1345	0.100	135	0.1	2.974	A
3	151	17	1260	0.120	151	0.1	3.245	A
4	16	152	1020	0.016	16	0.0	3.584	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	20	115	1433	0.014	20	0.0	2.549	A
2	113	19	1347	0.084	113	0.1	2.916	A
3	126	14	1262	0.100	127	0.1	3.172	A
4	14	127	1033	0.013	14	0.0	3.532	A

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.17	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	29	100.000
2		✓	127	100.000
3		✓	166	100.000
4		✓	19	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	12	17	0
	2	1	1	108	17
	3	27	139	0	0
	4	1	17	1	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.02	2.64	0.0	A
2	0.10	2.98	0.1	A
3	0.15	3.35	0.2	A
4	0.02	3.66	0.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	22	119	1431	0.015	22	0.0	2.554	A
2	96	14	1350	0.071	95	0.1	2.868	A
3	125	14	1262	0.099	125	0.1	3.165	A
4	14	126	1034	0.014	14	0.0	3.530	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	26	142	1417	0.018	26	0.0	2.588	A
2	114	16	1349	0.085	114	0.1	2.915	A
3	149	17	1260	0.118	149	0.1	3.239	A
4	17	151	1021	0.017	17	0.0	3.585	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	32	174	1397	0.023	32	0.0	2.636	A
2	140	20	1347	0.104	140	0.1	2.982	A
3	183	21	1258	0.145	183	0.2	3.346	A
4	21	185	1003	0.021	21	0.0	3.664	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	32	174	1397	0.023	32	0.0	2.636	A
2	140	20	1347	0.104	140	0.1	2.982	A
3	183	21	1258	0.145	183	0.2	3.346	A
4	21	185	1003	0.021	21	0.0	3.664	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	26	142	1416	0.018	26	0.0	2.590	A
2	114	16	1349	0.085	114	0.1	2.917	A
3	149	17	1260	0.118	149	0.1	3.242	A
4	17	151	1021	0.017	17	0.0	3.586	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	22	119	1431	0.015	22	0.0	2.556	A
2	96	14	1350	0.071	96	0.1	2.871	A
3	125	14	1262	0.099	125	0.1	3.166	A
4	14	127	1034	0.014	14	0.0	3.531	A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820

For sales and distribution information, program advice and maintenance, contact TRL Software:
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

Filename: JTC 3- Existing access for Derrygreenagh Works.j10
Path: L:\Legacy\UKBLF1FP002\V1TP\PROPOSALS\PROJECTS\Derrygreenagh CCGT\J10
Report generation date: 14/11/2023 15:10:00

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2023									
Stream B-AC	D1	0.0	6.81	0.02	A	D2	0.0	0.00	0.00	A
Stream C-AB		0.0	4.73	0.01	A		0.0	0.00	0.00	A
	2027									
Stream B-AC	D3	0.0	6.84	0.02	A	D4	0.0	0.00	0.00	A
Stream C-AB		0.0	4.71	0.01	A		0.0	0.00	0.00	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	Bord na Mona
Location	
Site number	
Date	01/11/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	NA\GrahamS3
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:15	09:45	15
D2	2023	PM	ONE HOUR	00:00	01:30	15
D3	2027	AM	ONE HOUR	08:15	09:45	15
D4	2027	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.26	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.26	A

Arms

Arms

Arm	Name	Description	Arm type
A	R400 N		Major
B	Bord na Mona Access		Minor
C	R400 S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.70			250.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.54	20	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	524	0.093	0.234	0.147	0.334
B-C	676	0.100	0.254	-	-
C-B	719	0.270	0.270	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	133	100.000
B		✓	8	100.000
C		✓	161	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	127
	B	4	0	4
	C	157	4	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	6.81	0.0	A
C-AB	0.01	4.73	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	554	0.011	6	0.0	6.564	A
C-AB	4	764	0.005	4	0.0	4.730	A
C-A	118			118			
A-B	5			5			
A-C	96			96			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	547	0.013	7	0.0	6.663	A
C-AB	4	774	0.006	4	0.0	4.678	A
C-A	140			140			
A-B	5			5			
A-C	114			114			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	538	0.016	9	0.0	6.806	A
C-AB	6	787	0.007	6	0.0	4.607	A
C-A	172			172			
A-B	7			7			
A-C	140			140			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	538	0.016	9	0.0	6.806	A
C-AB	6	787	0.007	6	0.0	4.607	A
C-A	172			172			
A-B	7			7			
A-C	140			140			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	547	0.013	7	0.0	6.666	A
C-AB	4	774	0.006	4	0.0	4.680	A
C-A	140			140			
A-B	5			5			
A-C	114			114			

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	554	0.011	6	0.0	6.564	A
C-AB	4	764	0.005	4	0.0	4.730	A
C-A	118			118			
A-B	5			5			
A-C	96			96			

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	PM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	135	100.000
B		✓	2	100.000
C		✓	120	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	135
	B	2	0	0
	C	120	0	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	557	0.000	0	0.0	0.000	A
C-AB	0	691	0.000	0	0.0	0.000	A
C-A	90			90			
A-B	0			0			
A-C	102			102			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	550	0.000	0	0.0	0.000	A
C-AB	0	686	0.000	0	0.0	0.000	A
C-A	108			108			
A-B	0			0			
A-C	121			121			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	541	0.000	0	0.0	0.000	A
C-AB	0	679	0.000	0	0.0	0.000	A
C-A	132			132			
A-B	0			0			
A-C	149			149			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	541	0.000	0	0.0	0.000	A
C-AB	0	679	0.000	0	0.0	0.000	A
C-A	132			132			
A-B	0			0			
A-C	149			149			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	550	0.000	0	0.0	0.000	A
C-AB	0	686	0.000	0	0.0	0.000	A
C-A	108			108			
A-B	0			0			
A-C	121			121			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	557	0.000	0	0.0	0.000	A
C-AB	0	691	0.000	0	0.0	0.000	A
C-A	90			90			
A-B	0			0			
A-C	102			102			

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.25	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.25	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	139	100.000
B		✓	8	100.000
C		✓	169	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	133
	B	4	0	4
	C	165	4	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	6.84	0.0	A
C-AB	0.01	4.71	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	553	0.011	6	0.0	6.584	A
C-AB	4	767	0.005	4	0.0	4.714	A
C-A	124			124			
A-B	5			5			
A-C	100			100			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	545	0.013	7	0.0	6.688	A
C-AB	4	777	0.006	4	0.0	4.660	A
C-A	147			147			
A-B	5			5			
A-C	120			120			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	535	0.016	9	0.0	6.839	A
C-AB	6	791	0.007	6	0.0	4.585	A
C-A	180			180			
A-B	7			7			
A-C	146			146			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	535	0.016	9	0.0	6.839	A
C-AB	6	791	0.007	6	0.0	4.585	A
C-A	180			180			
A-B	7			7			
A-C	146			146			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	545	0.013	7	0.0	6.691	A
C-AB	4	777	0.006	4	0.0	4.660	A
C-A	147			147			
A-B	5			5			
A-C	120			120			

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	553	0.011	6	0.0	6.587	A
C-AB	4	767	0.005	4	0.0	4.715	A
C-A	124			124			
A-B	5			5			
A-C	100			100			

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027	PM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	141	100.000
B		✓	2	100.000
C		✓	126	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	141
	B	2	0	0
	C	126	0	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	555	0.000	0	0.0	0.000	A
C-AB	0	690	0.000	0	0.0	0.000	A
C-A	95			95			
A-B	0			0			
A-C	106			106			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	548	0.000	0	0.0	0.000	A
C-AB	0	685	0.000	0	0.0	0.000	A
C-A	113			113			
A-B	0			0			
A-C	127			127			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	539	0.000	0	0.0	0.000	A
C-AB	0	677	0.000	0	0.0	0.000	A
C-A	139			139			
A-B	0			0			
A-C	155			155			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	539	0.000	0	0.0	0.000	A
C-AB	0	677	0.000	0	0.0	0.000	A
C-A	139			139			
A-B	0			0			
A-C	155			155			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	548	0.000	0	0.0	0.000	A
C-AB	0	685	0.000	0	0.0	0.000	A
C-A	113			113			
A-B	0			0			
A-C	127			127			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	555	0.000	0	0.0	0.000	A
C-AB	0	690	0.000	0	0.0	0.000	A
C-A	95			95			
A-B	0			0			
A-C	106			106			

Junctions 10

ARCADY 10 - Roundabout Module

Filename: JTC 4a- Rochfortbridge R400 R446 mini-roundabout.j10
Path: L:\Legacy\UKBLF1FP002\V1TP\PROPOSALS\PROJECTS\Derrygreenagh CCGT\J10
Report generation date: 14/11/2023 15:20:08

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2023									
Arm 1	D1	0.2	4.54	0.16	A	D2	0.2	4.37	0.17	A
Arm 2		0.2	3.10	0.16	A		0.1	3.01	0.13	A
Arm 3		0.4	4.45	0.30	A		0.3	3.98	0.22	A
	2027									
Arm 1	D3	0.2	4.62	0.17	A	D4	0.2	4.44	0.18	A
Arm 2		0.2	3.13	0.17	A		0.2	3.05	0.14	A
Arm 3		0.5	4.55	0.32	A		0.3	4.05	0.24	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	Mini Roundabout R446
Location	
Site number	
Date	01/11/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	NA\GrahamS3
Description	

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

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:15	09:45	15
D2	2023	PM	ONE HOUR	00:00	01:30	15
D3	2027	AM	ONE HOUR	08:15	09:45	15
D4	2027	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	4.05	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		4.05	A

Arms

Arms

Arm	Name	Description
1	R400	
2	R446 S	
3	R446 N	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.77	3.77	7.06	7.1	20.00	16.65	0.0	✓
2	6.36	6.36	8.76	9.0	20.00	17.26	0.0	✓
3	5.90	5.90	7.04	6.6	20.00	13.75	0.0	✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.615	1096
2	0.733	1464
3	0.631	1189

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	136	100.000
2		✓	205	100.000
3		✓	319	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	49	87
	2	35	6	164
	3	99	212	8

Vehicle Mix

Heavy Vehicle %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.16	4.54	0.2	A
2	0.16	3.10	0.2	A
3	0.30	4.45	0.4	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	169	992	0.103	102	0.1	4.042	A
2	154	71	1412	0.109	154	0.1	2.861	A
3	240	31	1169	0.205	239	0.3	3.867	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	122	203	971	0.126	122	0.1	4.238	A
2	184	85	1402	0.131	184	0.2	2.956	A
3	287	37	1165	0.246	287	0.3	4.095	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	150	249	943	0.159	150	0.2	4.533	A
2	226	104	1388	0.163	226	0.2	3.097	A
3	351	45	1160	0.303	351	0.4	4.446	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	150	249	943	0.159	150	0.2	4.536	A
2	226	105	1388	0.163	226	0.2	3.097	A
3	351	45	1160	0.303	351	0.4	4.450	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	122	203	971	0.126	122	0.1	4.242	A
2	184	86	1402	0.131	184	0.2	2.957	A
3	287	37	1165	0.246	287	0.3	4.103	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	170	992	0.103	103	0.1	4.051	A
2	154	72	1412	0.109	154	0.1	2.862	A
3	240	31	1169	0.205	240	0.3	3.879	A

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	3.80	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		3.80	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	PM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	150	100.000
2		✓	162	100.000
3		✓	238	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	37	113
	2	32	1	129
	3	81	156	1

Vehicle Mix

Heavy Vehicle %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.17	4.37	0.2	A
2	0.13	3.01	0.1	A
3	0.22	3.98	0.3	A

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	118	1023	0.110	112	0.1	3.950	A
2	122	85	1402	0.087	122	0.1	2.812	A
3	179	25	1173	0.153	178	0.2	3.618	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	135	142	1009	0.134	135	0.2	4.117	A
2	146	102	1389	0.105	146	0.1	2.893	A
3	214	30	1170	0.183	214	0.2	3.765	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	165	174	989	0.167	165	0.2	4.365	A
2	178	125	1373	0.130	178	0.1	3.014	A
3	262	36	1166	0.225	262	0.3	3.982	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	165	174	989	0.167	165	0.2	4.367	A
2	178	126	1372	0.130	178	0.1	3.014	A
3	262	36	1166	0.225	262	0.3	3.983	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	135	142	1009	0.134	135	0.2	4.121	A
2	146	103	1389	0.105	146	0.1	2.894	A
3	214	30	1170	0.183	214	0.2	3.767	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	119	1023	0.110	113	0.1	3.957	A
2	122	86	1401	0.087	122	0.1	2.813	A
3	179	25	1173	0.153	179	0.2	3.623	A

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	4.12	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		4.12	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	143	100.000
2		✓	214	100.000
3		✓	334	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	52	91
	2	36	6	172
	3	104	222	8

Vehicle Mix

Heavy Vehicle %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.17	4.62	0.2	A
2	0.17	3.13	0.2	A
3	0.32	4.55	0.5	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	177	988	0.109	107	0.1	4.088	A
2	161	74	1410	0.114	161	0.1	2.879	A
3	251	32	1169	0.215	250	0.3	3.914	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	212	966	0.133	128	0.2	4.298	A
2	192	89	1399	0.137	192	0.2	2.982	A
3	300	38	1165	0.258	300	0.3	4.162	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	157	260	937	0.168	157	0.2	4.617	A
2	236	109	1385	0.170	235	0.2	3.132	A
3	368	46	1159	0.317	367	0.5	4.541	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	157	260	937	0.168	157	0.2	4.620	A
2	236	109	1385	0.170	236	0.2	3.132	A
3	368	46	1159	0.317	368	0.5	4.547	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	212	966	0.133	129	0.2	4.302	A
2	192	89	1399	0.138	193	0.2	2.985	A
3	300	38	1165	0.258	301	0.3	4.170	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	178	987	0.109	108	0.1	4.095	A
2	161	75	1410	0.114	161	0.1	2.885	A
3	251	32	1169	0.215	252	0.3	3.929	A

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	3.86	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		3.86	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027	PM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	157	100.000
2		✓	170	100.000
3		✓	250	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	39	118
	2	34	1	135
	3	85	164	1

Vehicle Mix

Heavy Vehicle %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.18	4.44	0.2	A
2	0.14	3.05	0.2	A
3	0.24	4.05	0.3	A

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	118	124	1020	0.116	118	0.1	3.989	A
2	128	89	1399	0.091	128	0.1	2.831	A
3	188	26	1172	0.161	187	0.2	3.655	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	141	149	1005	0.140	141	0.2	4.168	A
2	153	107	1386	0.110	153	0.1	2.918	A
3	225	31	1169	0.192	225	0.2	3.812	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	173	183	984	0.176	173	0.2	4.435	A
2	187	131	1368	0.137	187	0.2	3.046	A
3	275	39	1164	0.236	275	0.3	4.047	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	173	183	984	0.176	173	0.2	4.438	A
2	187	131	1368	0.137	187	0.2	3.047	A
3	275	39	1164	0.236	275	0.3	4.049	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	141	149	1004	0.141	141	0.2	4.171	A
2	153	107	1386	0.110	153	0.1	2.921	A
3	225	31	1169	0.192	225	0.2	3.817	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	118	125	1019	0.116	118	0.1	3.995	A
2	128	90	1399	0.092	128	0.1	2.835	A
3	188	26	1172	0.161	188	0.2	3.660	A

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.0.1820

Filename: JTC 5a- M6 Junction 3 R400 roundabout (northern roundabout).j10
Path: L:\Legacy\UKBLF1FP002\V1TP\PROPOSALS\PROJECTS\Derrygreenagh CCGT\J10
Report generation date: 14/11/2023 15:33:26

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2023									
Arm 1	D1	0.1	1.83	0.06	A	D2	0.1	1.85	0.07	A
Arm 2		0.0	1.45	0.03	A		0.0	1.46	0.03	A
Arm 3		0.1	1.86	0.07	A		0.1	1.82	0.05	A
	2027 Without Development									
Arm 1	D3	0.1	1.83	0.06	A	D4	0.1	1.85	0.07	A
Arm 2		0.0	1.45	0.03	A		0.0	1.47	0.03	A
Arm 3		0.1	1.87	0.07	A		0.1	1.82	0.05	A
	2027 With Development									
Arm 1	D5	0.1	1.89	0.09	A	D6	0.1	1.91	0.10	A
Arm 2		0.0	1.48	0.03	A		0.0	1.50	0.03	A
Arm 3		0.1	1.91	0.08	A		0.1	1.86	0.05	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	Roundabout N
Location	
Site number	
Date	01/11/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	NA\GrahamS3
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:15	09:45	15
D2	2023	PM	ONE HOUR	17:00	18:30	15
D3	2027 Without Development	AM	ONE HOUR	08:15	09:45	15
D4	2027 Without Development	PM	ONE HOUR	17:00	18:30	15
D5	2027 With Development	AM	ONE HOUR	08:15	09:45	15
D6	2027 With Development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.77	A

Arms

Arms

Arm	Name	Description	No give-way line
1	R400 S		
2	M6 S		
3	R400 N		
4	M6 N		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	5.72	6.95	16.9	39.0	55.0	28.7		
2	6.37	10.04	13.2	30.0	57.0	20.4	✓	
3	5.35	8.34	9.9	30.0	55.0	29.0		
4								✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.664	2093
2	0.755	2643
3	0.667	2123
4		

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	113	100.000
2		✓	61	100.000
3		✓	134	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	102	11
	2	43	0	18	0
	3	104	0	0	30
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.06	1.83	0.1	A
2	0.03	1.45	0.0	A
3	0.07	1.86	0.1	A
4				

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	85	0	2093	0.041	85	0.0	1.792	A
2	46	85	2579	0.018	46	0.0	1.420	A
3	101	41	2096	0.048	101	0.1	1.803	A
4		110						

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	0	2093	0.049	102	0.1	1.806	A
2	55	102	2566	0.021	55	0.0	1.432	A
3	120	49	2090	0.058	120	0.1	1.826	A
4		132						

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	124	0	2093	0.059	124	0.1	1.827	A
2	67	124	2549	0.026	67	0.0	1.449	A
3	148	59	2083	0.071	147	0.1	1.858	A
4		162						

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	124	0	2093	0.059	124	0.1	1.827	A
2	67	124	2549	0.026	67	0.0	1.449	A
3	148	59	2083	0.071	148	0.1	1.858	A
4		162						

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	0	2093	0.049	102	0.1	1.809	A
2	55	102	2566	0.021	55	0.0	1.432	A
3	120	49	2090	0.058	121	0.1	1.826	A
4		132						

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	85	0	2093	0.041	85	0.0	1.794	A
2	46	85	2579	0.018	46	0.0	1.420	A
3	101	41	2096	0.048	101	0.1	1.803	A
4		111						

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.75	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	131	100.000
2		✓	67	100.000
3		✓	92	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	113	18
	2	41	0	26	0
	3	76	0	0	16
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.07	1.85	0.1	A
2	0.03	1.46	0.0	A
3	0.05	1.82	0.1	A
4				

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	99	0	2093	0.047	98	0.0	1.804	A
2	50	98	2569	0.020	50	0.0	1.429	A
3	69	44	2093	0.033	69	0.0	1.777	A
4		88						

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	118	0	2093	0.056	118	0.1	1.821	A
2	60	118	2554	0.024	60	0.0	1.442	A
3	83	53	2087	0.040	83	0.0	1.794	A
4		105						

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	144	0	2093	0.069	144	0.1	1.846	A
2	74	144	2534	0.029	74	0.0	1.462	A
3	101	65	2080	0.049	101	0.1	1.818	A
4		129						

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	144	0	2093	0.069	144	0.1	1.846	A
2	74	144	2534	0.029	74	0.0	1.462	A
3	101	65	2080	0.049	101	0.1	1.818	A
4		129						

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	118	0	2093	0.056	118	0.1	1.824	A
2	60	118	2554	0.024	60	0.0	1.443	A
3	83	53	2087	0.040	83	0.0	1.794	A
4		105						

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	99	0	2093	0.047	99	0.0	1.807	A
2	50	99	2568	0.020	50	0.0	1.429	A
3	69	44	2093	0.033	69	0.0	1.777	A
4		88						

2027 Without Development , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.77	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027 Without Development	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	119	100.000
2		✓	64	100.000
3		✓	140	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	107	12
	2	45	0	19	0
	3	109	0	0	31
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.06	1.83	0.1	A
2	0.03	1.45	0.0	A
3	0.07	1.87	0.1	A
4				

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	90	0	2093	0.043	89	0.0	1.796	A
2	48	89	2575	0.019	48	0.0	1.423	A
3	105	43	2094	0.050	105	0.1	1.809	A
4		116						

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	107	0	2093	0.051	107	0.1	1.811	A
2	58	107	2562	0.022	58	0.0	1.436	A
3	126	51	2089	0.060	126	0.1	1.833	A
4		138						

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	131	0	2093	0.063	131	0.1	1.833	A
2	70	131	2544	0.028	70	0.0	1.454	A
3	154	63	2081	0.074	154	0.1	1.867	A
4		169						

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	131	0	2093	0.063	131	0.1	1.833	A
2	70	131	2544	0.028	70	0.0	1.454	A
3	154	63	2081	0.074	154	0.1	1.867	A
4		170						

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	107	0	2093	0.051	107	0.1	1.814	A
2	58	107	2562	0.022	58	0.0	1.439	A
3	126	51	2089	0.060	126	0.1	1.836	A
4		139						

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	90	0	2093	0.043	90	0.0	1.798	A
2	48	90	2575	0.019	48	0.0	1.426	A
3	105	43	2094	0.050	105	0.1	1.812	A
4		116						

2027 Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.75	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027 Without Development	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	137	100.000
2		✓	70	100.000
3		✓	96	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	118	19
	2	43	0	27	0
	3	79	0	0	17
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.07	1.85	0.1	A
2	0.03	1.47	0.0	A
3	0.05	1.82	0.1	A
4				

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	103	0	2093	0.049	103	0.1	1.808	A
2	53	103	2565	0.021	53	0.0	1.432	A
3	72	47	2092	0.035	72	0.0	1.781	A
4		92						

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	123	0	2093	0.059	123	0.1	1.826	A
2	63	123	2550	0.025	63	0.0	1.446	A
3	86	56	2086	0.041	86	0.0	1.799	A
4		110						

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	151	0	2093	0.072	151	0.1	1.852	A
2	77	151	2529	0.030	77	0.0	1.467	A
3	106	68	2077	0.051	106	0.1	1.824	A
4		134						

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	151	0	2093	0.072	151	0.1	1.852	A
2	77	151	2529	0.030	77	0.0	1.467	A
3	106	68	2077	0.051	106	0.1	1.824	A
4		134						

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	123	0	2093	0.059	123	0.1	1.829	A
2	63	123	2550	0.025	63	0.0	1.446	A
3	86	56	2086	0.041	86	0.0	1.802	A
4		110						

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	103	0	2093	0.049	103	0.1	1.808	A
2	53	103	2565	0.021	53	0.0	1.434	A
3	72	47	2092	0.035	72	0.0	1.784	A
4		92						

2027 With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.83	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2027 With Development	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	174	100.000
2		✓	64	100.000
3		✓	140	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	107	67
	2	45	0	19	0
	3	109	0	0	31
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.09	1.89	0.1	A
2	0.03	1.48	0.0	A
3	0.08	1.91	0.1	A
4				

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	131	0	2093	0.063	131	0.1	1.833	A
2	48	131	2544	0.019	48	0.0	1.441	A
3	105	84	2067	0.051	105	0.1	1.834	A
4		116						

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	156	0	2093	0.075	156	0.1	1.858	A
2	58	156	2525	0.023	58	0.0	1.458	A
3	126	101	2056	0.061	126	0.1	1.864	A
4		138						

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	192	0	2093	0.092	191	0.1	1.892	A
2	70	191	2498	0.028	70	0.0	1.482	A
3	154	123	2041	0.076	154	0.1	1.907	A
4		169						

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	192	0	2093	0.092	192	0.1	1.892	A
2	70	192	2498	0.028	70	0.0	1.482	A
3	154	123	2041	0.076	154	0.1	1.907	A
4		170						

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	156	0	2093	0.075	157	0.1	1.861	A
2	58	157	2525	0.023	58	0.0	1.460	A
3	126	101	2056	0.061	126	0.1	1.864	A
4		139						

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	131	0	2093	0.063	131	0.1	1.834	A
2	48	131	2544	0.019	48	0.0	1.444	A
3	105	84	2067	0.051	105	0.1	1.834	A
4		116						

2027 With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.82	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.82	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2027 With Development	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	192	100.000
2		✓	70	100.000
3		✓	96	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	118	74
	2	43	0	27	0
	3	79	0	0	17
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.10	1.91	0.1	A
2	0.03	1.50	0.0	A
3	0.05	1.86	0.1	A
4				

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	145	0	2093	0.069	144	0.1	1.846	A
2	53	144	2534	0.021	53	0.0	1.450	A
3	72	88	2064	0.035	72	0.0	1.806	A
4		92						

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	173	0	2093	0.082	173	0.1	1.873	A
2	63	173	2513	0.025	63	0.0	1.468	A
3	86	105	2053	0.042	86	0.0	1.829	A
4		110						

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	211	0	2093	0.101	211	0.1	1.912	A
2	77	211	2483	0.031	77	0.0	1.495	A
3	106	129	2037	0.052	106	0.1	1.863	A
4		134						

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	211	0	2093	0.101	211	0.1	1.912	A
2	77	211	2483	0.031	77	0.0	1.495	A
3	106	129	2037	0.052	106	0.1	1.863	A
4		134						

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	173	0	2093	0.082	173	0.1	1.876	A
2	63	173	2512	0.025	63	0.0	1.471	A
3	86	105	2053	0.042	86	0.0	1.832	A
4		110						

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	145	0	2093	0.069	145	0.1	1.846	A
2	53	145	2534	0.021	53	0.0	1.450	A
3	72	88	2064	0.035	72	0.0	1.806	A
4		92						

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.0.1820

For sales and distribution information, program advice and maintenance, contact TRL Software:
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

Filename: JTC 5b- M6 Junction R400 roundabout (southern roundabout).j10
Path: L:\Legacy\UKBLF1FP002\V1TP\PROPOSALS\PROJECTS\Derrygreenagh CCGT\J10
Report generation date: 14/11/2023 15:45:46

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2023									
Arm 1	D1	0.1	1.68	0.07	A	D2	0.1	1.67	0.07	A
Arm 3		0.1	1.68	0.07	A		0.1	1.65	0.06	A
Arm 4		0.0	1.62	0.02	A		0.0	1.62	0.03	A
	2027 Without Development									
Arm 1	D3	0.1	1.69	0.08	A	D4	0.1	1.68	0.07	A
Arm 3		0.1	1.68	0.07	A		0.1	1.66	0.06	A
Arm 4		0.0	1.62	0.02	A		0.0	1.62	0.03	A
	2027 With Development									
Arm 1	D5	0.1	1.74	0.10	A	D6	0.1	1.73	0.10	A
Arm 3		0.1	1.68	0.07	A		0.1	1.66	0.06	A
Arm 4		0.0	1.67	0.05	A		0.1	1.67	0.06	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	M6 Roundabout S
Location	
Site number	
Date	01/11/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	NA\GrahamS3
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:15	09:45	15
D2	2023	PM	ONE HOUR	17:00	18:30	15
D3	2027 Without Development	AM	ONE HOUR	08:15	09:45	15
D4	2027 Without Development	PM	ONE HOUR	17:00	18:30	15
D5	2027 With Development	AM	ONE HOUR	08:15	09:45	15
D6	2027 With Development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.67	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.67	A

Arms

Arms

Arm	Name	Description	No give-way line
1	R400 S		
2	M6 S		
3	R400 N		
4	M6 N		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	5.94	8.52	12.6	29.0	53.0	25.0		
2								✓
3	5.98	8.52	9.9	30.0	53.0	25.7		
4	5.93	8.52	17.4	29.0	56.0	28.2	✓	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.723	2346
2		
3	0.715	2305
4	0.707	2378

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	149	100.000
2				
3		✓	148	100.000
4		✓	36	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	57	92	0
	2	0	0	0	0
	3	114	34	0	0
	4	15	0	21	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.07	1.68	0.1	A
2				
3	0.07	1.68	0.1	A
4	0.02	1.62	0.0	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	112	41	2317	0.048	112	0.1	1.632	A
2		85						
3	111	0	2305	0.048	111	0.1	1.640	A
4	27	111	2300	0.012	27	0.0	1.583	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	134	49	2311	0.058	134	0.1	1.653	A
2		102						
3	133	0	2305	0.058	133	0.1	1.656	A
4	32	133	2284	0.014	32	0.0	1.598	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	164	61	2303	0.071	164	0.1	1.682	A
2		124						
3	163	0	2305	0.071	163	0.1	1.679	A
4	40	163	2263	0.018	40	0.0	1.618	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	164	61	2303	0.071	164	0.1	1.682	A
2		124						
3	163	0	2305	0.071	163	0.1	1.679	A
4	40	163	2263	0.018	40	0.0	1.618	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	134	49	2311	0.058	134	0.1	1.655	A
2		102						
3	133	0	2305	0.058	133	0.1	1.656	A
4	32	133	2284	0.014	32	0.0	1.600	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	112	41	2317	0.048	112	0.1	1.632	A
2		85						
3	111	0	2305	0.048	111	0.1	1.640	A
4	27	111	2299	0.012	27	0.0	1.583	A

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.65	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.65	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	137	100.000
2				
3		✓	116	100.000
4		✓	59	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	39	98	0
	2	0	0	0	0
	3	98	18	0	0
	4	26	0	33	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.07	1.67	0.1	A
2				
3	0.06	1.65	0.1	A
4	0.03	1.62	0.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	103	38	2319	0.044	103	0.0	1.624	A
2		98						
3	87	0	2305	0.038	87	0.0	1.622	A
4	44	87	2317	0.019	44	0.0	1.583	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	123	46	2313	0.053	123	0.1	1.642	A
2		118						
3	104	0	2305	0.045	104	0.0	1.634	A
4	53	104	2304	0.023	53	0.0	1.598	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	151	56	2306	0.065	151	0.1	1.669	A
2		144						
3	128	0	2305	0.055	128	0.1	1.652	A
4	65	128	2288	0.028	65	0.0	1.618	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	151	56	2306	0.065	151	0.1	1.669	A
2		144						
3	128	0	2305	0.055	128	0.1	1.652	A
4	65	128	2288	0.028	65	0.0	1.618	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	123	46	2313	0.053	123	0.1	1.645	A
2		118						
3	104	0	2305	0.045	104	0.0	1.634	A
4	53	104	2304	0.023	53	0.0	1.600	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	103	38	2319	0.044	103	0.0	1.624	A
2		99						
3	87	0	2305	0.038	87	0.0	1.625	A
4	44	87	2316	0.019	44	0.0	1.583	A

2027 Without Development , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.68	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.68	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027 Without Development	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	157	100.000
2				
3		✓	154	100.000
4		✓	39	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	60	97	0
	2	0	0	0	0
	3	119	35	0	0
	4	16	0	23	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.08	1.69	0.1	A
2				
3	0.07	1.68	0.1	A
4	0.02	1.62	0.0	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	118	44	2315	0.051	118	0.1	1.637	A
2		90						
3	116	0	2305	0.050	116	0.1	1.643	A
4	29	116	2296	0.013	29	0.0	1.587	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	141	52	2309	0.061	141	0.1	1.659	A
2		107						
3	139	0	2305	0.060	139	0.1	1.660	A
4	35	139	2280	0.015	35	0.0	1.602	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	173	64	2300	0.075	172	0.1	1.691	A
2		131						
3	170	0	2305	0.074	170	0.1	1.685	A
4	42	170	2258	0.019	42	0.0	1.624	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	173	64	2300	0.075	173	0.1	1.691	A
2		131						
3	170	0	2305	0.074	170	0.1	1.685	A
4	42	170	2258	0.019	42	0.0	1.624	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	141	52	2309	0.061	141	0.1	1.659	A
2		107						
3	139	0	2305	0.060	139	0.1	1.663	A
4	35	139	2280	0.015	35	0.0	1.602	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	118	44	2315	0.051	118	0.1	1.637	A
2		90						
3	116	0	2305	0.050	116	0.1	1.646	A
4	29	116	2296	0.013	29	0.0	1.589	A

2027 Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.66	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.66	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027 Without Development	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	144	100.000
2				
3		✓	122	100.000
4		✓	61	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	41	103	0
	2	0	0	0	0
	3	103	19	0	0
	4	27	0	34	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.07	1.68	0.1	A
2				
3	0.06	1.66	0.1	A
4	0.03	1.62	0.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	40	2318	0.047	108	0.0	1.628	A
2		103						
3	92	0	2305	0.040	92	0.0	1.625	A
4	46	92	2313	0.020	46	0.0	1.586	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	48	2312	0.056	129	0.1	1.648	A
2		123						
3	110	0	2305	0.048	110	0.0	1.638	A
4	55	110	2301	0.024	55	0.0	1.602	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	159	58	2304	0.069	158	0.1	1.676	A
2		151						
3	134	0	2305	0.058	134	0.1	1.657	A
4	67	134	2283	0.029	67	0.0	1.623	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	159	58	2304	0.069	159	0.1	1.676	A
2		151						
3	134	0	2305	0.058	134	0.1	1.657	A
4	67	134	2283	0.029	67	0.0	1.623	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	48	2312	0.056	130	0.1	1.648	A
2		123						
3	110	0	2305	0.048	110	0.1	1.641	A
4	55	110	2301	0.024	55	0.0	1.604	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	40	2318	0.047	108	0.0	1.628	A
2		103						
3	92	0	2305	0.040	92	0.0	1.625	A
4	46	92	2313	0.020	46	0.0	1.589	A

2027 With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.71	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.71	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2027 With Development	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	212	100.000
2				
3		✓	154	100.000
4		✓	94	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	60	152	0
	2	0	0	0	0
	3	119	35	0	0
	4	71	0	23	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.10	1.74	0.1	A
2				
3	0.07	1.68	0.1	A
4	0.05	1.67	0.0	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	160	44	2315	0.069	159	0.1	1.669	A
2		132						
3	116	0	2305	0.050	116	0.1	1.643	A
4	71	116	2296	0.031	71	0.0	1.616	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	191	52	2309	0.083	191	0.1	1.698	A
2		157						
3	138	0	2305	0.060	138	0.1	1.660	A
4	85	138	2280	0.037	84	0.0	1.638	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	233	64	2300	0.101	233	0.1	1.740	A
2		193						
3	170	0	2305	0.074	169	0.1	1.684	A
4	103	169	2258	0.046	103	0.0	1.669	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	233	64	2300	0.101	233	0.1	1.740	A
2		193						
3	170	0	2305	0.074	170	0.1	1.684	A
4	103	170	2258	0.046	103	0.0	1.669	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	191	52	2309	0.083	191	0.1	1.698	A
2		157						
3	138	0	2305	0.060	139	0.1	1.660	A
4	85	139	2280	0.037	85	0.0	1.638	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	160	44	2315	0.069	160	0.1	1.669	A
2		132						
3	116	0	2305	0.050	116	0.1	1.643	A
4	71	116	2296	0.031	71	0.0	1.619	A

2027 With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	1.69	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.69	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2027 With Development	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	199	100.000
2				
3		✓	122	100.000
4		✓	116	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	41	158	0
	2	0	0	0	0
	3	103	19	0	0
	4	82	0	34	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.10	1.73	0.1	A
2				
3	0.06	1.66	0.1	A
4	0.06	1.67	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	150	40	2318	0.065	150	0.1	1.659	A
2		144						
3	92	0	2305	0.040	92	0.0	1.625	A
4	87	92	2313	0.038	87	0.0	1.616	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	179	48	2312	0.077	179	0.1	1.686	A
2		173						
3	110	0	2305	0.048	110	0.0	1.638	A
4	104	110	2301	0.045	104	0.0	1.638	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	219	58	2304	0.095	219	0.1	1.725	A
2		211						
3	134	0	2305	0.058	134	0.1	1.657	A
4	128	134	2283	0.056	128	0.1	1.669	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	219	58	2304	0.095	219	0.1	1.725	A
2		211						
3	134	0	2305	0.058	134	0.1	1.657	A
4	128	134	2283	0.056	128	0.1	1.669	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	179	48	2312	0.077	179	0.1	1.686	A
2		173						
3	110	0	2305	0.048	110	0.1	1.641	A
4	104	110	2301	0.045	104	0.0	1.640	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	150	40	2318	0.065	150	0.1	1.662	A
2		145						
3	92	0	2305	0.040	92	0.0	1.625	A
4	87	92	2313	0.038	87	0.0	1.616	A

Junctions 10

PICADY 10 - Priority Intersection Module

Filename: PPA proposed Access.j10
Path: L:\Legacy\UKBLF1FP002\V1TP\PROPOSALS\PROJECTS\Derrygreenagh CCGT\J10
Report generation date: 14/11/2023 15:58:50

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2027 without development									
Stream B-AC	D1	0.0	5.60	0.01	A	D2	0.0	0.00	0.00	A
Stream C-AB		0.0	4.70	0.01	A		0.0	0.00	0.00	A
	2027 with development									
Stream B-AC	D3	0.1	6.70	0.07	A	D4	0.1	6.76	0.06	A
Stream C-AB		0.0	4.70	0.01	A		0.0	0.00	0.00	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	Power Plant Area Access
Location	
Site number	
Date	02/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	NA\kim.burgess
Description	

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2027 without development	AM	ONE HOUR	08:00	09:30	15	✓
D2	2027 without development	PM	ONE HOUR	17:00	18:30	15	✓
D3	2027 with development	AM	ONE HOUR	08:00	09:30	15	✓
D4	2027 with development	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2027 without development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Power Plant Area Access	T-Junction	Two-way	Two-way	Two-way		0.22	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.22	A

Arms

Arms

Arm	Name	Description	Arm type
A	R400 West		Major
B	Site Access		Minor
C	R400 East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.28			250.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.78	36	98

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	634	0.099	0.250	0.157	0.357
B-C	808	0.106	0.268	-	-
C-B	719	0.239	0.239	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2027 without development	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	139	100.000
B		ONE HOUR	✓	8	100.000
C		ONE HOUR	✓	169	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	133
	B	4	0	4
	C	165	4	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.01	5.60	0.0	A	7	11
C-AB	0.01	4.70	0.0	A	5	7
C-A					150	226
A-B					6	8
A-C					122	183

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	671	0.009	6	0.0	0.0	5.416	A
C-AB	4	0.90	770	0.005	4	0.0	0.0	4.696	A
C-A	124	31			124				
A-B	5	1			5				
A-C	100	25			100				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	663	0.011	7	0.0	0.0	5.491	A
C-AB	4	1	780	0.006	4	0.0	0.0	4.638	A
C-A	147	37			147				
A-B	5	1			5				
A-C	120	30			120				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	2	652	0.014	9	0.0	0.0	5.597	A
C-AB	6	1	795	0.007	6	0.0	0.0	4.560	A
C-A	180	45			180				
A-B	7	2			7				
A-C	146	37			146				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	2	652	0.014	9	0.0	0.0	5.597	A
C-AB	6	1	795	0.007	6	0.0	0.0	4.560	A
C-A	180	45			180				
A-B	7	2			7				
A-C	146	37			146				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	663	0.011	7	0.0	0.0	5.491	A
C-AB	4	1	780	0.006	4	0.0	0.0	4.640	A
C-A	147	37			147				
A-B	5	1			5				
A-C	120	30			120				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	671	0.009	6	0.0	0.0	5.417	A
C-AB	4	0.90	770	0.005	4	0.0	0.0	4.698	A
C-A	124	31			124				
A-B	5	1			5				
A-C	100	25			100				

2027 without development , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Power Plant Area Access	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2027 without development	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	141	100.000
B		ONE HOUR	✓	2	100.000
C		ONE HOUR	✓	126	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	141
	B	2	0	0
	C	126	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					116	173
A-B					0	0
A-C					129	194

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	673	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	693	0.000	0	0.0	0.0	0.000	A
C-A	95	24			95				
A-B	0	0			0				
A-C	106	27			106				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	666	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	688	0.000	0	0.0	0.0	0.000	A
C-A	113	28			113				
A-B	0	0			0				
A-C	127	32			127				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	656	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	682	0.000	0	0.0	0.0	0.000	A
C-A	139	35			139				
A-B	0	0			0				
A-C	155	39			155				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	656	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	682	0.000	0	0.0	0.0	0.000	A
C-A	139	35			139				
A-B	0	0			0				
A-C	155	39			155				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	666	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	688	0.000	0	0.0	0.0	0.000	A
C-A	113	28			113				
A-B	0	0			0				
A-C	127	32			127				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	673	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	693	0.000	0	0.0	0.0	0.000	A
C-A	95	24			95				
A-B	0	0			0				
A-C	106	27			106				

2027 with development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Power Plant Area Access	T-Junction	Two-way	Two-way	Two-way		0.66	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.66	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027 with development	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	178	100.000
B		ONE HOUR	✓	35	100.000
C		ONE HOUR	✓	181	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	33	145
	B	31	0	4
	C	177	4	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.07	6.70	0.1	A	32	48
C-AB	0.01	4.70	0.0	A	5	7
C-A					161	242
A-B					30	45
A-C					133	200

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	7	599	0.044	26	0.0	0.0	6.282	A
C-AB	4	0.91	769	0.005	4	0.0	0.0	4.702	A
C-A	133	33			133				
A-B	25	6			25				
A-C	109	27			109				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	589	0.053	31	0.0	0.1	6.454	A
C-AB	5	1	780	0.006	5	0.0	0.0	4.644	A
C-A	158	40			158				
A-B	30	7			30				
A-C	130	33			130				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	10	576	0.067	38	0.1	0.1	6.703	A
C-AB	6	1	794	0.007	6	0.0	0.0	4.566	A
C-A	193	48			193				
A-B	36	9			36				
A-C	160	40			160				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	10	576	0.067	39	0.1	0.1	6.703	A
C-AB	6	1	794	0.007	6	0.0	0.0	4.568	A
C-A	193	48			193				
A-B	36	9			36				
A-C	160	40			160				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	589	0.053	32	0.1	0.1	6.455	A
C-AB	5	1	780	0.006	5	0.0	0.0	4.646	A
C-A	158	40			158				
A-B	30	7			30				
A-C	130	33			130				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	7	599	0.044	26	0.1	0.0	6.288	A
C-AB	4	0.91	769	0.005	4	0.0	0.0	4.702	A
C-A	133	33			133				
A-B	25	6			25				
A-C	109	27			109				

2027 with development , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Power Plant Area Access	T-Junction	Two-way	Two-way	Two-way		0.56	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.56	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027 with development	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	180	100.000
B		ONE HOUR	✓	29	100.000
C		ONE HOUR	✓	138	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	27	153
	B	29	0	0
	C	138	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	6.76	0.1	A	27	40
C-AB	0.00	0.00	0.0	A	0	0
C-A					127	190
A-B					25	37
A-C					140	211

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	5	587	0.037	22	0.0	0.0	6.371	A
C-AB	0	0	686	0.000	0	0.0	0.0	0.000	A
C-A	104	26			104				
A-B	20	5			20				
A-C	115	29			115				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	7	577	0.045	26	0.0	0.0	6.529	A
C-AB	0	0	680	0.000	0	0.0	0.0	0.000	A
C-A	124	31			124				
A-B	24	6			24				
A-C	138	34			138				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	8	565	0.057	32	0.0	0.1	6.755	A
C-AB	0	0	671	0.000	0	0.0	0.0	0.000	A
C-A	152	38			152				
A-B	30	7			30				
A-C	168	42			168				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	8	565	0.057	32	0.1	0.1	6.755	A
C-AB	0	0	671	0.000	0	0.0	0.0	0.000	A
C-A	152	38			152				
A-B	30	7			30				
A-C	168	42			168				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	7	577	0.045	26	0.1	0.0	6.530	A
C-AB	0	0	680	0.000	0	0.0	0.0	0.000	A
C-A	124	31			124				
A-B	24	6			24				
A-C	138	34			138				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	5	587	0.037	22	0.0	0.0	6.377	A
C-AB	0	0	686	0.000	0	0.0	0.0	0.000	A
C-A	104	26			104				
A-B	20	5			20				
A-C	115	29			115				