

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.25	4.09	0.3	A
2 - B4100 (E)	0.38	4.72	0.6	A
3 - Site Arm 3	0.14	4.36	0.2	A

Main Results for each time segment

16:45 - 17:00

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 - B4100 (W)	203	99	1220	0.167	202	0.2	3.603	A
2 - B4100 (E)	327	2	1273	0.257	326	0.4	3.953	A
3 - Site Arm 3	107	286	1165	0.092	106	0.1	3.835	A

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 - B4100 (W)	243	119	1209	0.201	243	0.3	3.797	A
2 - B4100 (E)	391	3	1273	0.307	391	0.5	4.247	A
3 - Site Arm 3	128	343	1133	0.113	128	0.1	4.043	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 - B4100 (W)	297	145	1195	0.249	297	0.3	4.089	A
2 - B4100 (E)	479	3	1272	0.376	478	0.6	4.716	A
3 - Site Arm 3	156	420	1088	0.144	156	0.2	4.359	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 - B4100 (W)	297	145	1195	0.249	297	0.3	4.091	A
2 - B4100 (E)	479	3	1272	0.376	479	0.6	4.723	A
3 - Site Arm 3	156	421	1088	0.144	156	0.2	4.363	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 - B4100 (W)	243	119	1209	0.201	243	0.3	3.800	A
2 - B4100 (E)	391	3	1273	0.307	392	0.5	4.257	A
3 - Site Arm 3	128	344	1132	0.113	128	0.1	4.048	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 - B4100 (W)	203	99	1220	0.167	203	0.2	3.612	A
2 - B4100 (E)	327	2	1273	0.257	328	0.4	3.967	A
3 - Site Arm 3	107	288	1164	0.092	107	0.1	3.844	A

2025 Baseline + Committed + Both Developments, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3	4.55	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	161	1 - B4100 (W)	4.55	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)
D15	2025 Baseline + Committed + Both Developments	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	368	100.000
2 - B4100 (E)		✓	383	100.000
3 - Site Arm 3		✓	85	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	359	9
2 - B4100 (E)	264	0	119
3 - Site Arm 3	5	80	0

Vehicle Mix

HV %s

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	4	0
2 - B4100 (E)	3	0	20
3 - Site Arm 3	0	34	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.33	4.56	0.5	A
2 - B4100 (E)	0.33	4.58	0.5	A
3 - Site Arm 3	0.08	4.42	0.1	A

Main Results for each time segment

07:45 - 08:00

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 - B4100 (W)	277	60	1242	0.223	276	0.3	3.868	A
2 - B4100 (E)	288	7	1271	0.227	287	0.3	3.939	A
3 - Site Arm 3	64	198	1217	0.053	64	0.1	4.101	A

08:00 - 08:15

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 - B4100 (W)	331	72	1235	0.268	331	0.4	4.134	A
2 - B4100 (E)	344	8	1270	0.271	344	0.4	4.189	A
3 - Site Arm 3	76	237	1194	0.064	76	0.1	4.231	A

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 - B4100 (W)	405	88	1226	0.330	405	0.5	4.550	A
2 - B4100 (E)	422	10	1269	0.332	421	0.5	4.573	A
3 - Site Arm 3	94	290	1163	0.080	93	0.1	4.421	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 - B4100 (W)	405	88	1226	0.330	405	0.5	4.555	A
2 - B4100 (E)	422	10	1269	0.332	422	0.5	4.578	A
3 - Site Arm 3	94	291	1163	0.080	94	0.1	4.422	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 - B4100 (W)	331	72	1235	0.268	331	0.4	4.143	A
2 - B4100 (E)	344	8	1270	0.271	345	0.4	4.197	A
3 - Site Arm 3	76	238	1194	0.064	77	0.1	4.235	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 - B4100 (W)	277	60	1241	0.223	277	0.3	3.882	A
2 - B4100 (E)	288	7	1270	0.227	289	0.3	3.953	A
3 - Site Arm 3	64	199	1216	0.053	64	0.1	4.105	A

2025 Baseline + Committed + Both Developments, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3	4.48	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	144	2 - B4100 (E)	4.48	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)
D16	2025 Baseline + Committed + Both Developments	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	271	100.000
2 - B4100 (E)		✓	440	100.000
3 - Site Arm 3		✓	142	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	268	3
2 - B4100 (E)	387	0	53
3 - Site Arm 3	10	132	0

Vehicle Mix

HV %s

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	2	0
2 - B4100 (E)	1	0	34
3 - Site Arm 3	0	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.25	4.10	0.3	A
2 - B4100 (E)	0.38	4.75	0.6	A
3 - Site Arm 3	0.14	4.38	0.2	A

Main Results for each time segment

16:45 - 17:00

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 - B4100 (W)	204	99	1220	0.167	203	0.2	3.606	A
2 - B4100 (E)	331	2	1273	0.260	330	0.4	3.967	A
3 - Site Arm 3	107	290	1163	0.092	106	0.1	3.843	A

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 - B4100 (W)	244	119	1209	0.201	243	0.3	3.800	A
2 - B4100 (E)	396	3	1273	0.311	395	0.5	4.267	A
3 - Site Arm 3	128	348	1130	0.113	128	0.1	4.054	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 - B4100 (W)	298	145	1195	0.250	298	0.3	4.094	A
2 - B4100 (E)	484	3	1272	0.381	484	0.6	4.747	A
3 - Site Arm 3	156	426	1085	0.144	156	0.2	4.374	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 - B4100 (W)	298	145	1195	0.250	298	0.3	4.096	A
2 - B4100 (E)	484	3	1272	0.381	484	0.6	4.754	A
3 - Site Arm 3	156	426	1085	0.144	156	0.2	4.378	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 - B4100 (W)	244	119	1209	0.201	244	0.3	3.806	A
2 - B4100 (E)	396	3	1273	0.311	396	0.5	4.277	A
3 - Site Arm 3	128	348	1129	0.113	128	0.1	4.059	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 - B4100 (W)	204	99	1220	0.167	204	0.2	3.614	A
2 - B4100 (E)	331	2	1273	0.260	332	0.4	3.982	A
3 - Site Arm 3	107	292	1162	0.092	107	0.1	3.851	A

2031 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3	4.09	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	192	1 - B4100 (W)	4.09	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)
D17	2031 Baseline	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	368	100.000
2 - B4100 (E)		✓	271	100.000
3 - Site Arm 3		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
From	1 - B4100 (W)	0	368	0
	2 - B4100 (E)	271	0	0
	3 - Site Arm 3	0	0	0

Vehicle Mix

HV %s

		To		
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
From	1 - B4100 (W)	0	4	0
	2 - B4100 (E)	3	0	0
	3 - Site Arm 3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.32	4.31	0.5	A
2 - B4100 (E)	0.23	3.80	0.3	A
3 - Site Arm 3	0.00	0.00	0.0	A

Main Results for each time segment

07:45 - 08:00

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 - B4100 (W)	277	0	1275	0.217	276	0.3	3.746	A
2 - B4100 (E)	204	0	1274	0.160	203	0.2	3.461	A
3 - Site Arm 3	0	203	1214	0.000	0	0.0	0.000	A

08:00 - 08:15

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 - B4100 (W)	331	0	1275	0.260	331	0.4	3.965	A
2 - B4100 (E)	244	0	1274	0.191	243	0.2	3.596	A
3 - Site Arm 3	0	243	1190	0.000	0	0.0	0.000	A

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 - B4100 (W)	405	0	1275	0.318	405	0.5	4.302	A
2 - B4100 (E)	298	0	1274	0.234	298	0.3	3.798	A
3 - Site Arm 3	0	298	1159	0.000	0	0.0	0.000	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 - B4100 (W)	405	0	1275	0.318	405	0.5	4.305	A
2 - B4100 (E)	298	0	1274	0.234	298	0.3	3.798	A
3 - Site Arm 3	0	298	1158	0.000	0	0.0	0.000	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 - B4100 (W)	331	0	1275	0.260	331	0.4	3.970	A
2 - B4100 (E)	244	0	1274	0.191	244	0.2	3.598	A
3 - Site Arm 3	0	244	1190	0.000	0	0.0	0.000	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 - B4100 (W)	277	0	1275	0.217	277	0.3	3.754	A
2 - B4100 (E)	204	0	1274	0.160	204	0.2	3.465	A
3 - Site Arm 3	0	204	1213	0.000	0	0.0	0.000	A

2031 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3	4.11	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	172	2 - B4100 (E)	4.11	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)
D18	2031 Baseline	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	278	100.000
2 - B4100 (E)		✓	397	100.000
3 - Site Arm 3		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
From	1 - B4100 (W)	0	278	0
	2 - B4100 (E)	397	0	0
	3 - Site Arm 3	0	0	0

Vehicle Mix

HV %s

		To		
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
From	1 - B4100 (W)	0	2	0
	2 - B4100 (E)	1	0	0
	3 - Site Arm 3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.24	3.79	0.3	A
2 - B4100 (E)	0.34	4.34	0.5	A
3 - Site Arm 3	0.00	0.00	0.0	A

Main Results for each time segment

16:45 - 17:00

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 - B4100 (W)	209	0	1275	0.164	208	0.2	3.443	A
2 - B4100 (E)	299	0	1274	0.235	298	0.3	3.718	A
3 - Site Arm 3	0	298	1159	0.000	0	0.0	0.000	A

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 - B4100 (W)	250	0	1275	0.196	250	0.2	3.582	A
2 - B4100 (E)	357	0	1274	0.280	357	0.4	3.961	A
3 - Site Arm 3	0	357	1125	0.000	0	0.0	0.000	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 - B4100 (W)	306	0	1275	0.240	306	0.3	3.790	A
2 - B4100 (E)	437	0	1274	0.343	437	0.5	4.337	A
3 - Site Arm 3	0	437	1078	0.000	0	0.0	0.000	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 - B4100 (W)	306	0	1275	0.240	306	0.3	3.790	A
2 - B4100 (E)	437	0	1274	0.343	437	0.5	4.342	A
3 - Site Arm 3	0	437	1078	0.000	0	0.0	0.000	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 - B4100 (W)	250	0	1275	0.196	250	0.2	3.584	A
2 - B4100 (E)	357	0	1274	0.280	357	0.4	3.967	A
3 - Site Arm 3	0	357	1124	0.000	0	0.0	0.000	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 - B4100 (W)	209	0	1275	0.164	209	0.2	3.449	A
2 - B4100 (E)	299	0	1274	0.235	299	0.3	3.729	A
3 - Site Arm 3	0	299	1158	0.000	0	0.0	0.000	A

2031 Baseline + Committed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3	4.09	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	192	1 - B4100 (W)	4.09	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)
D19	2031 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	368	100.000
2 - B4100 (E)		✓	271	100.000
3 - Site Arm 3		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
From	1 - B4100 (W)	0	368	0
	2 - B4100 (E)	271	0	0
	3 - Site Arm 3	0	0	0

Vehicle Mix

HV %s

		To		
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
From	1 - B4100 (W)	0	4	0
	2 - B4100 (E)	3	0	0
	3 - Site Arm 3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.32	4.31	0.5	A
2 - B4100 (E)	0.23	3.80	0.3	A
3 - Site Arm 3	0.00	0.00	0.0	A

Main Results for each time segment

07:45 - 08:00

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 - B4100 (W)	277	0	1275	0.217	276	0.3	3.746	A
2 - B4100 (E)	204	0	1274	0.160	203	0.2	3.461	A
3 - Site Arm 3	0	203	1214	0.000	0	0.0	0.000	A

08:00 - 08:15

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 - B4100 (W)	331	0	1275	0.260	331	0.4	3.965	A
2 - B4100 (E)	244	0	1274	0.191	243	0.2	3.596	A
3 - Site Arm 3	0	243	1190	0.000	0	0.0	0.000	A

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 - B4100 (W)	405	0	1275	0.318	405	0.5	4.302	A
2 - B4100 (E)	298	0	1274	0.234	298	0.3	3.798	A
3 - Site Arm 3	0	298	1159	0.000	0	0.0	0.000	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 - B4100 (W)	405	0	1275	0.318	405	0.5	4.305	A
2 - B4100 (E)	298	0	1274	0.234	298	0.3	3.798	A
3 - Site Arm 3	0	298	1158	0.000	0	0.0	0.000	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 - B4100 (W)	331	0	1275	0.260	331	0.4	3.970	A
2 - B4100 (E)	244	0	1274	0.191	244	0.2	3.598	A
3 - Site Arm 3	0	244	1190	0.000	0	0.0	0.000	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 - B4100 (W)	277	0	1275	0.217	277	0.3	3.754	A
2 - B4100 (E)	204	0	1274	0.160	204	0.2	3.465	A
3 - Site Arm 3	0	204	1213	0.000	0	0.0	0.000	A

2031 Baseline + Committed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3	4.11	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	172	2 - B4100 (E)	4.11	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)
D20	2031 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	278	100.000
2 - B4100 (E)		✓	397	100.000
3 - Site Arm 3		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
From	1 - B4100 (W)	0	278	0
	2 - B4100 (E)	397	0	0
	3 - Site Arm 3	0	0	0

Vehicle Mix

HV %s

		To		
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
From	1 - B4100 (W)	0	2	0
	2 - B4100 (E)	1	0	0
	3 - Site Arm 3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.24	3.79	0.3	A
2 - B4100 (E)	0.34	4.34	0.5	A
3 - Site Arm 3	0.00	0.00	0.0	A

Main Results for each time segment

16:45 - 17:00

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 - B4100 (W)	209	0	1275	0.164	208	0.2	3.443	A
2 - B4100 (E)	299	0	1274	0.235	298	0.3	3.718	A
3 - Site Arm 3	0	298	1159	0.000	0	0.0	0.000	A

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 - B4100 (W)	250	0	1275	0.196	250	0.2	3.582	A
2 - B4100 (E)	357	0	1274	0.280	357	0.4	3.961	A
3 - Site Arm 3	0	357	1125	0.000	0	0.0	0.000	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 - B4100 (W)	306	0	1275	0.240	306	0.3	3.790	A
2 - B4100 (E)	437	0	1274	0.343	437	0.5	4.337	A
3 - Site Arm 3	0	437	1078	0.000	0	0.0	0.000	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 - B4100 (W)	306	0	1275	0.240	306	0.3	3.790	A
2 - B4100 (E)	437	0	1274	0.343	437	0.5	4.342	A
3 - Site Arm 3	0	437	1078	0.000	0	0.0	0.000	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 - B4100 (W)	250	0	1275	0.196	250	0.2	3.584	A
2 - B4100 (E)	357	0	1274	0.280	357	0.4	3.967	A
3 - Site Arm 3	0	357	1124	0.000	0	0.0	0.000	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 - B4100 (W)	209	0	1275	0.164	209	0.2	3.449	A
2 - B4100 (E)	299	0	1274	0.235	299	0.3	3.729	A
3 - Site Arm 3	0	299	1158	0.000	0	0.0	0.000	A

2031 Baseline + Committed + Western Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3	4.60	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	155	1 - B4100 (W)	4.60	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)
D21	2031 Baseline + Committed + Western Development	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	377	100.000
2 - B4100 (E)		✓	390	100.000
3 - Site Arm 3		✓	85	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	368	9
2 - B4100 (E)	271	0	119
3 - Site Arm 3	5	80	0

Vehicle Mix

HV %s

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	4	0
2 - B4100 (E)	3	0	20
3 - Site Arm 3	0	34	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.34	4.61	0.5	A
2 - B4100 (E)	0.34	4.62	0.5	A
3 - Site Arm 3	0.08	4.44	0.1	A

Main Results for each time segment

07:45 - 08:00

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 - B4100 (W)	284	60	1242	0.229	283	0.3	3.895	A
2 - B4100 (E)	294	7	1271	0.231	292	0.3	3.957	A
3 - Site Arm 3	64	203	1214	0.053	64	0.1	4.112	A

08:00 - 08:15

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 - B4100 (W)	339	72	1235	0.274	339	0.4	4.172	A
2 - B4100 (E)	351	8	1270	0.276	350	0.4	4.214	A
3 - Site Arm 3	76	243	1190	0.064	76	0.1	4.245	A

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 - B4100 (W)	415	88	1226	0.339	415	0.5	4.605	A
2 - B4100 (E)	429	10	1269	0.338	429	0.5	4.611	A
3 - Site Arm 3	94	298	1159	0.081	93	0.1	4.439	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 - B4100 (W)	415	88	1226	0.339	415	0.5	4.611	A
2 - B4100 (E)	429	10	1269	0.338	429	0.5	4.616	A
3 - Site Arm 3	94	298	1158	0.081	94	0.1	4.440	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 - B4100 (W)	339	72	1235	0.274	339	0.4	4.179	A
2 - B4100 (E)	351	8	1270	0.276	351	0.4	4.222	A
3 - Site Arm 3	76	244	1190	0.064	77	0.1	4.247	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 - B4100 (W)	284	60	1241	0.229	284	0.3	3.910	A
2 - B4100 (E)	294	7	1270	0.231	294	0.3	3.969	A
3 - Site Arm 3	64	204	1213	0.053	64	0.1	4.116	A

2031 Baseline + Committed + Western Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3	4.54	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	138	2 - B4100 (E)	4.54	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)
D22	2031 Baseline + Committed + Western Development	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	281	100.000
2 - B4100 (E)		✓	450	100.000
3 - Site Arm 3		✓	142	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	278	3
2 - B4100 (E)	397	0	53
3 - Site Arm 3	10	132	0

Vehicle Mix

HV %s

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	2	0
2 - B4100 (E)	1	0	34
3 - Site Arm 3	0	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.26	4.15	0.4	A
2 - B4100 (E)	0.39	4.82	0.7	A
3 - Site Arm 3	0.15	4.41	0.2	A

Main Results for each time segment

16:45 - 17:00

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 - B4100 (W)	212	99	1220	0.173	211	0.2	3.633	A
2 - B4100 (E)	339	2	1273	0.266	337	0.4	3.995	A
3 - Site Arm 3	107	298	1159	0.092	106	0.1	3.859	A

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 - B4100 (W)	253	119	1209	0.209	252	0.3	3.836	A
2 - B4100 (E)	405	3	1273	0.318	404	0.5	4.309	A
3 - Site Arm 3	128	357	1125	0.113	128	0.1	4.075	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 - B4100 (W)	309	145	1195	0.259	309	0.4	4.142	A
2 - B4100 (E)	495	3	1272	0.389	495	0.7	4.811	A
3 - Site Arm 3	156	436	1079	0.145	156	0.2	4.404	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 - B4100 (W)	309	145	1195	0.259	309	0.4	4.147	A
2 - B4100 (E)	495	3	1272	0.389	495	0.7	4.819	A
3 - Site Arm 3	156	437	1078	0.145	156	0.2	4.408	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 - B4100 (W)	253	119	1209	0.209	253	0.3	3.841	A
2 - B4100 (E)	405	3	1273	0.318	405	0.5	4.321	A
3 - Site Arm 3	128	358	1124	0.114	128	0.1	4.079	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 - B4100 (W)	212	99	1220	0.173	212	0.2	3.641	A
2 - B4100 (E)	339	2	1273	0.266	339	0.4	4.011	A
3 - Site Arm 3	107	299	1158	0.092	107	0.1	3.868	A

2031 Baseline + Committed + Both Developments, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3	4.62	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	152	1 - B4100 (W)	4.62	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)
D23	2031 Baseline + Committed + Both Developments	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	382	100.000
2 - B4100 (E)		✓	393	100.000
3 - Site Arm 3		✓	85	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	373	9
2 - B4100 (E)	274	0	119
3 - Site Arm 3	5	80	0

Vehicle Mix

HV %s

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	4	0
2 - B4100 (E)	3	0	20
3 - Site Arm 3	0	34	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.34	4.64	0.5	A
2 - B4100 (E)	0.34	4.63	0.6	A
3 - Site Arm 3	0.08	4.45	0.1	A

Main Results for each time segment

07:45 - 08:00

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 - B4100 (W)	288	60	1242	0.232	286	0.3	3.911	A
2 - B4100 (E)	296	7	1271	0.233	295	0.3	3.965	A
3 - Site Arm 3	64	205	1212	0.053	64	0.1	4.116	A

08:00 - 08:15

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 - B4100 (W)	343	72	1235	0.278	343	0.4	4.190	A
2 - B4100 (E)	353	8	1270	0.278	353	0.4	4.226	A
3 - Site Arm 3	76	246	1189	0.064	76	0.1	4.251	A

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 - B4100 (W)	421	88	1226	0.343	420	0.5	4.637	A
2 - B4100 (E)	433	10	1269	0.341	432	0.6	4.627	A
3 - Site Arm 3	94	301	1157	0.081	93	0.1	4.447	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 - B4100 (W)	421	88	1226	0.343	421	0.5	4.643	A
2 - B4100 (E)	433	10	1269	0.341	433	0.6	4.633	A
3 - Site Arm 3	94	302	1157	0.081	94	0.1	4.448	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 - B4100 (W)	343	72	1235	0.278	344	0.4	4.202	A
2 - B4100 (E)	353	8	1270	0.278	354	0.4	4.233	A
3 - Site Arm 3	76	247	1188	0.064	77	0.1	4.255	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 - B4100 (W)	288	60	1241	0.232	288	0.3	3.924	A
2 - B4100 (E)	296	7	1270	0.233	296	0.3	3.977	A
3 - Site Arm 3	64	207	1212	0.053	64	0.1	4.122	A

2031 Baseline + Committed + Both Developments, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3	4.56	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	135	2 - B4100 (E)	4.56	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)
D24	2031 Baseline + Committed + Both Developments	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	282	100.000
2 - B4100 (E)		✓	456	100.000
3 - Site Arm 3		✓	142	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	279	3
2 - B4100 (E)	403	0	53
3 - Site Arm 3	10	132	0

Vehicle Mix

HV %s

From	To		
	1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3
1 - B4100 (W)	0	2	0
2 - B4100 (E)	1	0	34
3 - Site Arm 3	0	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.26	4.15	0.4	A
2 - B4100 (E)	0.39	4.86	0.7	A
3 - Site Arm 3	0.15	4.43	0.2	A

Main Results for each time segment

16:45 - 17:00

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 - B4100 (W)	212	99	1220	0.174	211	0.2	3.636	A
2 - B4100 (E)	343	2	1273	0.270	342	0.4	4.013	A
3 - Site Arm 3	107	302	1156	0.092	106	0.1	3.869	A

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 - B4100 (W)	254	119	1209	0.210	253	0.3	3.839	A
2 - B4100 (E)	410	3	1273	0.322	409	0.5	4.334	A
3 - Site Arm 3	128	362	1122	0.114	128	0.1	4.088	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 - B4100 (W)	310	145	1195	0.260	310	0.4	4.147	A
2 - B4100 (E)	502	3	1272	0.395	501	0.7	4.850	A
3 - Site Arm 3	156	443	1075	0.145	156	0.2	4.423	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 - B4100 (W)	310	145	1195	0.260	310	0.4	4.152	A
2 - B4100 (E)	502	3	1272	0.395	502	0.7	4.858	A
3 - Site Arm 3	156	444	1074	0.146	156	0.2	4.426	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 - B4100 (W)	254	119	1209	0.210	254	0.3	3.845	A
2 - B4100 (E)	410	3	1273	0.322	411	0.5	4.346	A
3 - Site Arm 3	128	363	1121	0.114	128	0.1	4.091	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 - B4100 (W)	212	99	1220	0.174	213	0.2	3.647	A
2 - B4100 (E)	343	2	1273	0.270	344	0.4	4.029	A
3 - Site Arm 3	107	304	1155	0.093	107	0.1	3.876	A

Junctions 10
ARCADY 10 - Roundabout Module
Version: 10.0.1.1519 © Copyright TRL Software Limited, 2021
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Filename: Eastern Site Roundabout RevA.j10
 Path: P:\17000's\17213\Junction Assessments
 Report generation date: 07/09/2021 11:29:29

- »2019 Baseline, AM
- »2019 Baseline, PM
- »2019 Baseline + Committed, AM
- »2019 Baseline + Committed, PM
- »2019 Baseline + Committed + Eastern Development, AM
- »2019 Baseline + Committed + Eastern Development, PM
- »2019 Baseline + Committed + Both Developments , AM
- »2019 Baseline + Committed + Both Developments, PM
- »2025 Baseline, AM
- »2025 Baseline, PM
- »2025 Baseline + Committed, AM
- »2025 Baseline + Committed, PM
- »2025 Baseline + Committed + Eastern Development, AM
- »2025 Baseline + Committed + Eastern Development, PM
- »2025 Baseline + Committed + Both Developments, AM
- »2025 Baseline + Committed + Both Developments, PM
- »2031 Baseline, AM
- »2031 Baseline, PM
- »2031 Baseline + Committed, AM
- »2031 Baseline + Committed, PM
- »2031 Baseline + Committed + Eastern Development, AM
- »2031 Baseline + Committed + Eastern Development, PM
- »2031 Baseline + Committed + Both Developments, AM
- »2031 Baseline + Committed + Both Developments, PM

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
2019 Baseline								
1 - B4100 (W)	0.5	2.44	0.33	193 % [1 - B4100 (W)]	0.3	2.10	0.23	172 % [2 - B4100 (E)]
2 - B4100 (E)	0.3	2.38	0.23		0.6	2.76	0.36	
3 - Site Arm 3	0.0	0.00	0.00		0.0	0.00	0.00	
4 - Site Arm 4	0.0	0.00	0.00		0.0	0.00	0.00	
2019 Baseline + Committed								
1 - B4100 (W)	0.6	2.60	0.37	160 % [1 - B4100 (W)]	0.3	2.10	0.23	172 % [2 - B4100 (E)]
2 - B4100 (E)	0.4	2.47	0.26		0.6	2.76	0.36	
3 - Site Arm 3	0.0	0.00	0.00		0.0	0.00	0.00	
4 - Site Arm 4	0.0	0.00	0.00		0.0	0.00	0.00	

2019 Baseline + Committed + Eastern Development								
1 - B4100 (W)	0.6	2.67	0.38	149 % [1 - B4100 (W)]	0.3	2.16	0.24	155 % [2 - B4100 (E)]
2 - B4100 (E)	0.4	2.64	0.29		0.8	3.72	0.37	
3 - Site Arm 3	0.0	4.56	0.02		0.0	4.35	0.03	
4 - Site Arm 4	0.0	4.15	0.03		0.1	4.06	0.05	
2019 Baseline + Committed + Both Developments								
1 - B4100 (W)	0.7	2.74	0.40	139 % [1 - B4100 (W)]	0.4	2.37	0.30	119 % [2 - B4100 (E)]
2 - B4100 (E)	0.5	2.75	0.32		1.0	4.12	0.43	
3 - Site Arm 3	0.0	4.71	0.02		0.0	4.67	0.03	
4 - Site Arm 4	0.0	4.28	0.03		0.1	4.35	0.06	
2025 Baseline								
1 - B4100 (W)	0.6	2.53	0.35	174 % [1 - B4100 (W)]	0.3	2.14	0.25	153 % [2 - B4100 (E)]
2 - B4100 (E)	0.3	2.43	0.25		0.6	2.88	0.38	
3 - Site Arm 3	0.0	0.00	0.00		0.0	0.00	0.00	
4 - Site Arm 4	0.0	0.00	0.00		0.0	0.00	0.00	
2025 Baseline + Committed								
1 - B4100 (W)	0.7	2.70	0.40	145 % [1 - B4100 (W)]	0.3	2.14	0.25	153 % [2 - B4100 (E)]
2 - B4100 (E)	0.4	2.52	0.27		0.6	2.88	0.38	
3 - Site Arm 3	0.0	0.00	0.00		0.0	0.00	0.00	
4 - Site Arm 4	0.0	0.00	0.00		0.0	0.00	0.00	
2025 Baseline + Committed + Eastern Development								
1 - B4100 (W)	0.7	2.78	0.40	135 % [1 - B4100 (W)]	0.3	2.24	0.25	142 % [2 - B4100 (E)]
2 - B4100 (E)	0.5	2.70	0.31		0.7	3.06	0.40	
3 - Site Arm 3	0.0	4.64	0.02		0.0	5.20	0.03	
4 - Site Arm 4	0.0	4.22	0.03		0.1	4.84	0.06	
2025 Baseline + Committed + Both Developments								
1 - B4100 (W)	0.7	2.85	0.42	126 % [1 - B4100 (W)]	0.5	2.46	0.32	110 % [2 - B4100 (E)]
2 - B4100 (E)	0.5	2.82	0.34		0.9	3.40	0.46	
3 - Site Arm 3	0.0	4.80	0.02		0.0	5.60	0.03	
4 - Site Arm 4	0.0	4.35	0.03		0.1	5.21	0.06	
2031 Baseline								
1 - B4100 (W)	0.6	2.58	0.37	163 % [1 - B4100 (W)]	0.4	2.17	0.26	143 % [2 - B4100 (E)]
2 - B4100 (E)	0.4	2.47	0.26		0.7	2.95	0.40	
3 - Site Arm 3	0.0	0.00	0.00		0.0	0.00	0.00	
4 - Site Arm 4	0.0	0.00	0.00		0.0	0.00	0.00	
2031 Baseline + Committed								
1 - B4100 (W)	0.7	2.76	0.41	137 % [1 - B4100 (W)]	0.4	2.17	0.26	143 % [2 - B4100 (E)]
2 - B4100 (E)	0.4	2.56	0.28		0.7	2.95	0.40	
3 - Site Arm 3	0.0	0.00	0.00		0.0	0.00	0.00	
4 - Site Arm 4	0.0	0.00	0.00		0.0	0.00	0.00	
2031 Baseline + Committed + Eastern Development								
1 - B4100 (W)	0.7	2.84	0.42	127 % [1 - B4100 (W)]	0.4	2.25	0.26	133 % [2 - B4100 (E)]
2 - B4100 (E)	0.5	2.76	0.32		0.7	3.06	0.41	
3 - Site Arm 3	0.0	4.24	0.02		0.0	4.57	0.03	
4 - Site Arm 4	0.0	3.85	0.03		0.1	4.26	0.06	
2031 Baseline + Committed + Both Developments								
1 - B4100 (W)	0.8	2.92	0.43	119 % [1 - B4100 (W)]	0.5	2.47	0.33	103 % [2 - B4100 (E)]
2 - B4100 (E)	0.6	2.89	0.35		0.9	3.41	0.47	
3 - Site Arm 3	0.0	4.38	0.02		0.0	4.93	0.03	
4 - Site Arm 4	0.0	3.97	0.03		0.1	4.58	0.06	

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 Av. delay per arriving vehicle. Res Cap indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	22/07/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DTA\arcady
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Q Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
	✓	Delay	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	2019 Baseline	AM	ONE HOUR	07:45	09:15	15
D2	2019 Baseline	PM	ONE HOUR	16:45	18:15	15
D3	2019 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15
D4	2019 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15
D5	2019 Baseline + Committed + Eastern Development	AM	ONE HOUR	07:45	09:15	15
D6	2019 Baseline + Committed + Eastern Development	PM	ONE HOUR	16:45	18:15	15
D7	2019 Baseline + Committed + Both Developments	AM	ONE HOUR	07:45	09:15	15
D8	2019 Baseline + Committed + Both Developments	PM	ONE HOUR	16:45	18:15	15
D9	2025 Baseline	AM	ONE HOUR	07:45	09:15	15
D10	2025 Baseline	PM	ONE HOUR	16:45	18:15	15
D11	2025 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15
D12	2025 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15
D13	2025 Baseline + Committed + Eastern Development	AM	ONE HOUR	07:45	09:15	15
D14	2025 Baseline + Committed + Eastern Development	PM	ONE HOUR	16:45	18:15	15
D15	2025 Baseline + Committed + Both Developments	AM	ONE HOUR	07:45	09:15	15
D16	2025 Baseline + Committed + Both Developments	PM	ONE HOUR	16:45	18:15	15
D17	2031 Baseline	AM	ONE HOUR	07:45	09:15	15
D18	2031 Baseline	PM	ONE HOUR	16:45	18:15	15
D19	2031 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15
D20	2031 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15
D21	2031 Baseline + Committed + Eastern Development	AM	ONE HOUR	07:45	09:15	15
D22	2031 Baseline + Committed + Eastern Development	PM	ONE HOUR	16:45	18:15	15
D23	2031 Baseline + Committed + Both Developments	AM	ONE HOUR	07:45	09:15	15
D24	2031 Baseline + Committed + Both Developments	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2019 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	2.42	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	193	1 - B4100 (W)	2.42	A

Arms

Arms

Arm	Name	Description	No give-way line
1	B4100 (W)		
2	B4100 (E)		
3	Site Arm 3		
4	Site Arm 4		

Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
1 - B4100 (W)	7.30	8.30	4.6	21.0	55.0	45.0		
2 - B4100 (E)	3.65	8.10	51.0	17.5	55.0	41.0		
3 - Site Arm 3	3.65	6.50	4.0	20.0	55.0	33.0		
4 - Site Arm 4	3.60	7.20	7.1	21.0	55.0	39.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B4100 (W)	0.675	2272
2 - B4100 (E)	0.638	2062
3 - Site Arm 3	0.519	1355
4 - Site Arm 4	0.533	1463

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	2019 Baseline	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	683	100.000
2 - B4100 (E)		✓	432	100.000
3 - Site Arm 3		✓	0	100.000
4 - Site Arm 4		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	683	0	0
	2 - B4100 (E)	432	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Vehicle Mix

HV %s

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	3	0	0
	2 - B4100 (E)	5	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.33	2.44	0.5	A
2 - B4100 (E)	0.23	2.38	0.3	A
3 - Site Arm 3	0.00	0.00	0.0	A
4 - Site Arm 4	0.00	0.00	0.0	A

Main Results for each time segment

07:45 - 08:00

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 - B4100 (W)	514	0	2272	0.226	513	0.3	2.107	A
2 - B4100 (E)	325	0	2062	0.158	324	0.2	2.173	A
3 - Site Arm 3	0	324	1187	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	324	1290	0.000	0	0.0	0.000	A

08:00 - 08:15

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 - B4100 (W)	614	0	2272	0.270	614	0.4	2.236	A
2 - B4100 (E)	388	0	2062	0.188	388	0.2	2.257	A
3 - Site Arm 3	0	388	1154	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	388	1256	0.000	0	0.0	0.000	A

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 - B4100 (W)	752	0	2272	0.331	751	0.5	2.439	A
2 - B4100 (E)	476	0	2062	0.231	475	0.3	2.381	A
3 - Site Arm 3	0	475	1108	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	475	1210	0.000	0	0.0	0.000	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 - B4100 (W)	752	0	2272	0.331	752	0.5	2.439	A
2 - B4100 (E)	476	0	2062	0.231	476	0.3	2.381	A
3 - Site Arm 3	0	476	1108	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	476	1210	0.000	0	0.0	0.000	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 - B4100 (W)	614	0	2272	0.270	615	0.4	2.239	A
2 - B4100 (E)	388	0	2062	0.188	389	0.2	2.260	A
3 - Site Arm 3	0	389	1153	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	389	1256	0.000	0	0.0	0.000	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 - B4100 (W)	514	0	2272	0.226	515	0.3	2.110	A
2 - B4100 (E)	325	0	2062	0.158	325	0.2	2.177	A
3 - Site Arm 3	0	325	1186	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	325	1290	0.000	0	0.0	0.000	A

2019 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	2.48	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	172	2 - B4100 (E)	2.48	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	2019 Baseline	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	472	100.000
2 - B4100 (E)		✓	665	100.000
3 - Site Arm 3		✓	0	100.000
4 - Site Arm 4		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	472	0	0
	2 - B4100 (E)	665	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Vehicle Mix

HV %s

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	2	0	0
	2 - B4100 (E)	2	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.23	2.10	0.3	A
2 - B4100 (E)	0.36	2.76	0.6	A
3 - Site Arm 3	0.00	0.00	0.0	A
4 - Site Arm 4	0.00	0.00	0.0	A

Main Results for each time segment
16:45 - 17:00

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 - B4100 (W)	355	0	2272	0.156	355	0.2	1.915	A
2 - B4100 (E)	501	0	2062	0.243	499	0.3	2.347	A
3 - Site Arm 3	0	499	1096	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	499	1197	0.000	0	0.0	0.000	A

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 - B4100 (W)	424	0	2272	0.187	424	0.2	1.987	A
2 - B4100 (E)	598	0	2062	0.290	597	0.4	2.506	A
3 - Site Arm 3	0	597	1045	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	597	1145	0.000	0	0.0	0.000	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 - B4100 (W)	520	0	2272	0.229	519	0.3	2.095	A
2 - B4100 (E)	732	0	2062	0.355	732	0.6	2.757	A
3 - Site Arm 3	0	732	975	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	732	1073	0.000	0	0.0	0.000	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 - B4100 (W)	520	0	2272	0.229	520	0.3	2.095	A
2 - B4100 (E)	732	0	2062	0.355	732	0.6	2.759	A
3 - Site Arm 3	0	732	975	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	732	1073	0.000	0	0.0	0.000	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 - B4100 (W)	424	0	2272	0.187	425	0.2	1.987	A
2 - B4100 (E)	598	0	2062	0.290	598	0.4	2.508	A
3 - Site Arm 3	0	598	1045	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	598	1144	0.000	0	0.0	0.000	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 - B4100 (W)	355	0	2272	0.156	356	0.2	1.915	A
2 - B4100 (E)	501	0	2062	0.243	501	0.3	2.351	A
3 - Site Arm 3	0	501	1095	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	501	1196	0.000	0	0.0	0.000	A

2019 Baseline + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	2.55	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	160	1 - B4100 (W)	2.55	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	2019 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	768	100.000
2 - B4100 (E)		✓	483	100.000
3 - Site Arm 3		✓	0	100.000
4 - Site Arm 4		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	768	0	0
	2 - B4100 (E)	483	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Vehicle Mix

HV %s

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	3	0	0
	2 - B4100 (E)	5	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.37	2.60	0.6	A
2 - B4100 (E)	0.26	2.47	0.4	A
3 - Site Arm 3	0.00	0.00	0.0	A
4 - Site Arm 4	0.00	0.00	0.0	A

Main Results for each time segment
07:45 - 08:00

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 - B4100 (W)	578	0	2272	0.255	577	0.4	2.185	A
2 - B4100 (E)	364	0	2062	0.176	363	0.2	2.222	A
3 - Site Arm 3	0	363	1167	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	363	1270	0.000	0	0.0	0.000	A

08:00 - 08:15

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 - B4100 (W)	690	0	2272	0.304	690	0.4	2.344	A
2 - B4100 (E)	434	0	2062	0.211	434	0.3	2.321	A
3 - Site Arm 3	0	434	1130	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	434	1232	0.000	0	0.0	0.000	A

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 - B4100 (W)	846	0	2272	0.372	845	0.6	2.597	A
2 - B4100 (E)	532	0	2062	0.258	531	0.4	2.469	A
3 - Site Arm 3	0	531	1079	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	531	1180	0.000	0	0.0	0.000	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 - B4100 (W)	846	0	2272	0.372	846	0.6	2.599	A
2 - B4100 (E)	532	0	2062	0.258	532	0.4	2.469	A
3 - Site Arm 3	0	532	1079	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	532	1180	0.000	0	0.0	0.000	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 - B4100 (W)	690	0	2272	0.304	691	0.5	2.346	A
2 - B4100 (E)	434	0	2062	0.211	435	0.3	2.323	A
3 - Site Arm 3	0	435	1130	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	435	1231	0.000	0	0.0	0.000	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 - B4100 (W)	578	0	2272	0.255	579	0.4	2.191	A
2 - B4100 (E)	364	0	2062	0.176	364	0.2	2.227	A
3 - Site Arm 3	0	364	1166	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	364	1269	0.000	0	0.0	0.000	A

2019 Baseline + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	2.48	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	172	2 - B4100 (E)	2.48	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	2019 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	472	100.000
2 - B4100 (E)		✓	665	100.000
3 - Site Arm 3		✓	0	100.000
4 - Site Arm 4		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	472	0	0
	2 - B4100 (E)	665	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Vehicle Mix

HV %s

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	2	0	0
	2 - B4100 (E)	2	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.23	2.10	0.3	A
2 - B4100 (E)	0.36	2.76	0.6	A
3 - Site Arm 3	0.00	0.00	0.0	A
4 - Site Arm 4	0.00	0.00	0.0	A

Main Results for each time segment
16:45 - 17:00

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 - B4100 (W)	355	0	2272	0.156	355	0.2	1.915	A
2 - B4100 (E)	501	0	2062	0.243	499	0.3	2.347	A
3 - Site Arm 3	0	499	1096	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	499	1197	0.000	0	0.0	0.000	A

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 - B4100 (W)	424	0	2272	0.187	424	0.2	1.987	A
2 - B4100 (E)	598	0	2062	0.290	597	0.4	2.506	A
3 - Site Arm 3	0	597	1045	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	597	1145	0.000	0	0.0	0.000	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 - B4100 (W)	520	0	2272	0.229	519	0.3	2.095	A
2 - B4100 (E)	732	0	2062	0.355	732	0.6	2.757	A
3 - Site Arm 3	0	732	975	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	732	1073	0.000	0	0.0	0.000	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 - B4100 (W)	520	0	2272	0.229	520	0.3	2.095	A
2 - B4100 (E)	732	0	2062	0.355	732	0.6	2.759	A
3 - Site Arm 3	0	732	975	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	732	1073	0.000	0	0.0	0.000	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 - B4100 (W)	424	0	2272	0.187	425	0.2	1.987	A
2 - B4100 (E)	598	0	2062	0.290	598	0.4	2.508	A
3 - Site Arm 3	0	598	1045	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	598	1144	0.000	0	0.0	0.000	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 - B4100 (W)	355	0	2272	0.156	356	0.2	1.915	A
2 - B4100 (E)	501	0	2062	0.243	501	0.3	2.351	A
3 - Site Arm 3	0	501	1095	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	501	1196	0.000	0	0.0	0.000	A

2019 Baseline + Committed + Eastern Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	2.71	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	149	1 - B4100 (W)	2.71	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	2019 Baseline + Committed + Eastern Development	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	773	100.000
2 - B4100 (E)		✓	549	100.000
3 - Site Arm 3		✓	16	100.000
4 - Site Arm 4		✓	31	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	768	2	3
	2 - B4100 (E)	483	0	22	44
	3 - Site Arm 3	1	15	0	0
	4 - Site Arm 4	2	29	0	0

Vehicle Mix

HV %s

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	3	0	0
	2 - B4100 (E)	5	0	20	20
	3 - Site Arm 3	0	34	0	0
	4 - Site Arm 4	0	34	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.38	2.67	0.6	A
2 - B4100 (E)	0.29	2.64	0.4	A
3 - Site Arm 3	0.02	4.56	0.0	A
4 - Site Arm 4	0.03	4.15	0.0	A

Main Results for each time segment
07:45 - 08:00

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 - B4100 (W)	582	33	2249	0.259	581	0.4	2.219	A
2 - B4100 (E)	413	4	2060	0.201	412	0.3	2.328	A
3 - Site Arm 3	12	398	1149	0.010	12	0.0	4.156	A
4 - Site Arm 4	23	375	1263	0.018	23	0.0	3.805	A

08:00 - 08:15

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 - B4100 (W)	695	40	2245	0.310	695	0.5	2.391	A
2 - B4100 (E)	494	4	2060	0.240	493	0.3	2.450	A
3 - Site Arm 3	14	476	1108	0.013	14	0.0	4.319	A
4 - Site Arm 4	28	448	1224	0.023	28	0.0	3.945	A

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 - B4100 (W)	851	48	2239	0.380	850	0.6	2.668	A
2 - B4100 (E)	604	6	2059	0.294	604	0.4	2.637	A
3 - Site Arm 3	18	583	1052	0.017	18	0.0	4.564	A
4 - Site Arm 4	34	549	1170	0.029	34	0.0	4.154	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 - B4100 (W)	851	48	2239	0.380	851	0.6	2.670	A
2 - B4100 (E)	604	6	2059	0.294	604	0.4	2.637	A
3 - Site Arm 3	18	584	1052	0.017	18	0.0	4.565	A
4 - Site Arm 4	34	549	1170	0.029	34	0.0	4.154	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 - B4100 (W)	695	40	2245	0.310	696	0.5	2.393	A
2 - B4100 (E)	494	4	2060	0.240	494	0.3	2.453	A
3 - Site Arm 3	14	477	1108	0.013	14	0.0	4.320	A
4 - Site Arm 4	28	449	1224	0.023	28	0.0	3.948	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 - B4100 (W)	582	33	2249	0.259	582	0.4	2.225	A
2 - B4100 (E)	413	4	2060	0.201	414	0.3	2.330	A
3 - Site Arm 3	12	399	1148	0.010	12	0.0	4.160	A
4 - Site Arm 4	23	376	1263	0.018	23	0.0	3.810	A

2019 Baseline + Committed + Eastern Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	3.16	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	155	2 - B4100 (E)	3.16	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	2019 Baseline + Committed + Eastern Development	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	474	100.000
2 - B4100 (E)		✓	694	100.000
3 - Site Arm 3		✓	27	100.000
4 - Site Arm 4		✓	52	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	472	1	1
	2 - B4100 (E)	665	0	10	19
	3 - Site Arm 3	2	25	0	0
	4 - Site Arm 4	4	48	0	0

Vehicle Mix

HV %s

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	2	0	0
	2 - B4100 (E)	34	0	34	34
	3 - Site Arm 3	0	14	0	0
	4 - Site Arm 4	0	14	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.24	2.16	0.3	A
2 - B4100 (E)	0.37	3.72	0.8	A
3 - Site Arm 3	0.03	4.35	0.0	A
4 - Site Arm 4	0.05	4.06	0.1	A

Main Results for each time segment
16:45 - 17:00

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 - B4100 (W)	357	55	2235	0.160	356	0.2	1.953	A
2 - B4100 (E)	522	2	2061	0.253	521	0.5	3.128	A
3 - Site Arm 3	20	514	1088	0.019	20	0.0	3.802	A
4 - Site Arm 4	39	519	1186	0.033	39	0.0	3.538	A

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 - B4100 (W)	426	66	2227	0.191	426	0.2	2.037	A
2 - B4100 (E)	624	2	2061	0.303	623	0.6	3.355	A
3 - Site Arm 3	24	615	1036	0.023	24	0.0	4.015	A
4 - Site Arm 4	47	622	1132	0.041	47	0.0	3.741	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 - B4100 (W)	522	80	2218	0.235	522	0.3	2.164	A
2 - B4100 (E)	764	2	2061	0.371	763	0.8	3.715	A
3 - Site Arm 3	30	753	964	0.031	30	0.0	4.346	A
4 - Site Arm 4	57	761	1057	0.054	57	0.1	4.059	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 - B4100 (W)	522	80	2218	0.235	522	0.3	2.165	A
2 - B4100 (E)	764	2	2061	0.371	764	0.8	3.718	A
3 - Site Arm 3	30	754	964	0.031	30	0.0	4.348	A
4 - Site Arm 4	57	762	1057	0.054	57	0.1	4.061	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 - B4100 (W)	426	66	2227	0.191	426	0.2	2.040	A
2 - B4100 (E)	624	2	2061	0.303	625	0.6	3.361	A
3 - Site Arm 3	24	617	1035	0.023	24	0.0	4.018	A
4 - Site Arm 4	47	623	1131	0.041	47	0.0	3.744	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 - B4100 (W)	357	55	2235	0.160	357	0.2	1.955	A
2 - B4100 (E)	522	2	2061	0.253	523	0.5	3.138	A
3 - Site Arm 3	20	516	1087	0.019	20	0.0	3.806	A
4 - Site Arm 4	39	521	1185	0.033	39	0.0	3.545	A

2019 Baseline + Committed + Both Developments , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	2.80	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	139	1 - B4100 (W)	2.80	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)
D7	2019 Baseline + Committed + Both Developments	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	805	100.000
2 - B4100 (E)		✓	606	100.000
3 - Site Arm 3		✓	16	100.000
4 - Site Arm 4		✓	31	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	800	2	3
	2 - B4100 (E)	540	0	22	44
	3 - Site Arm 3	1	15	0	0
	4 - Site Arm 4	2	29	0	0

Vehicle Mix

HV %s

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	3	0	0
	2 - B4100 (E)	5	0	20	20
	3 - Site Arm 3	0	34	0	0
	4 - Site Arm 4	0	34	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.40	2.74	0.7	A
2 - B4100 (E)	0.32	2.75	0.5	A
3 - Site Arm 3	0.02	4.71	0.0	A
4 - Site Arm 4	0.03	4.28	0.0	A

Main Results for each time segment
07:45 - 08:00

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 - B4100 (W)	606	33	2249	0.269	605	0.4	2.251	A
2 - B4100 (E)	456	4	2060	0.221	455	0.3	2.387	A
3 - Site Arm 3	12	441	1126	0.011	12	0.0	4.238	A
4 - Site Arm 4	23	417	1241	0.019	23	0.0	3.877	A

08:00 - 08:15

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 - B4100 (W)	724	40	2245	0.322	723	0.5	2.436	A
2 - B4100 (E)	545	4	2060	0.265	544	0.4	2.529	A
3 - Site Arm 3	14	527	1081	0.013	14	0.0	4.426	A
4 - Site Arm 4	28	500	1197	0.023	28	0.0	4.038	A

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 - B4100 (W)	886	48	2239	0.396	886	0.7	2.737	A
2 - B4100 (E)	667	6	2059	0.324	667	0.5	2.752	A
3 - Site Arm 3	18	646	1020	0.017	18	0.0	4.712	A
4 - Site Arm 4	34	612	1137	0.030	34	0.0	4.280	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 - B4100 (W)	886	48	2239	0.396	886	0.7	2.740	A
2 - B4100 (E)	667	6	2059	0.324	667	0.5	2.752	A
3 - Site Arm 3	18	646	1020	0.017	18	0.0	4.713	A
4 - Site Arm 4	34	612	1137	0.030	34	0.0	4.281	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 - B4100 (W)	724	40	2245	0.322	724	0.5	2.440	A
2 - B4100 (E)	545	4	2060	0.265	545	0.4	2.532	A
3 - Site Arm 3	14	528	1081	0.013	14	0.0	4.430	A
4 - Site Arm 4	28	500	1196	0.023	28	0.0	4.039	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 - B4100 (W)	606	33	2249	0.269	606	0.4	2.256	A
2 - B4100 (E)	456	4	2060	0.221	457	0.3	2.389	A
3 - Site Arm 3	12	442	1126	0.011	12	0.0	4.241	A
4 - Site Arm 4	23	419	1240	0.019	23	0.0	3.881	A

2019 Baseline + Committed + Both Developments, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	3.43	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	119	2 - B4100 (E)	3.43	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)
D8	2019 Baseline + Committed + Both Developments	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	609	100.000
2 - B4100 (E)		✓	808	100.000
3 - Site Arm 3		✓	27	100.000
4 - Site Arm 4		✓	52	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	607	1	1
	2 - B4100 (E)	779	0	10	19
	3 - Site Arm 3	2	25	0	0
	4 - Site Arm 4	4	48	0	0

Vehicle Mix

HV %s

		To			
From		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
	1 - B4100 (W)	0	2	0	0
	2 - B4100 (E)	34	0	34	34
	3 - Site Arm 3	0	14	0	0
	4 - Site Arm 4	0	14	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.30	2.37	0.4	A
2 - B4100 (E)	0.43	4.12	1.0	A
3 - Site Arm 3	0.03	4.67	0.0	A
4 - Site Arm 4	0.06	4.35	0.1	A

Main Results for each time segment
16:45 - 17:00

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 - B4100 (W)	458	55	2235	0.205	457	0.3	2.065	A
2 - B4100 (E)	608	2	2062	0.295	606	0.6	3.311	A
3 - Site Arm 3	20	599	1044	0.019	20	0.0	3.967	A
4 - Site Arm 4	39	605	1141	0.034	39	0.0	3.684	A

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 - B4100 (W)	547	66	2228	0.246	547	0.3	2.185	A
2 - B4100 (E)	726	2	2061	0.352	726	0.7	3.609	A
3 - Site Arm 3	24	718	983	0.025	24	0.0	4.237	A
4 - Site Arm 4	47	724	1077	0.043	47	0.1	3.940	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 - B4100 (W)	671	80	2218	0.302	670	0.4	2.372	A
2 - B4100 (E)	890	2	2061	0.432	888	1.0	4.109	A
3 - Site Arm 3	30	879	899	0.033	30	0.0	4.671	A
4 - Site Arm 4	57	886	990	0.058	57	0.1	4.350	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 - B4100 (W)	671	80	2218	0.302	671	0.4	2.373	A
2 - B4100 (E)	890	2	2061	0.432	890	1.0	4.117	A
3 - Site Arm 3	30	880	899	0.033	30	0.0	4.674	A
4 - Site Arm 4	57	887	990	0.058	57	0.1	4.353	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 - B4100 (W)	547	66	2227	0.246	548	0.3	2.188	A
2 - B4100 (E)	726	2	2061	0.352	727	0.7	3.621	A
3 - Site Arm 3	24	719	982	0.025	24	0.0	4.243	A
4 - Site Arm 4	47	726	1076	0.043	47	0.1	3.946	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 - B4100 (W)	458	55	2235	0.205	459	0.3	2.067	A
2 - B4100 (E)	608	2	2061	0.295	609	0.6	3.324	A
3 - Site Arm 3	20	602	1043	0.020	20	0.0	3.973	A
4 - Site Arm 4	39	607	1139	0.034	39	0.0	3.690	A

2025 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	2.49	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	174	1 - B4100 (W)	2.49	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)
D9	2025 Baseline	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	731	100.000
2 - B4100 (E)		✓	463	100.000
3 - Site Arm 3		✓	0	100.000
4 - Site Arm 4		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	731	0	0
	2 - B4100 (E)	463	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Vehicle Mix

HV %s

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	3	0	0
	2 - B4100 (E)	5	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.35	2.53	0.6	A
2 - B4100 (E)	0.25	2.43	0.3	A
3 - Site Arm 3	0.00	0.00	0.0	A
4 - Site Arm 4	0.00	0.00	0.0	A

Main Results for each time segment
07:45 - 08:00

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 - B4100 (W)	550	0	2272	0.242	549	0.3	2.152	A
2 - B4100 (E)	349	0	2062	0.169	348	0.2	2.203	A
3 - Site Arm 3	0	348	1175	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	348	1278	0.000	0	0.0	0.000	A

08:00 - 08:15

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 - B4100 (W)	657	0	2272	0.289	657	0.4	2.296	A
2 - B4100 (E)	416	0	2062	0.202	416	0.3	2.295	A
3 - Site Arm 3	0	416	1139	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	416	1241	0.000	0	0.0	0.000	A

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 - B4100 (W)	805	0	2272	0.354	804	0.6	2.525	A
2 - B4100 (E)	510	0	2062	0.247	509	0.3	2.434	A
3 - Site Arm 3	0	509	1091	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	509	1191	0.000	0	0.0	0.000	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 - B4100 (W)	805	0	2272	0.354	805	0.6	2.527	A
2 - B4100 (E)	510	0	2062	0.247	510	0.3	2.434	A
3 - Site Arm 3	0	510	1091	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	510	1191	0.000	0	0.0	0.000	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 - B4100 (W)	657	0	2272	0.289	658	0.4	2.297	A
2 - B4100 (E)	416	0	2062	0.202	417	0.3	2.298	A
3 - Site Arm 3	0	417	1139	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	417	1241	0.000	0	0.0	0.000	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 - B4100 (W)	550	0	2272	0.242	551	0.3	2.154	A
2 - B4100 (E)	349	0	2062	0.169	349	0.2	2.207	A
3 - Site Arm 3	0	349	1174	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	349	1277	0.000	0	0.0	0.000	A

2025 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	2.57	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	153	2 - B4100 (E)	2.57	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)
D10	2025 Baseline	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	508	100.000
2 - B4100 (E)		✓	715	100.000
3 - Site Arm 3		✓	0	100.000
4 - Site Arm 4		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	508	0	0
	2 - B4100 (E)	715	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Vehicle Mix

HV %s

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	2	0	0
	2 - B4100 (E)	2	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.25	2.14	0.3	A
2 - B4100 (E)	0.38	2.88	0.6	A
3 - Site Arm 3	0.00	0.00	0.0	A
4 - Site Arm 4	0.00	0.00	0.0	A

Main Results for each time segment
16:45 - 17:00

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 - B4100 (W)	382	0	2272	0.168	382	0.2	1.941	A
2 - B4100 (E)	538	0	2062	0.261	537	0.4	2.404	A
3 - Site Arm 3	0	537	1076	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	537	1177	0.000	0	0.0	0.000	A

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 - B4100 (W)	457	0	2272	0.201	456	0.3	2.022	A
2 - B4100 (E)	643	0	2062	0.312	642	0.5	2.585	A
3 - Site Arm 3	0	642	1022	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	642	1121	0.000	0	0.0	0.000	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 - B4100 (W)	559	0	2272	0.246	559	0.3	2.144	A
2 - B4100 (E)	787	0	2062	0.382	787	0.6	2.876	A
3 - Site Arm 3	0	787	947	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	787	1044	0.000	0	0.0	0.000	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 - B4100 (W)	559	0	2272	0.246	559	0.3	2.144	A
2 - B4100 (E)	787	0	2062	0.382	787	0.6	2.878	A
3 - Site Arm 3	0	787	947	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	787	1043	0.000	0	0.0	0.000	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 - B4100 (W)	457	0	2272	0.201	457	0.3	2.023	A
2 - B4100 (E)	643	0	2062	0.312	643	0.5	2.588	A
3 - Site Arm 3	0	643	1021	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	643	1120	0.000	0	0.0	0.000	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 - B4100 (W)	382	0	2272	0.168	383	0.2	1.945	A
2 - B4100 (E)	538	0	2062	0.261	539	0.4	2.411	A
3 - Site Arm 3	0	539	1076	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	539	1176	0.000	0	0.0	0.000	A

2025 Baseline + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	2.63	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	145	1 - B4100 (W)	2.63	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)
D11	2025 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	816	100.000
2 - B4100 (E)		✓	514	100.000
3 - Site Arm 3		✓	0	100.000
4 - Site Arm 4		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	816	0	0
	2 - B4100 (E)	514	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Vehicle Mix

HV %s

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	3	0	0
	2 - B4100 (E)	5	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.40	2.70	0.7	A
2 - B4100 (E)	0.27	2.52	0.4	A
3 - Site Arm 3	0.00	0.00	0.0	A
4 - Site Arm 4	0.00	0.00	0.0	A

Main Results for each time segment
07:45 - 08:00

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 - B4100 (W)	614	0	2272	0.270	613	0.4	2.233	A
2 - B4100 (E)	387	0	2062	0.188	386	0.2	2.253	A
3 - Site Arm 3	0	386	1155	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	386	1257	0.000	0	0.0	0.000	A

08:00 - 08:15

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 - B4100 (W)	734	0	2272	0.323	733	0.5	2.410	A
2 - B4100 (E)	462	0	2062	0.224	462	0.3	2.361	A
3 - Site Arm 3	0	462	1115	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	462	1217	0.000	0	0.0	0.000	A

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 - B4100 (W)	898	0	2272	0.395	898	0.7	2.697	A
2 - B4100 (E)	566	0	2062	0.274	566	0.4	2.525	A
3 - Site Arm 3	0	566	1062	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	566	1162	0.000	0	0.0	0.000	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 - B4100 (W)	898	0	2272	0.395	898	0.7	2.699	A
2 - B4100 (E)	566	0	2062	0.274	566	0.4	2.525	A
3 - Site Arm 3	0	566	1061	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	566	1161	0.000	0	0.0	0.000	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 - B4100 (W)	734	0	2272	0.323	734	0.5	2.414	A
2 - B4100 (E)	462	0	2062	0.224	462	0.3	2.364	A
3 - Site Arm 3	0	462	1115	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	462	1217	0.000	0	0.0	0.000	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 - B4100 (W)	614	0	2272	0.270	615	0.4	2.238	A
2 - B4100 (E)	387	0	2062	0.188	387	0.2	2.258	A
3 - Site Arm 3	0	387	1154	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	387	1257	0.000	0	0.0	0.000	A

2025 Baseline + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	2.57	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	153	2 - B4100 (E)	2.57	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)
D12	2025 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	508	100.000
2 - B4100 (E)		✓	715	100.000
3 - Site Arm 3		✓	0	100.000
4 - Site Arm 4		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	508	0	0
	2 - B4100 (E)	715	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Vehicle Mix

HV %s

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	2	0	0
	2 - B4100 (E)	2	0	0	0
	3 - Site Arm 3	0	0	0	0
	4 - Site Arm 4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS
1 - B4100 (W)	0.25	2.14	0.3	A
2 - B4100 (E)	0.38	2.88	0.6	A
3 - Site Arm 3	0.00	0.00	0.0	A
4 - Site Arm 4	0.00	0.00	0.0	A

Main Results for each time segment
16:45 - 17:00

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 - B4100 (W)	382	0	2272	0.168	382	0.2	1.941	A
2 - B4100 (E)	538	0	2062	0.261	537	0.4	2.404	A
3 - Site Arm 3	0	537	1076	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	537	1177	0.000	0	0.0	0.000	A

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 - B4100 (W)	457	0	2272	0.201	456	0.3	2.022	A
2 - B4100 (E)	643	0	2062	0.312	642	0.5	2.585	A
3 - Site Arm 3	0	642	1022	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	642	1121	0.000	0	0.0	0.000	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 - B4100 (W)	559	0	2272	0.246	559	0.3	2.144	A
2 - B4100 (E)	787	0	2062	0.382	787	0.6	2.876	A
3 - Site Arm 3	0	787	947	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	787	1044	0.000	0	0.0	0.000	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 - B4100 (W)	559	0	2272	0.246	559	0.3	2.144	A
2 - B4100 (E)	787	0	2062	0.382	787	0.6	2.878	A
3 - Site Arm 3	0	787	947	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	787	1043	0.000	0	0.0	0.000	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 - B4100 (W)	457	0	2272	0.201	457	0.3	2.023	A
2 - B4100 (E)	643	0	2062	0.312	643	0.5	2.588	A
3 - Site Arm 3	0	643	1021	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	643	1120	0.000	0	0.0	0.000	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 - B4100 (W)	382	0	2272	0.168	383	0.2	1.945	A
2 - B4100 (E)	538	0	2062	0.261	539	0.4	2.411	A
3 - Site Arm 3	0	539	1076	0.000	0	0.0	0.000	A
4 - Site Arm 4	0	539	1176	0.000	0	0.0	0.000	A

2025 Baseline + Committed + Eastern Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4100 (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Eastern Site Roundabout	Standard Roundabout		1, 2, 3, 4	2.80	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	135	1 - B4100 (W)	2.80	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)
D13	2025 Baseline + Committed + Eastern Development	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - B4100 (W)		✓	821	100.000
2 - B4100 (E)		✓	580	100.000
3 - Site Arm 3		✓	16	100.000
4 - Site Arm 4		✓	31	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - B4100 (W)	2 - B4100 (E)	3 - Site Arm 3	4 - Site Arm 4
From	1 - B4100 (W)	0	816	2	3
	2 - B4100 (E)	514	0	22	44
	3 - Site Arm 3	1	15	0	0
	4 - Site Arm 4	2	29	0	0

Vehicle Mix