APPENDIX O

Junction Operational Appraisals

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

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Filename: (new file)
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Report generation date: 19/06/2019 16:31:01

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
2026 Base								
1 - Wendlebury Road N	0.2	3.72	0.13	368 % [1 - Wendlebury Road N]	0.0	3.07	0.01	265 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.1	3.36	0.12		0.3	3.94	0.25	
4 - Vendee Drive	0.1	3.11	0.13		0.1	3.00	0.06	
2026 Base + Dev								
1 - Wendlebury Road N	0.4	4.90	0.28	136 % [1 - Wendlebury Road N]				
2 - Site Access	0.0	3.32	0.03					
3 - Wendlebury Drive S	0.1	3.43	0.12					
4 - Vendee Drive	0.4	3.66	0.26					
2031 Base								
1 - Wendlebury Road N	0.3	4.06	0.20	249 % [1 - Wendlebury Road N]	0.0	3.05	0.01	211 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.2	3.60	0.17		0.4	4.19	0.30	
4 - Vendee Drive	0.1	3.11	0.13		0.0	2.98	0.05	
2031 Base + Dev								
1 - Wendlebury Road N	0.6	5.51	0.36	101 % [1 - Wendlebury Road N]				
2 - Site Access	0.0	3.47	0.04					
3 - Wendlebury Drive S	0.2	3.68	0.18					
4 - Vendee Drive	0.4	3.66	0.26					
2031 SEPR Base								
1 - Wendlebury Road N	0.2	3.83	0.16	318 % [1 - Wendlebury Road N]	0.0	3.06	0.01	245 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.2	3.46	0.14		0.4	4.02	0.27	
4 - Vendee Drive	0.1	3.11	0.13		0.1	2.98	0.05	
2031 SEPR Base + Dev								
1 - Wendlebury Road N	0.4	5.10	0.31	123 % [1 - Wendlebury Road N]				
2 - Site Access	0.0	3.37	0.03					
3 - Wendlebury Drive S	0.2	3.54	0.14					
4 - Vendee Drive	0.3	3.63	0.26					

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	19/06/2019
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

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D7	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D11	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓
D13	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

2026 Base, 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	3.38	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	368	1 - Wendlebury Road N

Arms

Arms

Arm	Name	Description
1	Wendlebury Road N	
2	Site Access	
3	Wendlebury Drive S	
4	Vendee Drive	

Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Wendlebury Road N	3.00	4.50	8.0	20.0	36.0	27.0	
2 - Site Access	3.65	4.50	5.0	20.0	36.0	23.0	
3 - Wendlebury Drive S	3.00	4.50	8.0	25.0	36.0	25.0	
4 - Vendee Drive	3.65	4.50	5.0	25.0	36.0	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Wendlebury Road N	0.553	1205
2 - Site Access	0.577	1304
3 - Wendlebury Drive S	0.562	1225
4 - Vendee Drive	0.591	1334

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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	133	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	128	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	110	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	121
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.13	3.72	0.2	A	122	183
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.12	3.36	0.1	A	117	176
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	100	25	113	1143	0.088	100	11	0.0	0.1	3.450	A
2 - Site Access	0	0	212	1181	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	96	24	17	1216	0.079	96	195	0.0	0.1	3.215	A
4 - Vendee Drive	118	30	5	1331	0.089	118	108	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	135	1131	0.106	119	13	0.1	0.1	3.558	A
2 - Site Access	0	0	254	1157	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	115	29	21	1214	0.095	115	234	0.1	0.1	3.275	A
4 - Vendee Drive	141	35	6	1330	0.106	141	129	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	146	37	165	1114	0.131	146	15	0.1	0.2	3.718	A
2 - Site Access	0	0	311	1124	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	141	35	25	1211	0.116	141	286	0.1	0.1	3.362	A
4 - Vendee Drive	173	43	8	1329	0.130	173	158	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	146	37	165	1114	0.131	146	15	0.2	0.2	3.719	A
2 - Site Access	0	0	312	1124	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	141	35	25	1211	0.116	141	286	0.1	0.1	3.362	A
4 - Vendee Drive	173	43	8	1329	0.130	173	159	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	135	1131	0.106	120	13	0.2	0.1	3.562	A
2 - Site Access	0	0	255	1157	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	115	29	21	1214	0.095	115	234	0.1	0.1	3.278	A
4 - Vendee Drive	141	35	6	1330	0.106	141	130	0.1	0.1	3.027	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	100	25	113	1143	0.088	100	11	0.1	0.1	3.454	A
2 - Site Access	0	0	213	1181	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	96	24	17	1216	0.079	96	196	0.1	0.1	3.215	A
4 - Vendee Drive	118	30	5	1331	0.089	118	108	0.1	0.1	2.971	A

2026 Base, 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	3.75	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	265	3 - Wendlebury Drive S

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	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	280	100.000
4 - Vendee Drive		ONE HOUR	✓	64	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	180
	4 - Vendee Drive	20	0	44	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.07	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.25	3.94	0.3	A	257	385
4 - Vendee Drive	0.06	3.00	0.1	A	59	88

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	33	1187	0.004	5	90	0.0	0.0	3.043	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	5	1223	0.172	210	33	0.0	0.2	3.550	A
4 - Vendee Drive	48	12	75	1289	0.037	48	139	0.0	0.0	2.899	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	40	1184	0.005	5	108	0.0	0.0	3.054	A
2 - Site Access	0	0	45	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	252	63	5	1222	0.206	252	40	0.2	0.3	3.707	A
4 - Vendee Drive	58	14	90	1281	0.045	58	167	0.0	0.0	2.942	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	48	1179	0.006	7	132	0.0	0.0	3.070	A
2 - Site Access	0	0	55	1272	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	308	77	7	1222	0.252	308	48	0.3	0.3	3.939	A
4 - Vendee Drive	70	18	110	1269	0.056	70	205	0.0	0.1	3.003	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	48	1179	0.006	7	132	0.0	0.0	3.070	A
2 - Site Access	0	0	55	1272	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	308	77	7	1222	0.252	308	48	0.3	0.3	3.940	A
4 - Vendee Drive	70	18	110	1269	0.056	70	205	0.1	0.1	3.003	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	40	1184	0.005	5	108	0.0	0.0	3.057	A
2 - Site Access	0	0	45	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	252	63	5	1222	0.206	252	40	0.3	0.3	3.710	A
4 - Vendee Drive	58	14	90	1281	0.045	58	167	0.1	0.0	2.942	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	33	1187	0.004	5	90	0.0	0.0	3.045	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	5	1223	0.172	211	33	0.3	0.2	3.557	A
4 - Vendee Drive	48	12	75	1289	0.037	48	140	0.0	0.0	2.900	A

2026 Base + Dev, 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	4.04	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	136	1 - Wendlebury Road N

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
D5	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	257	100.000
2 - Site Access		ONE HOUR	✓	35	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	128	100.000
4 - Vendee Drive		ONE HOUR	✓	315	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	124	110	23
	2 - Site Access	0	0	0	35
	3 - Wendlebury Drive S	7	0	0	121
	4 - Vendee Drive	7	158	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.28	4.90	0.4	A	236	354
2 - Site Access	0.03	3.32	0.0	A	32	48
3 - Wendlebury Drive S	0.12	3.43	0.1	A	117	176
4 - Vendee Drive	0.26	3.66	0.4	A	289	434

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	193	48	231	1078	0.180	193	11	0.0	0.2	4.063	A
2 - Site Access	26	7	212	1181	0.022	26	211	0.0	0.0	3.116	A
3 - Wendlebury Drive S	96	24	43	1201	0.080	96	195	0.0	0.1	3.258	A
4 - Vendee Drive	237	59	5	1331	0.178	236	134	0.0	0.2	3.284	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	231	58	277	1052	0.220	231	13	0.2	0.3	4.380	A
2 - Site Access	31	8	254	1157	0.027	31	253	0.0	0.0	3.197	A
3 - Wendlebury Drive S	115	29	52	1196	0.096	115	234	0.1	0.1	3.329	A
4 - Vendee Drive	283	71	6	1330	0.213	283	161	0.2	0.3	3.437	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	283	71	339	1018	0.278	283	15	0.3	0.4	4.892	A
2 - Site Access	39	10	311	1124	0.034	39	310	0.0	0.0	3.315	A
3 - Wendlebury Drive S	141	35	64	1190	0.118	141	286	0.1	0.1	3.432	A
4 - Vendee Drive	347	87	8	1329	0.261	346	197	0.3	0.4	3.663	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	283	71	339	1018	0.278	283	15	0.4	0.4	4.897	A
2 - Site Access	39	10	312	1124	0.034	39	310	0.0	0.0	3.316	A
3 - Wendlebury Drive S	141	35	64	1190	0.118	141	286	0.1	0.1	3.432	A
4 - Vendee Drive	347	87	8	1329	0.261	347	197	0.4	0.4	3.663	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	231	58	277	1052	0.220	231	13	0.4	0.3	4.389	A
2 - Site Access	31	8	255	1157	0.027	31	254	0.0	0.0	3.201	A
3 - Wendlebury Drive S	115	29	52	1196	0.096	115	234	0.1	0.1	3.332	A
4 - Vendee Drive	283	71	6	1330	0.213	283	161	0.4	0.3	3.440	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	193	48	232	1077	0.180	194	11	0.3	0.2	4.077	A
2 - Site Access	26	7	213	1181	0.022	26	213	0.0	0.0	3.118	A
3 - Wendlebury Drive S	96	24	44	1201	0.080	96	196	0.1	0.1	3.261	A
4 - Vendee Drive	237	59	5	1331	0.178	237	135	0.3	0.2	3.292	A

2031 Base, 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	3.63	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	249	1 - Wendlebury Road N

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
D7	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	207	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	192	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	184	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	185
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.20	4.06	0.3	A	190	285
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.17	3.60	0.2	A	176	264
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	156	39	113	1143	0.136	155	11	0.0	0.2	3.642	A
2 - Site Access	0	0	268	1149	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	145	36	17	1216	0.119	144	251	0.0	0.1	3.357	A
4 - Vendee Drive	118	30	5	1331	0.089	118	156	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	186	47	135	1131	0.165	186	13	0.2	0.2	3.809	A
2 - Site Access	0	0	321	1119	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	173	43	21	1214	0.142	172	300	0.1	0.2	3.456	A
4 - Vendee Drive	141	35	6	1330	0.106	141	187	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	228	57	165	1114	0.205	228	15	0.2	0.3	4.060	A
2 - Site Access	0	0	393	1077	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	25	1211	0.175	211	367	0.2	0.2	3.599	A
4 - Vendee Drive	173	43	8	1329	0.130	173	229	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	228	57	165	1114	0.205	228	15	0.3	0.3	4.061	A
2 - Site Access	0	0	393	1077	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	25	1211	0.175	211	368	0.2	0.2	3.599	A
4 - Vendee Drive	173	43	8	1329	0.130	173	229	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	186	47	135	1131	0.165	186	13	0.3	0.2	3.814	A
2 - Site Access	0	0	321	1118	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	173	43	21	1214	0.142	173	301	0.2	0.2	3.460	A
4 - Vendee Drive	141	35	6	1330	0.106	141	187	0.1	0.1	3.030	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	156	39	113	1143	0.136	156	11	0.2	0.2	3.647	A
2 - Site Access	0	0	269	1148	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	145	36	17	1216	0.119	145	252	0.2	0.1	3.363	A
4 - Vendee Drive	118	30	5	1331	0.089	118	157	0.1	0.1	2.968	A

2031 Base, 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	4.00	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	211	3 - Wendlebury Drive S

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
D8	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	329	100.000
4 - Vendee Drive		ONE HOUR	✓	54	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	229
	4 - Vendee Drive	20	0	34	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.05	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.30	4.19	0.4	A	302	453
4 - Vendee Drive	0.05	2.98	0.0	A	50	74

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	26	1191	0.004	5	90	0.0	0.0	3.032	A
2 - Site Access	0	0	30	1286	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	248	62	5	1223	0.203	247	26	0.0	0.3	3.684	A
4 - Vendee Drive	41	10	75	1290	0.032	41	176	0.0	0.0	2.882	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	31	1189	0.005	5	108	0.0	0.0	3.041	A
2 - Site Access	0	0	36	1283	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	296	74	5	1222	0.242	296	31	0.3	0.3	3.883	A
4 - Vendee Drive	49	12	90	1281	0.038	49	211	0.0	0.0	2.920	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	37	1185	0.006	7	132	0.0	0.0	3.054	A
2 - Site Access	0	0	44	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	362	91	7	1222	0.297	362	37	0.3	0.4	4.184	A
4 - Vendee Drive	59	15	110	1269	0.047	59	258	0.0	0.0	2.976	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	37	1185	0.006	7	132	0.0	0.0	3.054	A
2 - Site Access	0	0	44	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	362	91	7	1222	0.297	362	37	0.4	0.4	4.188	A
4 - Vendee Drive	59	15	110	1269	0.047	59	259	0.0	0.0	2.976	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	31	1189	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	36	1283	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	296	74	5	1222	0.242	296	31	0.4	0.3	3.889	A
4 - Vendee Drive	49	12	90	1281	0.038	49	212	0.0	0.0	2.921	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	26	1191	0.004	5	90	0.0	0.0	3.035	A
2 - Site Access	0	0	30	1286	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	248	62	5	1223	0.203	248	26	0.3	0.3	3.695	A
4 - Vendee Drive	41	10	75	1289	0.032	41	177	0.0	0.0	2.882	A

2031 Base + Dev, 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	4.36	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	101	1 - Wendlebury Road N

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
D9	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	331	100.000
2 - Site Access		ONE HOUR	✓	35	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	192	100.000
4 - Vendee Drive		ONE HOUR	✓	315	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	124	184	23
	2 - Site Access	0	0	0	35
	3 - Wendlebury Drive S	7	0	0	185
	4 - Vendee Drive	7	158	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.36	5.51	0.6	A	304	456
2 - Site Access	0.04	3.47	0.0	A	32	48
3 - Wendlebury Drive S	0.18	3.68	0.2	A	176	264
4 - Vendee Drive	0.26	3.66	0.4	A	289	434

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	249	62	231	1078	0.231	248	11	0.0	0.3	4.333	A
2 - Site Access	26	7	268	1149	0.023	26	211	0.0	0.0	3.205	A
3 - Wendlebury Drive S	145	36	43	1201	0.120	144	250	0.0	0.1	3.404	A
4 - Vendee Drive	237	59	5	1331	0.178	236	182	0.0	0.2	3.284	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	298	74	277	1052	0.283	297	13	0.3	0.4	4.764	A
2 - Site Access	31	8	321	1119	0.028	31	253	0.0	0.0	3.310	A
3 - Wendlebury Drive S	173	43	52	1196	0.144	172	300	0.1	0.2	3.516	A
4 - Vendee Drive	283	71	6	1330	0.213	283	218	0.2	0.3	3.437	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	364	91	339	1018	0.358	364	15	0.4	0.6	5.496	A
2 - Site Access	39	10	393	1077	0.036	39	310	0.0	0.0	3.465	A
3 - Wendlebury Drive S	211	53	64	1190	0.178	211	367	0.2	0.2	3.679	A
4 - Vendee Drive	347	87	8	1329	0.261	346	267	0.3	0.4	3.663	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	364	91	339	1018	0.358	364	15	0.6	0.6	5.508	A
2 - Site Access	39	10	393	1077	0.036	39	310	0.0	0.0	3.466	A
3 - Wendlebury Drive S	211	53	64	1190	0.178	211	368	0.2	0.2	3.679	A
4 - Vendee Drive	347	87	8	1329	0.261	347	268	0.4	0.4	3.663	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	298	74	277	1052	0.283	298	13	0.6	0.4	4.780	A
2 - Site Access	31	8	321	1118	0.028	31	254	0.0	0.0	3.314	A
3 - Wendlebury Drive S	173	43	52	1196	0.144	173	301	0.2	0.2	3.520	A
4 - Vendee Drive	283	71	6	1330	0.213	283	219	0.4	0.3	3.440	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	249	62	232	1077	0.231	250	11	0.4	0.3	4.351	A
2 - Site Access	26	7	269	1148	0.023	26	213	0.0	0.0	3.210	A
3 - Wendlebury Drive S	145	36	44	1201	0.120	145	252	0.2	0.1	3.410	A
4 - Vendee Drive	237	59	5	1331	0.178	237	183	0.3	0.2	3.292	A

2031 SEPR Base, 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	3.47	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	318	1 - Wendlebury Road N

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
D11	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	159	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	156	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	136	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	149
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.16	3.83	0.2	A	146	219
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.14	3.46	0.2	A	143	215
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	113	1143	0.105	119	11	0.0	0.1	3.513	A
2 - Site Access	0	0	232	1170	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	117	29	17	1216	0.097	117	215	0.0	0.1	3.277	A
4 - Vendee Drive	118	30	5	1331	0.089	118	129	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	143	36	135	1131	0.126	143	13	0.1	0.1	3.642	A
2 - Site Access	0	0	278	1143	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	140	35	21	1214	0.116	140	257	0.1	0.1	3.352	A
4 - Vendee Drive	141	35	6	1330	0.106	141	155	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	175	44	165	1114	0.157	175	15	0.1	0.2	3.832	A
2 - Site Access	0	0	340	1107	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	172	43	25	1211	0.142	172	315	0.1	0.2	3.462	A
4 - Vendee Drive	173	43	8	1329	0.130	173	189	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	175	44	165	1114	0.157	175	15	0.2	0.2	3.832	A
2 - Site Access	0	0	340	1107	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	172	43	25	1211	0.142	172	315	0.2	0.2	3.462	A
4 - Vendee Drive	173	43	8	1329	0.130	173	189	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	143	36	135	1131	0.126	143	13	0.2	0.1	3.647	A
2 - Site Access	0	0	278	1143	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	140	35	21	1214	0.116	140	257	0.2	0.1	3.353	A
4 - Vendee Drive	141	35	6	1330	0.106	141	155	0.1	0.1	3.030	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	113	1143	0.105	120	11	0.1	0.1	3.518	A
2 - Site Access	0	0	233	1169	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	117	29	17	1216	0.097	118	215	0.1	0.1	3.280	A
4 - Vendee Drive	118	30	5	1331	0.089	118	130	0.1	0.1	2.971	A

2031 SEPR Base, 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	3.84	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	245	3 - Wendlebury Drive S

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
D12	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	297	100.000
4 - Vendee Drive		ONE HOUR	✓	56	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	197
	4 - Vendee Drive	20	0	36	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.06	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.27	4.02	0.4	A	273	409
4 - Vendee Drive	0.05	2.98	0.1	A	51	77

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	27	1191	0.004	5	90	0.0	0.0	3.034	A
2 - Site Access	0	0	32	1285	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	224	56	5	1223	0.183	223	27	0.0	0.2	3.595	A
4 - Vendee Drive	42	11	75	1290	0.033	42	152	0.0	0.0	2.885	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	32	1188	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	267	67	5	1222	0.218	267	32	0.2	0.3	3.767	A
4 - Vendee Drive	50	13	90	1281	0.039	50	182	0.0	0.0	2.925	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	40	1184	0.006	7	132	0.0	0.0	3.058	A
2 - Site Access	0	0	46	1277	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	327	82	7	1222	0.268	327	40	0.3	0.4	4.022	A
4 - Vendee Drive	62	15	110	1269	0.049	62	223	0.0	0.1	2.981	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	40	1184	0.006	7	132	0.0	0.0	3.058	A
2 - Site Access	0	0	46	1277	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	327	82	7	1222	0.268	327	40	0.4	0.4	4.023	A
4 - Vendee Drive	62	15	110	1269	0.049	62	224	0.1	0.1	2.981	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	32	1188	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	267	67	5	1222	0.218	267	32	0.4	0.3	3.769	A
4 - Vendee Drive	50	13	90	1281	0.039	50	183	0.1	0.0	2.927	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	27	1190	0.004	5	90	0.0	0.0	3.034	A
2 - Site Access	0	0	32	1285	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	224	56	5	1223	0.183	224	27	0.3	0.2	3.606	A
4 - Vendee Drive	42	11	75	1289	0.033	42	153	0.0	0.0	2.886	A

2031 SEPR Base + Dev, 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	4.13	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	123	1 - Wendlebury Road N

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
D13	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	283	100.000
2 - Site Access		ONE HOUR	✓	35	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	156	100.000
4 - Vendee Drive		ONE HOUR	✓	308	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	124	136	23
	2 - Site Access	0	0	0	35
	3 - Wendlebury Drive S	7	0	0	149
	4 - Vendee Drive	0	158	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.31	5.10	0.4	A	260	390
2 - Site Access	0.03	3.37	0.0	A	32	48
3 - Wendlebury Drive S	0.14	3.54	0.2	A	143	215
4 - Vendee Drive	0.26	3.63	0.3	A	283	424

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	213	53	231	1078	0.198	212	5	0.0	0.2	4.155	A
2 - Site Access	26	7	232	1170	0.023	26	211	0.0	0.0	3.147	A
3 - Wendlebury Drive S	117	29	43	1201	0.098	117	214	0.0	0.1	3.319	A
4 - Vendee Drive	232	58	5	1331	0.174	231	155	0.0	0.2	3.272	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	254	64	277	1052	0.242	254	6	0.2	0.3	4.508	A
2 - Site Access	31	8	278	1143	0.028	31	253	0.0	0.0	3.236	A
3 - Wendlebury Drive S	140	35	52	1196	0.117	140	257	0.1	0.1	3.408	A
4 - Vendee Drive	277	69	6	1330	0.208	277	186	0.2	0.3	3.417	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	312	78	339	1018	0.306	311	8	0.3	0.4	5.089	A
2 - Site Access	39	10	340	1108	0.035	39	310	0.0	0.0	3.366	A
3 - Wendlebury Drive S	172	43	64	1190	0.144	172	315	0.1	0.2	3.536	A
4 - Vendee Drive	339	85	8	1329	0.255	339	228	0.3	0.3	3.634	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	312	78	339	1018	0.306	312	8	0.4	0.4	5.096	A
2 - Site Access	39	10	340	1107	0.035	39	310	0.0	0.0	3.367	A
3 - Wendlebury Drive S	172	43	64	1190	0.144	172	315	0.2	0.2	3.536	A
4 - Vendee Drive	339	85	8	1329	0.255	339	228	0.3	0.3	3.635	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	254	64	277	1052	0.242	255	6	0.4	0.3	4.519	A
2 - Site Access	31	8	278	1143	0.028	31	254	0.0	0.0	3.240	A
3 - Wendlebury Drive S	140	35	52	1196	0.117	140	257	0.2	0.1	3.409	A
4 - Vendee Drive	277	69	6	1330	0.208	277	186	0.3	0.3	3.422	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	213	53	232	1077	0.198	213	5	0.3	0.2	4.170	A
2 - Site Access	26	7	233	1169	0.023	26	213	0.0	0.0	3.149	A
3 - Wendlebury Drive S	117	29	44	1201	0.098	118	216	0.1	0.1	3.322	A
4 - Vendee Drive	232	58	5	1331	0.174	232	156	0.3	0.2	3.279	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

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Filename: Sc 4 B1b am - Copy.j9
Path: P:\19000's\19539\Technical\Junction models\Site Acess Roundabout
Report generation date: 19/06/2019 16:46:18

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
2026 Base								
1 - Wendlebury Road N	0.2	3.72	0.13	368 % [1 - Wendlebury Road N]	0.0	3.07	0.01	265 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.1	3.36	0.12		0.3	3.94	0.25	
4 - Vendee Drive	0.1	3.11	0.13		0.1	3.00	0.06	
2026 Base + Dev								
1 - Wendlebury Road N					0.0	3.13	0.02	140 % [3 - Wendlebury Drive S]
2 - Site Access					0.3	3.64	0.22	
3 - Wendlebury Drive S					0.4	4.77	0.29	
4 - Vendee Drive					0.1	3.05	0.07	
2031 Base								
1 - Wendlebury Road N	0.3	4.06	0.20	249 % [1 - Wendlebury Road N]	0.0	3.05	0.01	211 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.2	3.60	0.17		0.4	4.19	0.30	
4 - Vendee Drive	0.1	3.11	0.13		0.0	2.98	0.05	
2031 Base + Dev								
1 - Wendlebury Road N					0.0	3.12	0.02	116 % [3 - Wendlebury Drive S]
2 - Site Access					0.3	3.62	0.22	
3 - Wendlebury Drive S					0.5	5.14	0.34	
4 - Vendee Drive					0.1	3.02	0.06	
2031 SEPR Base								
1 - Wendlebury Road N	0.2	3.83	0.16	318 % [1 - Wendlebury Road N]	0.0	3.06	0.01	245 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.2	3.46	0.14		0.4	4.02	0.27	
4 - Vendee Drive	0.1	3.11	0.13		0.1	2.98	0.05	
2031 SEPR Base + Dev								
1 - Wendlebury Road N					0.0	3.12	0.02	131 % [3 - Wendlebury Drive S]
2 - Site Access					0.3	3.62	0.22	
3 - Wendlebury Drive S					0.4	4.89	0.31	
4 - Vendee Drive					0.1	3.03	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	19/06/2019
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

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D11	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓
D13	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2026 Base, 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	3.38	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	368	1 - Wendlebury Road N

Arms

Arms

Arm	Name	Description
1	Wendlebury Road N	
2	Site Access	
3	Wendlebury Drive S	
4	Vendee Drive	

Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Wendlebury Road N	3.00	4.50	8.0	20.0	36.0	27.0	
2 - Site Access	3.65	4.50	5.0	20.0	36.0	23.0	
3 - Wendlebury Drive S	3.00	4.50	8.0	25.0	36.0	25.0	
4 - Vendee Drive	3.65	4.50	5.0	25.0	36.0	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Wendlebury Road N	0.553	1205
2 - Site Access	0.577	1304
3 - Wendlebury Drive S	0.562	1225
4 - Vendee Drive	0.591	1334

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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	133	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	128	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	110	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	121
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.13	3.72	0.2	A	122	183
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.12	3.36	0.1	A	117	176
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	100	25	113	1143	0.088	100	11	0.0	0.1	3.450	A
2 - Site Access	0	0	212	1181	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	96	24	17	1216	0.079	96	195	0.0	0.1	3.215	A
4 - Vendee Drive	118	30	5	1331	0.089	118	108	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	135	1131	0.106	119	13	0.1	0.1	3.558	A
2 - Site Access	0	0	254	1157	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	115	29	21	1214	0.095	115	234	0.1	0.1	3.275	A
4 - Vendee Drive	141	35	6	1330	0.106	141	129	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	146	37	165	1114	0.131	146	15	0.1	0.2	3.718	A
2 - Site Access	0	0	311	1124	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	141	35	25	1211	0.116	141	286	0.1	0.1	3.362	A
4 - Vendee Drive	173	43	8	1329	0.130	173	158	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	146	37	165	1114	0.131	146	15	0.2	0.2	3.719	A
2 - Site Access	0	0	312	1124	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	141	35	25	1211	0.116	141	286	0.1	0.1	3.362	A
4 - Vendee Drive	173	43	8	1329	0.130	173	159	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	135	1131	0.106	120	13	0.2	0.1	3.562	A
2 - Site Access	0	0	255	1157	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	115	29	21	1214	0.095	115	234	0.1	0.1	3.278	A
4 - Vendee Drive	141	35	6	1330	0.106	141	130	0.1	0.1	3.027	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	100	25	113	1143	0.088	100	11	0.1	0.1	3.454	A
2 - Site Access	0	0	213	1181	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	96	24	17	1216	0.079	96	196	0.1	0.1	3.215	A
4 - Vendee Drive	118	30	5	1331	0.089	118	108	0.1	0.1	2.971	A

2026 Base, 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	3.75	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	265	3 - Wendlebury Drive S

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	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	280	100.000
4 - Vendee Drive		ONE HOUR	✓	64	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	180
	4 - Vendee Drive	20	0	44	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.07	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.25	3.94	0.3	A	257	385
4 - Vendee Drive	0.06	3.00	0.1	A	59	88

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	33	1187	0.004	5	90	0.0	0.0	3.043	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	5	1223	0.172	210	33	0.0	0.2	3.550	A
4 - Vendee Drive	48	12	75	1289	0.037	48	139	0.0	0.0	2.899	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	40	1184	0.005	5	108	0.0	0.0	3.054	A
2 - Site Access	0	0	45	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	252	63	5	1222	0.206	252	40	0.2	0.3	3.707	A
4 - Vendee Drive	58	14	90	1281	0.045	58	167	0.0	0.0	2.942	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	48	1179	0.006	7	132	0.0	0.0	3.070	A
2 - Site Access	0	0	55	1272	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	308	77	7	1222	0.252	308	48	0.3	0.3	3.939	A
4 - Vendee Drive	70	18	110	1269	0.056	70	205	0.0	0.1	3.003	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	48	1179	0.006	7	132	0.0	0.0	3.070	A
2 - Site Access	0	0	55	1272	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	308	77	7	1222	0.252	308	48	0.3	0.3	3.940	A
4 - Vendee Drive	70	18	110	1269	0.056	70	205	0.1	0.1	3.003	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	40	1184	0.005	5	108	0.0	0.0	3.057	A
2 - Site Access	0	0	45	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	252	63	5	1222	0.206	252	40	0.3	0.3	3.710	A
4 - Vendee Drive	58	14	90	1281	0.045	58	167	0.1	0.0	2.942	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	33	1187	0.004	5	90	0.0	0.0	3.045	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	5	1223	0.172	211	33	0.3	0.2	3.557	A
4 - Vendee Drive	48	12	75	1289	0.037	48	140	0.0	0.0	2.900	A

2026 Base + Dev, 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	4.05	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	140	3 - Wendlebury Drive S

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
D5	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	18	100.000
2 - Site Access		ONE HOUR	✓	257	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	280	100.000
4 - Vendee Drive		ONE HOUR	✓	80	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	12	0	6
	2 - Site Access	0	0	0	257
	3 - Wendlebury Drive S	100	0	0	180
	4 - Vendee Drive	20	16	44	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.02	3.13	0.0	A	17	25
2 - Site Access	0.22	3.64	0.3	A	236	354
3 - Wendlebury Drive S	0.29	4.77	0.4	A	257	385
4 - Vendee Drive	0.07	3.05	0.1	A	73	110

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	14	3	45	1181	0.011	14	90	0.0	0.0	3.084	A
2 - Site Access	193	48	38	1282	0.151	193	21	0.0	0.2	3.303	A
3 - Wendlebury Drive S	211	53	197	1115	0.189	210	33	0.0	0.2	3.975	A
4 - Vendee Drive	60	15	75	1290	0.047	60	332	0.0	0.0	2.927	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	16	4	54	1176	0.014	16	108	0.0	0.0	3.104	A
2 - Site Access	231	58	45	1278	0.181	231	25	0.2	0.2	3.438	A
3 - Wendlebury Drive S	252	63	236	1093	0.230	251	40	0.2	0.3	4.279	A
4 - Vendee Drive	72	18	90	1281	0.056	72	398	0.0	0.1	2.977	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	20	5	66	1169	0.017	20	132	0.0	0.0	3.132	A
2 - Site Access	283	71	55	1272	0.222	283	31	0.2	0.3	3.639	A
3 - Wendlebury Drive S	308	77	289	1063	0.290	308	48	0.3	0.4	4.767	A
4 - Vendee Drive	88	22	110	1269	0.069	88	487	0.1	0.1	3.048	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	20	5	66	1169	0.017	20	132	0.0	0.0	3.132	A
2 - Site Access	283	71	55	1272	0.222	283	31	0.3	0.3	3.639	A
3 - Wendlebury Drive S	308	77	290	1063	0.290	308	48	0.4	0.4	4.772	A
4 - Vendee Drive	88	22	110	1269	0.069	88	488	0.1	0.1	3.048	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	16	4	54	1176	0.014	16	108	0.0	0.0	3.106	A
2 - Site Access	231	58	45	1278	0.181	231	25	0.3	0.2	3.443	A
3 - Wendlebury Drive S	252	63	237	1092	0.230	252	40	0.4	0.3	4.288	A
4 - Vendee Drive	72	18	90	1281	0.056	72	399	0.1	0.1	2.978	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	14	3	45	1180	0.011	14	90	0.0	0.0	3.086	A
2 - Site Access	193	48	38	1282	0.151	194	21	0.2	0.2	3.310	A
3 - Wendlebury Drive S	211	53	198	1114	0.189	211	33	0.3	0.2	3.989	A
4 - Vendee Drive	60	15	75	1289	0.047	60	334	0.1	0.0	2.930	A

2031 Base, 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	3.63	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	249	1 - Wendlebury Road N

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
D7	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	207	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	192	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	184	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	185
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.20	4.06	0.3	A	190	285
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.17	3.60	0.2	A	176	264
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	156	39	113	1143	0.136	155	11	0.0	0.2	3.642	A
2 - Site Access	0	0	268	1149	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	145	36	17	1216	0.119	144	251	0.0	0.1	3.357	A
4 - Vendee Drive	118	30	5	1331	0.089	118	156	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	186	47	135	1131	0.165	186	13	0.2	0.2	3.809	A
2 - Site Access	0	0	321	1119	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	173	43	21	1214	0.142	172	300	0.1	0.2	3.456	A
4 - Vendee Drive	141	35	6	1330	0.106	141	187	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	228	57	165	1114	0.205	228	15	0.2	0.3	4.060	A
2 - Site Access	0	0	393	1077	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	25	1211	0.175	211	367	0.2	0.2	3.599	A
4 - Vendee Drive	173	43	8	1329	0.130	173	229	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	228	57	165	1114	0.205	228	15	0.3	0.3	4.061	A
2 - Site Access	0	0	393	1077	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	25	1211	0.175	211	368	0.2	0.2	3.599	A
4 - Vendee Drive	173	43	8	1329	0.130	173	229	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	186	47	135	1131	0.165	186	13	0.3	0.2	3.814	A
2 - Site Access	0	0	321	1118	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	173	43	21	1214	0.142	173	301	0.2	0.2	3.460	A
4 - Vendee Drive	141	35	6	1330	0.106	141	187	0.1	0.1	3.030	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	156	39	113	1143	0.136	156	11	0.2	0.2	3.647	A
2 - Site Access	0	0	269	1148	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	145	36	17	1216	0.119	145	252	0.2	0.1	3.363	A
4 - Vendee Drive	118	30	5	1331	0.089	118	157	0.1	0.1	2.968	A

2031 Base, 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	4.00	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	211	3 - Wendlebury Drive S

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
D8	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	329	100.000
4 - Vendee Drive		ONE HOUR	✓	54	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	229
	4 - Vendee Drive	20	0	34	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.05	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.30	4.19	0.4	A	302	453
4 - Vendee Drive	0.05	2.98	0.0	A	50	74

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	26	1191	0.004	5	90	0.0	0.0	3.032	A
2 - Site Access	0	0	30	1286	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	248	62	5	1223	0.203	247	26	0.0	0.3	3.684	A
4 - Vendee Drive	41	10	75	1290	0.032	41	176	0.0	0.0	2.882	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	31	1189	0.005	5	108	0.0	0.0	3.041	A
2 - Site Access	0	0	36	1283	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	296	74	5	1222	0.242	296	31	0.3	0.3	3.883	A
4 - Vendee Drive	49	12	90	1281	0.038	49	211	0.0	0.0	2.920	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	37	1185	0.006	7	132	0.0	0.0	3.054	A
2 - Site Access	0	0	44	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	362	91	7	1222	0.297	362	37	0.3	0.4	4.184	A
4 - Vendee Drive	59	15	110	1269	0.047	59	258	0.0	0.0	2.976	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	37	1185	0.006	7	132	0.0	0.0	3.054	A
2 - Site Access	0	0	44	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	362	91	7	1222	0.297	362	37	0.4	0.4	4.188	A
4 - Vendee Drive	59	15	110	1269	0.047	59	259	0.0	0.0	2.976	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	31	1189	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	36	1283	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	296	74	5	1222	0.242	296	31	0.4	0.3	3.889	A
4 - Vendee Drive	49	12	90	1281	0.038	49	212	0.0	0.0	2.921	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	26	1191	0.004	5	90	0.0	0.0	3.035	A
2 - Site Access	0	0	30	1286	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	248	62	5	1223	0.203	248	26	0.3	0.3	3.695	A
4 - Vendee Drive	41	10	75	1289	0.032	41	177	0.0	0.0	2.882	A

2031 Base + Dev, 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	4.28	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	116	3 - Wendlebury Drive S

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
D9	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	18	100.000
2 - Site Access		ONE HOUR	✓	257	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	329	100.000
4 - Vendee Drive		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	12	0	6
	2 - Site Access	0	0	0	257
	3 - Wendlebury Drive S	100	0	0	229
	4 - Vendee Drive	20	16	34	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.02	3.12	0.0	A	17	25
2 - Site Access	0.22	3.62	0.3	A	236	354
3 - Wendlebury Drive S	0.34	5.14	0.5	A	302	453
4 - Vendee Drive	0.06	3.02	0.1	A	64	96

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	14	3	38	1185	0.011	14	90	0.0	0.0	3.073	A
2 - Site Access	193	48	30	1286	0.150	193	21	0.0	0.2	3.290	A
3 - Wendlebury Drive S	248	62	197	1114	0.222	247	26	0.0	0.3	4.143	A
4 - Vendee Drive	53	13	75	1290	0.041	53	369	0.0	0.0	2.910	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	16	4	45	1181	0.014	16	108	0.0	0.0	3.090	A
2 - Site Access	231	58	36	1283	0.180	231	25	0.2	0.2	3.421	A
3 - Wendlebury Drive S	296	74	236	1093	0.271	295	31	0.3	0.4	4.514	A
4 - Vendee Drive	63	16	90	1281	0.049	63	442	0.0	0.1	2.955	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	20	5	55	1175	0.017	20	132	0.0	0.0	3.115	A
2 - Site Access	283	71	44	1278	0.221	283	31	0.2	0.3	3.616	A
3 - Wendlebury Drive S	362	91	289	1063	0.341	362	37	0.4	0.5	5.130	A
4 - Vendee Drive	77	19	110	1269	0.061	77	541	0.1	0.1	3.019	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	20	5	55	1175	0.017	20	132	0.0	0.0	3.115	A
2 - Site Access	283	71	44	1278	0.221	283	31	0.3	0.3	3.616	A
3 - Wendlebury Drive S	362	91	290	1063	0.341	362	37	0.5	0.5	5.139	A
4 - Vendee Drive	77	19	110	1269	0.061	77	542	0.1	0.1	3.020	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	16	4	45	1181	0.014	16	108	0.0	0.0	3.093	A
2 - Site Access	231	58	36	1283	0.180	231	25	0.3	0.2	3.423	A
3 - Wendlebury Drive S	296	74	237	1092	0.271	296	31	0.5	0.4	4.527	A
4 - Vendee Drive	63	16	90	1281	0.049	63	443	0.1	0.1	2.956	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	14	3	38	1185	0.011	14	90	0.0	0.0	3.075	A
2 - Site Access	193	48	30	1286	0.150	194	21	0.2	0.2	3.297	A
3 - Wendlebury Drive S	248	62	198	1114	0.222	248	26	0.4	0.3	4.158	A
4 - Vendee Drive	53	13	75	1289	0.041	53	371	0.1	0.0	2.910	A

2031 SEPR Base, 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	3.47	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	318	1 - Wendlebury Road N

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
D11	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	159	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	156	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	136	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	149
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.16	3.83	0.2	A	146	219
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.14	3.46	0.2	A	143	215
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	113	1143	0.105	119	11	0.0	0.1	3.513	A
2 - Site Access	0	0	232	1170	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	117	29	17	1216	0.097	117	215	0.0	0.1	3.277	A
4 - Vendee Drive	118	30	5	1331	0.089	118	129	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	143	36	135	1131	0.126	143	13	0.1	0.1	3.642	A
2 - Site Access	0	0	278	1143	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	140	35	21	1214	0.116	140	257	0.1	0.1	3.352	A
4 - Vendee Drive	141	35	6	1330	0.106	141	155	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	175	44	165	1114	0.157	175	15	0.1	0.2	3.832	A
2 - Site Access	0	0	340	1107	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	172	43	25	1211	0.142	172	315	0.1	0.2	3.462	A
4 - Vendee Drive	173	43	8	1329	0.130	173	189	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	175	44	165	1114	0.157	175	15	0.2	0.2	3.832	A
2 - Site Access	0	0	340	1107	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	172	43	25	1211	0.142	172	315	0.2	0.2	3.462	A
4 - Vendee Drive	173	43	8	1329	0.130	173	189	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	143	36	135	1131	0.126	143	13	0.2	0.1	3.647	A
2 - Site Access	0	0	278	1143	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	140	35	21	1214	0.116	140	257	0.2	0.1	3.353	A
4 - Vendee Drive	141	35	6	1330	0.106	141	155	0.1	0.1	3.030	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	113	1143	0.105	120	11	0.1	0.1	3.518	A
2 - Site Access	0	0	233	1169	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	117	29	17	1216	0.097	118	215	0.1	0.1	3.280	A
4 - Vendee Drive	118	30	5	1331	0.089	118	130	0.1	0.1	2.971	A

2031 SEPR Base, 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	3.84	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	245	3 - Wendlebury Drive S

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
D12	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	297	100.000
4 - Vendee Drive		ONE HOUR	✓	56	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	197
	4 - Vendee Drive	20	0	36	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.06	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.27	4.02	0.4	A	273	409
4 - Vendee Drive	0.05	2.98	0.1	A	51	77

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	27	1191	0.004	5	90	0.0	0.0	3.034	A
2 - Site Access	0	0	32	1285	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	224	56	5	1223	0.183	223	27	0.0	0.2	3.595	A
4 - Vendee Drive	42	11	75	1290	0.033	42	152	0.0	0.0	2.885	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	32	1188	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	267	67	5	1222	0.218	267	32	0.2	0.3	3.767	A
4 - Vendee Drive	50	13	90	1281	0.039	50	182	0.0	0.0	2.925	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	40	1184	0.006	7	132	0.0	0.0	3.058	A
2 - Site Access	0	0	46	1277	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	327	82	7	1222	0.268	327	40	0.3	0.4	4.022	A
4 - Vendee Drive	62	15	110	1269	0.049	62	223	0.0	0.1	2.981	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	40	1184	0.006	7	132	0.0	0.0	3.058	A
2 - Site Access	0	0	46	1277	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	327	82	7	1222	0.268	327	40	0.4	0.4	4.023	A
4 - Vendee Drive	62	15	110	1269	0.049	62	224	0.1	0.1	2.981	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	32	1188	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	267	67	5	1222	0.218	267	32	0.4	0.3	3.769	A
4 - Vendee Drive	50	13	90	1281	0.039	50	183	0.1	0.0	2.927	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	27	1190	0.004	5	90	0.0	0.0	3.034	A
2 - Site Access	0	0	32	1285	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	224	56	5	1223	0.183	224	27	0.3	0.2	3.606	A
4 - Vendee Drive	42	11	75	1289	0.033	42	153	0.0	0.0	2.886	A

2031 SEPR Base + Dev, 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	4.13	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	131	3 - Wendlebury Drive S

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
D13	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	18	100.000
2 - Site Access		ONE HOUR	✓	257	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	297	100.000
4 - Vendee Drive		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	12	0	6
	2 - Site Access	0	0	0	257
	3 - Wendlebury Drive S	100	0	0	197
	4 - Vendee Drive	20	16	36	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.02	3.12	0.0	A	17	25
2 - Site Access	0.22	3.62	0.3	A	236	354
3 - Wendlebury Drive S	0.31	4.89	0.4	A	273	409
4 - Vendee Drive	0.06	3.03	0.1	A	66	99

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	14	3	39	1184	0.011	14	90	0.0	0.0	3.075	A
2 - Site Access	193	48	32	1285	0.151	193	21	0.0	0.2	3.293	A
3 - Wendlebury Drive S	224	56	197	1115	0.201	223	27	0.0	0.2	4.032	A
4 - Vendee Drive	54	14	75	1290	0.042	54	345	0.0	0.0	2.913	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	16	4	47	1180	0.014	16	108	0.0	0.0	3.093	A
2 - Site Access	231	58	38	1282	0.180	231	25	0.2	0.2	3.424	A
3 - Wendlebury Drive S	267	67	236	1093	0.244	267	32	0.2	0.3	4.358	A
4 - Vendee Drive	65	16	90	1281	0.051	65	413	0.0	0.1	2.959	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	20	5	57	1174	0.017	20	132	0.0	0.0	3.118	A
2 - Site Access	283	71	46	1277	0.222	283	31	0.2	0.3	3.620	A
3 - Wendlebury Drive S	327	82	289	1063	0.308	327	40	0.3	0.4	4.886	A
4 - Vendee Drive	79	20	110	1269	0.062	79	506	0.1	0.1	3.025	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	20	5	57	1174	0.017	20	132	0.0	0.0	3.118	A
2 - Site Access	283	71	46	1277	0.222	283	31	0.3	0.3	3.620	A
3 - Wendlebury Drive S	327	82	290	1063	0.308	327	40	0.4	0.4	4.893	A
4 - Vendee Drive	79	20	110	1269	0.062	79	506	0.1	0.1	3.025	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	16	4	47	1180	0.014	16	108	0.0	0.0	3.096	A
2 - Site Access	231	58	38	1282	0.180	231	25	0.3	0.2	3.429	A
3 - Wendlebury Drive S	267	67	237	1092	0.244	267	32	0.4	0.3	4.366	A
4 - Vendee Drive	65	16	90	1281	0.051	65	414	0.1	0.1	2.962	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	14	3	39	1184	0.011	14	90	0.0	0.0	3.077	A
2 - Site Access	193	48	32	1285	0.151	194	21	0.2	0.2	3.299	A
3 - Wendlebury Drive S	224	56	198	1114	0.201	224	27	0.3	0.3	4.047	A
4 - Vendee Drive	54	14	75	1289	0.042	54	347	0.1	0.0	2.914	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

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Filename: Sc 3 B1b am - Copy.j9
Path: P:\19000's\19539\Technical\Junction models\Site Acess Roundabout
Report generation date: 19/06/2019 16:40:16

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
2026 Base								
1 - Wendlebury Road N	0.2	3.72	0.13	368 % [1 - Wendlebury Road N]	0.0	3.07	0.01	265 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.1	3.36	0.12		0.3	3.94	0.25	
4 - Vendee Drive	0.1	3.11	0.13		0.1	3.00	0.06	
2026 Base + Dev								
1 - Wendlebury Road N	0.4	4.84	0.28	141 % [1 - Wendlebury Road N]				
2 - Site Access	0.0	3.37	0.03					
3 - Wendlebury Drive S	0.1	3.49	0.12					
4 - Vendee Drive	0.3	3.61	0.25					
2031 Base								
1 - Wendlebury Road N	0.3	4.06	0.20	249 % [1 - Wendlebury Road N]	0.0	3.05	0.01	211 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.2	3.60	0.17		0.4	4.19	0.30	
4 - Vendee Drive	0.1	3.11	0.13		0.0	2.98	0.05	
2031 Base + Dev								
1 - Wendlebury Road N	0.6	5.44	0.36	105 % [1 - Wendlebury Road N]				
2 - Site Access	0.0	3.52	0.03					
3 - Wendlebury Drive S	0.2	3.75	0.18					
4 - Vendee Drive	0.3	3.61	0.25					
2031 SEPR Base								
1 - Wendlebury Road N	0.2	3.83	0.16	318 % [1 - Wendlebury Road N]	0.0	3.06	0.01	245 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.2	3.46	0.14		0.4	4.02	0.27	
4 - Vendee Drive	0.1	3.11	0.13		0.1	2.98	0.05	
2031 SEPR Base + Dev								
1 - Wendlebury Road N	0.4	5.04	0.31	127 % [1 - Wendlebury Road N]				
2 - Site Access	0.0	3.42	0.03					
3 - Wendlebury Drive S	0.2	3.60	0.15					
4 - Vendee Drive	0.3	3.61	0.25					

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	19/06/2019
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

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D7	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D11	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓
D13	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

2026 Base, 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	3.38	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	368	1 - Wendlebury Road N

Arms

Arms

Arm	Name	Description
1	Wendlebury Road N	
2	Site Access	
3	Wendlebury Drive S	
4	Vendee Drive	

Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Wendlebury Road N	3.00	4.50	8.0	20.0	36.0	27.0	
2 - Site Access	3.65	4.50	5.0	20.0	36.0	23.0	
3 - Wendlebury Drive S	3.00	4.50	8.0	25.0	36.0	25.0	
4 - Vendee Drive	3.65	4.50	5.0	25.0	36.0	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Wendlebury Road N	0.553	1205
2 - Site Access	0.577	1304
3 - Wendlebury Drive S	0.562	1225
4 - Vendee Drive	0.591	1334

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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	133	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	128	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	110	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	121
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.13	3.72	0.2	A	122	183
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.12	3.36	0.1	A	117	176
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	100	25	113	1143	0.088	100	11	0.0	0.1	3.450	A
2 - Site Access	0	0	212	1181	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	96	24	17	1216	0.079	96	195	0.0	0.1	3.215	A
4 - Vendee Drive	118	30	5	1331	0.089	118	108	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	135	1131	0.106	119	13	0.1	0.1	3.558	A
2 - Site Access	0	0	254	1157	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	115	29	21	1214	0.095	115	234	0.1	0.1	3.275	A
4 - Vendee Drive	141	35	6	1330	0.106	141	129	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	146	37	165	1114	0.131	146	15	0.1	0.2	3.718	A
2 - Site Access	0	0	311	1124	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	141	35	25	1211	0.116	141	286	0.1	0.1	3.362	A
4 - Vendee Drive	173	43	8	1329	0.130	173	158	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	146	37	165	1114	0.131	146	15	0.2	0.2	3.719	A
2 - Site Access	0	0	312	1124	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	141	35	25	1211	0.116	141	286	0.1	0.1	3.362	A
4 - Vendee Drive	173	43	8	1329	0.130	173	159	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	135	1131	0.106	120	13	0.2	0.1	3.562	A
2 - Site Access	0	0	255	1157	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	115	29	21	1214	0.095	115	234	0.1	0.1	3.278	A
4 - Vendee Drive	141	35	6	1330	0.106	141	130	0.1	0.1	3.027	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	100	25	113	1143	0.088	100	11	0.1	0.1	3.454	A
2 - Site Access	0	0	213	1181	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	96	24	17	1216	0.079	96	196	0.1	0.1	3.215	A
4 - Vendee Drive	118	30	5	1331	0.089	118	108	0.1	0.1	2.971	A

2026 Base, 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	3.75	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	265	3 - Wendlebury Drive S

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	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	280	100.000
4 - Vendee Drive		ONE HOUR	✓	64	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	180
	4 - Vendee Drive	20	0	44	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.07	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.25	3.94	0.3	A	257	385
4 - Vendee Drive	0.06	3.00	0.1	A	59	88

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	33	1187	0.004	5	90	0.0	0.0	3.043	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	5	1223	0.172	210	33	0.0	0.2	3.550	A
4 - Vendee Drive	48	12	75	1289	0.037	48	139	0.0	0.0	2.899	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	40	1184	0.005	5	108	0.0	0.0	3.054	A
2 - Site Access	0	0	45	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	252	63	5	1222	0.206	252	40	0.2	0.3	3.707	A
4 - Vendee Drive	58	14	90	1281	0.045	58	167	0.0	0.0	2.942	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	48	1179	0.006	7	132	0.0	0.0	3.070	A
2 - Site Access	0	0	55	1272	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	308	77	7	1222	0.252	308	48	0.3	0.3	3.939	A
4 - Vendee Drive	70	18	110	1269	0.056	70	205	0.0	0.1	3.003	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	48	1179	0.006	7	132	0.0	0.0	3.070	A
2 - Site Access	0	0	55	1272	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	308	77	7	1222	0.252	308	48	0.3	0.3	3.940	A
4 - Vendee Drive	70	18	110	1269	0.056	70	205	0.1	0.1	3.003	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	40	1184	0.005	5	108	0.0	0.0	3.057	A
2 - Site Access	0	0	45	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	252	63	5	1222	0.206	252	40	0.3	0.3	3.710	A
4 - Vendee Drive	58	14	90	1281	0.045	58	167	0.1	0.0	2.942	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	33	1187	0.004	5	90	0.0	0.0	3.045	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	5	1223	0.172	211	33	0.3	0.2	3.557	A
4 - Vendee Drive	48	12	75	1289	0.037	48	140	0.0	0.0	2.900	A

2026 Base + Dev, 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	4.03	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	141	1 - Wendlebury Road N

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
D5	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	267	100.000
2 - Site Access		ONE HOUR	✓	30	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	129	100.000
4 - Vendee Drive		ONE HOUR	✓	299	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	100	111	56
	2 - Site Access	2	0	0	28
	3 - Wendlebury Drive S	8	0	0	121
	4 - Vendee Drive	23	126	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.28	4.84	0.4	A	245	368
2 - Site Access	0.03	3.37	0.0	A	28	41
3 - Wendlebury Drive S	0.12	3.49	0.1	A	118	178
4 - Vendee Drive	0.25	3.61	0.3	A	274	412

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	201	50	207	1091	0.184	200	25	0.0	0.2	4.036	A
2 - Site Access	23	6	238	1166	0.019	23	169	0.0	0.0	3.146	A
3 - Wendlebury Drive S	97	24	64	1189	0.082	97	196	0.0	0.1	3.295	A
4 - Vendee Drive	225	56	8	1329	0.169	224	154	0.0	0.2	3.256	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	240	60	248	1068	0.225	240	30	0.2	0.3	4.344	A
2 - Site Access	27	7	285	1139	0.024	27	203	0.0	0.0	3.235	A
3 - Wendlebury Drive S	116	29	77	1182	0.098	116	234	0.1	0.1	3.376	A
4 - Vendee Drive	269	67	9	1328	0.202	269	184	0.2	0.3	3.396	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	294	73	304	1038	0.283	294	36	0.3	0.4	4.837	A
2 - Site Access	33	8	349	1102	0.030	33	249	0.0	0.0	3.365	A
3 - Wendlebury Drive S	142	36	95	1172	0.121	142	287	0.1	0.1	3.493	A
4 - Vendee Drive	329	82	11	1327	0.248	329	225	0.3	0.3	3.606	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	294	73	304	1037	0.283	294	36	0.4	0.4	4.842	A
2 - Site Access	33	8	349	1102	0.030	33	249	0.0	0.0	3.366	A
3 - Wendlebury Drive S	142	36	95	1172	0.121	142	287	0.1	0.1	3.493	A
4 - Vendee Drive	329	82	11	1327	0.248	329	226	0.3	0.3	3.606	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	240	60	248	1068	0.225	240	30	0.4	0.3	4.353	A
2 - Site Access	27	7	285	1139	0.024	27	203	0.0	0.0	3.239	A
3 - Wendlebury Drive S	116	29	77	1182	0.098	116	235	0.1	0.1	3.377	A
4 - Vendee Drive	269	67	9	1328	0.202	269	185	0.3	0.3	3.401	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	201	50	208	1090	0.184	201	25	0.3	0.2	4.049	A
2 - Site Access	23	6	239	1166	0.019	23	170	0.0	0.0	3.148	A
3 - Wendlebury Drive S	97	24	65	1189	0.082	97	197	0.1	0.1	3.299	A
4 - Vendee Drive	225	56	8	1329	0.169	225	154	0.3	0.2	3.260	A

2031 Base, 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	3.63	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	249	1 - Wendlebury Road N

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
D7	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	207	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	192	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	184	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	185
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.20	4.06	0.3	A	190	285
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.17	3.60	0.2	A	176	264
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	156	39	113	1143	0.136	155	11	0.0	0.2	3.642	A
2 - Site Access	0	0	268	1149	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	145	36	17	1216	0.119	144	251	0.0	0.1	3.357	A
4 - Vendee Drive	118	30	5	1331	0.089	118	156	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	186	47	135	1131	0.165	186	13	0.2	0.2	3.809	A
2 - Site Access	0	0	321	1119	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	173	43	21	1214	0.142	172	300	0.1	0.2	3.456	A
4 - Vendee Drive	141	35	6	1330	0.106	141	187	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	228	57	165	1114	0.205	228	15	0.2	0.3	4.060	A
2 - Site Access	0	0	393	1077	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	25	1211	0.175	211	367	0.2	0.2	3.599	A
4 - Vendee Drive	173	43	8	1329	0.130	173	229	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	228	57	165	1114	0.205	228	15	0.3	0.3	4.061	A
2 - Site Access	0	0	393	1077	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	25	1211	0.175	211	368	0.2	0.2	3.599	A
4 - Vendee Drive	173	43	8	1329	0.130	173	229	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	186	47	135	1131	0.165	186	13	0.3	0.2	3.814	A
2 - Site Access	0	0	321	1118	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	173	43	21	1214	0.142	173	301	0.2	0.2	3.460	A
4 - Vendee Drive	141	35	6	1330	0.106	141	187	0.1	0.1	3.030	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	156	39	113	1143	0.136	156	11	0.2	0.2	3.647	A
2 - Site Access	0	0	269	1148	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	145	36	17	1216	0.119	145	252	0.2	0.1	3.363	A
4 - Vendee Drive	118	30	5	1331	0.089	118	157	0.1	0.1	2.968	A

2031 Base, 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	4.00	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	211	3 - Wendlebury Drive S

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
D8	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	329	100.000
4 - Vendee Drive		ONE HOUR	✓	54	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	229
	4 - Vendee Drive	20	0	34	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.05	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.30	4.19	0.4	A	302	453
4 - Vendee Drive	0.05	2.98	0.0	A	50	74

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	26	1191	0.004	5	90	0.0	0.0	3.032	A
2 - Site Access	0	0	30	1286	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	248	62	5	1223	0.203	247	26	0.0	0.3	3.684	A
4 - Vendee Drive	41	10	75	1290	0.032	41	176	0.0	0.0	2.882	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	31	1189	0.005	5	108	0.0	0.0	3.041	A
2 - Site Access	0	0	36	1283	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	296	74	5	1222	0.242	296	31	0.3	0.3	3.883	A
4 - Vendee Drive	49	12	90	1281	0.038	49	211	0.0	0.0	2.920	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	37	1185	0.006	7	132	0.0	0.0	3.054	A
2 - Site Access	0	0	44	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	362	91	7	1222	0.297	362	37	0.3	0.4	4.184	A
4 - Vendee Drive	59	15	110	1269	0.047	59	258	0.0	0.0	2.976	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	37	1185	0.006	7	132	0.0	0.0	3.054	A
2 - Site Access	0	0	44	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	362	91	7	1222	0.297	362	37	0.4	0.4	4.188	A
4 - Vendee Drive	59	15	110	1269	0.047	59	259	0.0	0.0	2.976	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	31	1189	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	36	1283	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	296	74	5	1222	0.242	296	31	0.4	0.3	3.889	A
4 - Vendee Drive	49	12	90	1281	0.038	49	212	0.0	0.0	2.921	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	26	1191	0.004	5	90	0.0	0.0	3.035	A
2 - Site Access	0	0	30	1286	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	248	62	5	1223	0.203	248	26	0.3	0.3	3.695	A
4 - Vendee Drive	41	10	75	1289	0.032	41	177	0.0	0.0	2.882	A

2031 Base + Dev, 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	4.36	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	105	1 - Wendlebury Road N

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
D9	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	341	100.000
2 - Site Access		ONE HOUR	✓	30	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	193	100.000
4 - Vendee Drive		ONE HOUR	✓	299	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	100	185	56
	2 - Site Access	2	0	0	28
	3 - Wendlebury Drive S	8	0	0	185
	4 - Vendee Drive	23	126	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.36	5.44	0.6	A	313	469
2 - Site Access	0.03	3.52	0.0	A	28	41
3 - Wendlebury Drive S	0.18	3.75	0.2	A	177	266
4 - Vendee Drive	0.25	3.61	0.3	A	274	412

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	257	64	207	1091	0.235	255	25	0.0	0.3	4.303	A
2 - Site Access	23	6	293	1134	0.020	23	169	0.0	0.0	3.236	A
3 - Wendlebury Drive S	145	36	64	1189	0.122	145	251	0.0	0.1	3.445	A
4 - Vendee Drive	225	56	8	1329	0.169	224	202	0.0	0.2	3.256	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	307	77	248	1068	0.287	306	30	0.3	0.4	4.721	A
2 - Site Access	27	7	351	1101	0.025	27	203	0.0	0.0	3.351	A
3 - Wendlebury Drive S	174	43	77	1182	0.147	173	301	0.1	0.2	3.568	A
4 - Vendee Drive	269	67	9	1328	0.202	269	242	0.2	0.3	3.396	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	375	94	304	1038	0.362	375	36	0.4	0.6	5.426	A
2 - Site Access	33	8	430	1056	0.031	33	249	0.0	0.0	3.519	A
3 - Wendlebury Drive S	212	53	95	1172	0.181	212	368	0.2	0.2	3.749	A
4 - Vendee Drive	329	82	11	1327	0.248	329	296	0.3	0.3	3.606	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	375	94	304	1037	0.362	375	36	0.6	0.6	5.437	A
2 - Site Access	33	8	430	1055	0.031	33	249	0.0	0.0	3.521	A
3 - Wendlebury Drive S	212	53	95	1172	0.181	212	369	0.2	0.2	3.750	A
4 - Vendee Drive	329	82	11	1327	0.248	329	296	0.3	0.3	3.606	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	307	77	248	1068	0.287	307	30	0.6	0.4	4.736	A
2 - Site Access	27	7	352	1100	0.025	27	203	0.0	0.0	3.353	A
3 - Wendlebury Drive S	174	43	77	1182	0.147	174	302	0.2	0.2	3.573	A
4 - Vendee Drive	269	67	9	1328	0.202	269	242	0.3	0.3	3.398	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	257	64	208	1090	0.235	257	25	0.4	0.3	4.323	A
2 - Site Access	23	6	295	1134	0.020	23	170	0.0	0.0	3.242	A
3 - Wendlebury Drive S	145	36	65	1189	0.122	145	253	0.2	0.1	3.452	A
4 - Vendee Drive	225	56	8	1329	0.169	225	203	0.3	0.2	3.263	A

2031 SEPR Base, 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	3.47	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	318	1 - Wendlebury Road N

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
D11	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	159	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	156	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	136	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	149
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.16	3.83	0.2	A	146	219
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.14	3.46	0.2	A	143	215
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	113	1143	0.105	119	11	0.0	0.1	3.513	A
2 - Site Access	0	0	232	1170	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	117	29	17	1216	0.097	117	215	0.0	0.1	3.277	A
4 - Vendee Drive	118	30	5	1331	0.089	118	129	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	143	36	135	1131	0.126	143	13	0.1	0.1	3.642	A
2 - Site Access	0	0	278	1143	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	140	35	21	1214	0.116	140	257	0.1	0.1	3.352	A
4 - Vendee Drive	141	35	6	1330	0.106	141	155	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	175	44	165	1114	0.157	175	15	0.1	0.2	3.832	A
2 - Site Access	0	0	340	1107	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	172	43	25	1211	0.142	172	315	0.1	0.2	3.462	A
4 - Vendee Drive	173	43	8	1329	0.130	173	189	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	175	44	165	1114	0.157	175	15	0.2	0.2	3.832	A
2 - Site Access	0	0	340	1107	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	172	43	25	1211	0.142	172	315	0.2	0.2	3.462	A
4 - Vendee Drive	173	43	8	1329	0.130	173	189	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	143	36	135	1131	0.126	143	13	0.2	0.1	3.647	A
2 - Site Access	0	0	278	1143	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	140	35	21	1214	0.116	140	257	0.2	0.1	3.353	A
4 - Vendee Drive	141	35	6	1330	0.106	141	155	0.1	0.1	3.030	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	113	1143	0.105	120	11	0.1	0.1	3.518	A
2 - Site Access	0	0	233	1169	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	117	29	17	1216	0.097	118	215	0.1	0.1	3.280	A
4 - Vendee Drive	118	30	5	1331	0.089	118	130	0.1	0.1	2.971	A

2031 SEPR Base, 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	3.84	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	245	3 - Wendlebury Drive S

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
D12	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	297	100.000
4 - Vendee Drive		ONE HOUR	✓	56	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	197
	4 - Vendee Drive	20	0	36	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.06	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.27	4.02	0.4	A	273	409
4 - Vendee Drive	0.05	2.98	0.1	A	51	77

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	27	1191	0.004	5	90	0.0	0.0	3.034	A
2 - Site Access	0	0	32	1285	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	224	56	5	1223	0.183	223	27	0.0	0.2	3.595	A
4 - Vendee Drive	42	11	75	1290	0.033	42	152	0.0	0.0	2.885	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	32	1188	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	267	67	5	1222	0.218	267	32	0.2	0.3	3.767	A
4 - Vendee Drive	50	13	90	1281	0.039	50	182	0.0	0.0	2.925	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	40	1184	0.006	7	132	0.0	0.0	3.058	A
2 - Site Access	0	0	46	1277	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	327	82	7	1222	0.268	327	40	0.3	0.4	4.022	A
4 - Vendee Drive	62	15	110	1269	0.049	62	223	0.0	0.1	2.981	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	40	1184	0.006	7	132	0.0	0.0	3.058	A
2 - Site Access	0	0	46	1277	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	327	82	7	1222	0.268	327	40	0.4	0.4	4.023	A
4 - Vendee Drive	62	15	110	1269	0.049	62	224	0.1	0.1	2.981	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	32	1188	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	267	67	5	1222	0.218	267	32	0.4	0.3	3.769	A
4 - Vendee Drive	50	13	90	1281	0.039	50	183	0.1	0.0	2.927	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	27	1190	0.004	5	90	0.0	0.0	3.034	A
2 - Site Access	0	0	32	1285	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	224	56	5	1223	0.183	224	27	0.3	0.2	3.606	A
4 - Vendee Drive	42	11	75	1289	0.033	42	153	0.0	0.0	2.886	A

2031 SEPR Base + Dev, 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	4.14	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	127	1 - Wendlebury Road N

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
D13	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	293	100.000
2 - Site Access		ONE HOUR	✓	30	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	157	100.000
4 - Vendee Drive		ONE HOUR	✓	299	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	100	137	56
	2 - Site Access	2	0	0	28
	3 - Wendlebury Drive S	8	0	0	149
	4 - Vendee Drive	23	126	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.31	5.04	0.4	A	269	403
2 - Site Access	0.03	3.42	0.0	A	28	41
3 - Wendlebury Drive S	0.15	3.60	0.2	A	144	216
4 - Vendee Drive	0.25	3.61	0.3	A	274	412

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	221	55	207	1091	0.202	220	25	0.0	0.3	4.127	A
2 - Site Access	23	6	257	1155	0.020	23	169	0.0	0.0	3.177	A
3 - Wendlebury Drive S	118	30	64	1189	0.099	118	215	0.0	0.1	3.357	A
4 - Vendee Drive	225	56	8	1329	0.169	224	175	0.0	0.2	3.256	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	263	66	248	1068	0.247	263	30	0.3	0.3	4.470	A
2 - Site Access	27	7	308	1126	0.024	27	203	0.0	0.0	3.275	A
3 - Wendlebury Drive S	141	35	77	1182	0.119	141	258	0.1	0.1	3.457	A
4 - Vendee Drive	269	67	9	1328	0.202	269	209	0.2	0.3	3.396	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	323	81	304	1038	0.311	322	36	0.3	0.4	5.028	A
2 - Site Access	33	8	377	1086	0.030	33	249	0.0	0.0	3.418	A
3 - Wendlebury Drive S	173	43	95	1172	0.147	173	316	0.1	0.2	3.601	A
4 - Vendee Drive	329	82	11	1327	0.248	329	256	0.3	0.3	3.606	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	323	81	304	1037	0.311	323	36	0.4	0.4	5.035	A
2 - Site Access	33	8	378	1086	0.030	33	249	0.0	0.0	3.419	A
3 - Wendlebury Drive S	173	43	95	1172	0.147	173	316	0.2	0.2	3.601	A
4 - Vendee Drive	329	82	11	1327	0.248	329	257	0.3	0.3	3.606	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	263	66	248	1068	0.247	264	30	0.4	0.3	4.480	A
2 - Site Access	27	7	309	1125	0.024	27	203	0.0	0.0	3.276	A
3 - Wendlebury Drive S	141	35	77	1182	0.119	141	258	0.2	0.1	3.459	A
4 - Vendee Drive	269	67	9	1328	0.202	269	210	0.3	0.3	3.401	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	221	55	208	1090	0.202	221	25	0.3	0.3	4.141	A
2 - Site Access	23	6	259	1154	0.020	23	170	0.0	0.0	3.182	A
3 - Wendlebury Drive S	118	30	65	1189	0.099	118	216	0.1	0.1	3.364	A
4 - Vendee Drive	225	56	8	1329	0.169	225	176	0.3	0.2	3.263	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

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

Filename: Sc 3 B1c pm - Copy.j9
Path: P:\19000's\19539\Technical\Junction models\Site Acess Roundabout
Report generation date: 19/06/2019 16:56:01

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
2026 Base								
1 - Wendlebury Road N	0.2	3.72	0.13	368 % [1 - Wendlebury Road N]	0.0	3.07	0.01	265 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.1	3.36	0.12		0.3	3.94	0.25	
4 - Vendee Drive	0.1	3.11	0.13		0.1	3.00	0.06	
2026 Base + Dev								
1 - Wendlebury Road N					0.1	3.39	0.09	131 % [3 - Wendlebury Drive S]
2 - Site Access					0.2	3.62	0.19	
3 - Wendlebury Drive S					0.4	4.90	0.30	
4 - Vendee Drive					0.1	3.04	0.07	
2031 Base								
1 - Wendlebury Road N	0.3	4.06	0.20	249 % [1 - Wendlebury Road N]	0.0	3.05	0.01	211 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.2	3.60	0.17		0.4	4.19	0.30	
4 - Vendee Drive	0.1	3.11	0.13		0.0	2.98	0.05	
2031 Base + Dev								
1 - Wendlebury Road N					0.1	3.37	0.09	108 % [3 - Wendlebury Drive S]
2 - Site Access					0.2	3.60	0.18	
3 - Wendlebury Drive S					0.5	5.28	0.35	
4 - Vendee Drive					0.1	3.01	0.06	
2031 SEPR Base								
1 - Wendlebury Road N	0.2	3.83	0.16	318 % [1 - Wendlebury Road N]	0.0	3.06	0.01	245 % [3 - Wendlebury Drive S]
2 - Site Access	0.0	0.00	0.00		0.0	0.00	0.00	
3 - Wendlebury Drive S	0.2	3.46	0.14		0.4	4.02	0.27	
4 - Vendee Drive	0.1	3.11	0.13		0.1	2.98	0.05	
2031 SEPR Base + Dev								
1 - Wendlebury Road N					0.1	3.38	0.09	122 % [3 - Wendlebury Drive S]
2 - Site Access					0.2	3.61	0.19	
3 - Wendlebury Drive S					0.5	5.02	0.31	
4 - Vendee Drive					0.1	3.02	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	19/06/2019
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

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D11	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓
D13	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2026 Base, 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	3.38	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	368	1 - Wendlebury Road N

Arms

Arms

Arm	Name	Description
1	Wendlebury Road N	
2	Site Access	
3	Wendlebury Drive S	
4	Vendee Drive	

Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Wendlebury Road N	3.00	4.50	8.0	20.0	36.0	27.0	
2 - Site Access	3.65	4.50	5.0	20.0	36.0	23.0	
3 - Wendlebury Drive S	3.00	4.50	8.0	25.0	36.0	25.0	
4 - Vendee Drive	3.65	4.50	5.0	25.0	36.0	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Wendlebury Road N	0.553	1205
2 - Site Access	0.577	1304
3 - Wendlebury Drive S	0.562	1225
4 - Vendee Drive	0.591	1334

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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	133	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	128	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	110	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	121
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.13	3.72	0.2	A	122	183
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.12	3.36	0.1	A	117	176
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	100	25	113	1143	0.088	100	11	0.0	0.1	3.450	A
2 - Site Access	0	0	212	1181	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	96	24	17	1216	0.079	96	195	0.0	0.1	3.215	A
4 - Vendee Drive	118	30	5	1331	0.089	118	108	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	135	1131	0.106	119	13	0.1	0.1	3.558	A
2 - Site Access	0	0	254	1157	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	115	29	21	1214	0.095	115	234	0.1	0.1	3.275	A
4 - Vendee Drive	141	35	6	1330	0.106	141	129	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	146	37	165	1114	0.131	146	15	0.1	0.2	3.718	A
2 - Site Access	0	0	311	1124	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	141	35	25	1211	0.116	141	286	0.1	0.1	3.362	A
4 - Vendee Drive	173	43	8	1329	0.130	173	158	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	146	37	165	1114	0.131	146	15	0.2	0.2	3.719	A
2 - Site Access	0	0	312	1124	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	141	35	25	1211	0.116	141	286	0.1	0.1	3.362	A
4 - Vendee Drive	173	43	8	1329	0.130	173	159	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	135	1131	0.106	120	13	0.2	0.1	3.562	A
2 - Site Access	0	0	255	1157	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	115	29	21	1214	0.095	115	234	0.1	0.1	3.278	A
4 - Vendee Drive	141	35	6	1330	0.106	141	130	0.1	0.1	3.027	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	100	25	113	1143	0.088	100	11	0.1	0.1	3.454	A
2 - Site Access	0	0	213	1181	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	96	24	17	1216	0.079	96	196	0.1	0.1	3.215	A
4 - Vendee Drive	118	30	5	1331	0.089	118	108	0.1	0.1	2.971	A

2026 Base, 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	3.75	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	265	3 - Wendlebury Drive S

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	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	280	100.000
4 - Vendee Drive		ONE HOUR	✓	64	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	180
	4 - Vendee Drive	20	0	44	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.07	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.25	3.94	0.3	A	257	385
4 - Vendee Drive	0.06	3.00	0.1	A	59	88

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	33	1187	0.004	5	90	0.0	0.0	3.043	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	5	1223	0.172	210	33	0.0	0.2	3.550	A
4 - Vendee Drive	48	12	75	1289	0.037	48	139	0.0	0.0	2.899	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	40	1184	0.005	5	108	0.0	0.0	3.054	A
2 - Site Access	0	0	45	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	252	63	5	1222	0.206	252	40	0.2	0.3	3.707	A
4 - Vendee Drive	58	14	90	1281	0.045	58	167	0.0	0.0	2.942	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	48	1179	0.006	7	132	0.0	0.0	3.070	A
2 - Site Access	0	0	55	1272	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	308	77	7	1222	0.252	308	48	0.3	0.3	3.939	A
4 - Vendee Drive	70	18	110	1269	0.056	70	205	0.0	0.1	3.003	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	48	1179	0.006	7	132	0.0	0.0	3.070	A
2 - Site Access	0	0	55	1272	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	308	77	7	1222	0.252	308	48	0.3	0.3	3.940	A
4 - Vendee Drive	70	18	110	1269	0.056	70	205	0.1	0.1	3.003	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	40	1184	0.005	5	108	0.0	0.0	3.057	A
2 - Site Access	0	0	45	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	252	63	5	1222	0.206	252	40	0.3	0.3	3.710	A
4 - Vendee Drive	58	14	90	1281	0.045	58	167	0.1	0.0	2.942	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	33	1187	0.004	5	90	0.0	0.0	3.045	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	5	1223	0.172	211	33	0.3	0.2	3.557	A
4 - Vendee Drive	48	12	75	1289	0.037	48	140	0.0	0.0	2.900	A

2026 Base + Dev, 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	4.06	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	131	3 - Wendlebury Drive S

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
D5	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	101	100.000
2 - Site Access		ONE HOUR	✓	206	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	281	100.000
4 - Vendee Drive		ONE HOUR	✓	76	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	13	2	86
	2 - Site Access	0	0	0	206
	3 - Wendlebury Drive S	101	0	0	180
	4 - Vendee Drive	20	12	44	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.09	3.39	0.1	A	93	139
2 - Site Access	0.19	3.62	0.2	A	189	284
3 - Wendlebury Drive S	0.30	4.90	0.4	A	258	387
4 - Vendee Drive	0.07	3.04	0.1	A	70	105

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	76	19	42	1182	0.064	76	91	0.0	0.1	3.253	A
2 - Site Access	155	39	99	1247	0.124	155	19	0.0	0.1	3.295	A
3 - Wendlebury Drive S	212	53	219	1102	0.192	211	35	0.0	0.2	4.033	A
4 - Vendee Drive	57	14	76	1289	0.044	57	354	0.0	0.0	2.921	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	91	23	50	1178	0.077	91	109	0.1	0.1	3.311	A
2 - Site Access	185	46	119	1235	0.150	185	22	0.1	0.2	3.427	A
3 - Wendlebury Drive S	253	63	262	1078	0.234	252	41	0.2	0.3	4.359	A
4 - Vendee Drive	68	17	91	1280	0.053	68	424	0.0	0.1	2.969	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	111	28	62	1171	0.095	111	133	0.1	0.1	3.394	A
2 - Site Access	227	57	145	1220	0.186	227	28	0.2	0.2	3.624	A
3 - Wendlebury Drive S	309	77	321	1045	0.296	309	51	0.3	0.4	4.888	A
4 - Vendee Drive	84	21	111	1268	0.066	84	519	0.1	0.1	3.038	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	111	28	62	1171	0.095	111	133	0.1	0.1	3.394	A
2 - Site Access	227	57	145	1220	0.186	227	28	0.2	0.2	3.624	A
3 - Wendlebury Drive S	309	77	321	1045	0.296	309	51	0.4	0.4	4.895	A
4 - Vendee Drive	84	21	111	1268	0.066	84	520	0.1	0.1	3.038	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	91	23	50	1178	0.077	91	109	0.1	0.1	3.312	A
2 - Site Access	185	46	119	1235	0.150	185	22	0.2	0.2	3.432	A
3 - Wendlebury Drive S	253	63	263	1078	0.234	253	41	0.4	0.3	4.367	A
4 - Vendee Drive	68	17	91	1280	0.053	68	425	0.1	0.1	2.972	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	76	19	42	1182	0.064	76	91	0.1	0.1	3.256	A
2 - Site Access	155	39	99	1246	0.124	155	19	0.2	0.1	3.299	A
3 - Wendlebury Drive S	212	53	220	1102	0.192	212	35	0.3	0.2	4.046	A
4 - Vendee Drive	57	14	76	1289	0.044	57	356	0.1	0.0	2.922	A

2031 Base, 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	3.63	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	249	1 - Wendlebury Road N

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
D7	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	207	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	192	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	184	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	185
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.20	4.06	0.3	A	190	285
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.17	3.60	0.2	A	176	264
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	156	39	113	1143	0.136	155	11	0.0	0.2	3.642	A
2 - Site Access	0	0	268	1149	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	145	36	17	1216	0.119	144	251	0.0	0.1	3.357	A
4 - Vendee Drive	118	30	5	1331	0.089	118	156	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	186	47	135	1131	0.165	186	13	0.2	0.2	3.809	A
2 - Site Access	0	0	321	1119	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	173	43	21	1214	0.142	172	300	0.1	0.2	3.456	A
4 - Vendee Drive	141	35	6	1330	0.106	141	187	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	228	57	165	1114	0.205	228	15	0.2	0.3	4.060	A
2 - Site Access	0	0	393	1077	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	25	1211	0.175	211	367	0.2	0.2	3.599	A
4 - Vendee Drive	173	43	8	1329	0.130	173	229	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	228	57	165	1114	0.205	228	15	0.3	0.3	4.061	A
2 - Site Access	0	0	393	1077	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	211	53	25	1211	0.175	211	368	0.2	0.2	3.599	A
4 - Vendee Drive	173	43	8	1329	0.130	173	229	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	186	47	135	1131	0.165	186	13	0.3	0.2	3.814	A
2 - Site Access	0	0	321	1118	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	173	43	21	1214	0.142	173	301	0.2	0.2	3.460	A
4 - Vendee Drive	141	35	6	1330	0.106	141	187	0.1	0.1	3.030	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	156	39	113	1143	0.136	156	11	0.2	0.2	3.647	A
2 - Site Access	0	0	269	1148	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	145	36	17	1216	0.119	145	252	0.2	0.1	3.363	A
4 - Vendee Drive	118	30	5	1331	0.089	118	157	0.1	0.1	2.968	A

2031 Base, 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	4.00	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	211	3 - Wendlebury Drive S

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
D8	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	329	100.000
4 - Vendee Drive		ONE HOUR	✓	54	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	229
	4 - Vendee Drive	20	0	34	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.05	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.30	4.19	0.4	A	302	453
4 - Vendee Drive	0.05	2.98	0.0	A	50	74

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	26	1191	0.004	5	90	0.0	0.0	3.032	A
2 - Site Access	0	0	30	1286	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	248	62	5	1223	0.203	247	26	0.0	0.3	3.684	A
4 - Vendee Drive	41	10	75	1290	0.032	41	176	0.0	0.0	2.882	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	31	1189	0.005	5	108	0.0	0.0	3.041	A
2 - Site Access	0	0	36	1283	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	296	74	5	1222	0.242	296	31	0.3	0.3	3.883	A
4 - Vendee Drive	49	12	90	1281	0.038	49	211	0.0	0.0	2.920	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	37	1185	0.006	7	132	0.0	0.0	3.054	A
2 - Site Access	0	0	44	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	362	91	7	1222	0.297	362	37	0.3	0.4	4.184	A
4 - Vendee Drive	59	15	110	1269	0.047	59	258	0.0	0.0	2.976	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	37	1185	0.006	7	132	0.0	0.0	3.054	A
2 - Site Access	0	0	44	1278	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	362	91	7	1222	0.297	362	37	0.4	0.4	4.188	A
4 - Vendee Drive	59	15	110	1269	0.047	59	259	0.0	0.0	2.976	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	31	1189	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	36	1283	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	296	74	5	1222	0.242	296	31	0.4	0.3	3.889	A
4 - Vendee Drive	49	12	90	1281	0.038	49	212	0.0	0.0	2.921	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	26	1191	0.004	5	90	0.0	0.0	3.035	A
2 - Site Access	0	0	30	1286	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	248	62	5	1223	0.203	248	26	0.3	0.3	3.695	A
4 - Vendee Drive	41	10	75	1289	0.032	41	177	0.0	0.0	2.882	A

2031 Base + Dev, 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	4.30	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	108	3 - Wendlebury Drive S

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
D9	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	101	100.000
2 - Site Access		ONE HOUR	✓	206	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	330	100.000
4 - Vendee Drive		ONE HOUR	✓	66	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	13	2	86
	2 - Site Access	0	0	0	206
	3 - Wendlebury Drive S	101	0	0	229
	4 - Vendee Drive	20	12	34	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.09	3.37	0.1	A	93	139
2 - Site Access	0.18	3.60	0.2	A	189	284
3 - Wendlebury Drive S	0.35	5.28	0.5	A	303	454
4 - Vendee Drive	0.06	3.01	0.1	A	61	91

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	76	19	35	1186	0.064	76	91	0.0	0.1	3.241	A
2 - Site Access	155	39	92	1251	0.124	155	19	0.0	0.1	3.282	A
3 - Wendlebury Drive S	248	62	219	1102	0.225	247	27	0.0	0.3	4.206	A
4 - Vendee Drive	50	12	76	1289	0.039	50	391	0.0	0.0	2.904	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	91	23	41	1183	0.077	91	109	0.1	0.1	3.296	A
2 - Site Access	185	46	110	1240	0.149	185	22	0.1	0.2	3.410	A
3 - Wendlebury Drive S	297	74	262	1078	0.275	296	32	0.3	0.4	4.603	A
4 - Vendee Drive	59	15	91	1280	0.046	59	468	0.0	0.0	2.948	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	111	28	51	1177	0.094	111	133	0.1	0.1	3.375	A
2 - Site Access	227	57	134	1226	0.185	227	28	0.2	0.2	3.601	A
3 - Wendlebury Drive S	363	91	321	1045	0.348	363	40	0.4	0.5	5.273	A
4 - Vendee Drive	73	18	111	1268	0.057	73	573	0.0	0.1	3.010	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	111	28	51	1177	0.094	111	133	0.1	0.1	3.375	A
2 - Site Access	227	57	134	1226	0.185	227	28	0.2	0.2	3.601	A
3 - Wendlebury Drive S	363	91	321	1045	0.348	363	40	0.5	0.5	5.283	A
4 - Vendee Drive	73	18	111	1268	0.057	73	574	0.1	0.1	3.010	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	91	23	41	1183	0.077	91	109	0.1	0.1	3.297	A
2 - Site Access	185	46	110	1240	0.149	185	22	0.2	0.2	3.412	A
3 - Wendlebury Drive S	297	74	263	1078	0.275	297	32	0.5	0.4	4.616	A
4 - Vendee Drive	59	15	91	1280	0.046	59	469	0.1	0.0	2.950	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	76	19	35	1186	0.064	76	91	0.1	0.1	3.244	A
2 - Site Access	155	39	92	1251	0.124	155	19	0.2	0.1	3.286	A
3 - Wendlebury Drive S	248	62	220	1102	0.226	249	27	0.4	0.3	4.223	A
4 - Vendee Drive	50	12	76	1289	0.039	50	393	0.0	0.0	2.904	A

2031 SEPR Base, 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	3.47	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	318	1 - Wendlebury Road N

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
D11	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	159	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	156	100.000
4 - Vendee Drive		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	136	23
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	7	0	0	149
	4 - Vendee Drive	7	0	150	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.16	3.83	0.2	A	146	219
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.14	3.46	0.2	A	143	215
4 - Vendee Drive	0.13	3.11	0.1	A	144	216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	113	1143	0.105	119	11	0.0	0.1	3.513	A
2 - Site Access	0	0	232	1170	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	117	29	17	1216	0.097	117	215	0.0	0.1	3.277	A
4 - Vendee Drive	118	30	5	1331	0.089	118	129	0.0	0.1	2.968	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	143	36	135	1131	0.126	143	13	0.1	0.1	3.642	A
2 - Site Access	0	0	278	1143	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	140	35	21	1214	0.116	140	257	0.1	0.1	3.352	A
4 - Vendee Drive	141	35	6	1330	0.106	141	155	0.1	0.1	3.027	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	175	44	165	1114	0.157	175	15	0.1	0.2	3.832	A
2 - Site Access	0	0	340	1107	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	172	43	25	1211	0.142	172	315	0.1	0.2	3.462	A
4 - Vendee Drive	173	43	8	1329	0.130	173	189	0.1	0.1	3.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	175	44	165	1114	0.157	175	15	0.2	0.2	3.832	A
2 - Site Access	0	0	340	1107	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	172	43	25	1211	0.142	172	315	0.2	0.2	3.462	A
4 - Vendee Drive	173	43	8	1329	0.130	173	189	0.1	0.1	3.112	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	143	36	135	1131	0.126	143	13	0.2	0.1	3.647	A
2 - Site Access	0	0	278	1143	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	140	35	21	1214	0.116	140	257	0.2	0.1	3.353	A
4 - Vendee Drive	141	35	6	1330	0.106	141	155	0.1	0.1	3.030	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	120	30	113	1143	0.105	120	11	0.1	0.1	3.518	A
2 - Site Access	0	0	233	1169	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	117	29	17	1216	0.097	118	215	0.1	0.1	3.280	A
4 - Vendee Drive	118	30	5	1331	0.089	118	130	0.1	0.1	2.971	A

2031 SEPR Base, 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	3.84	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	245	3 - Wendlebury Drive S

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
D12	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	6	100.000
2 - Site Access		ONE HOUR	✓	0	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	297	100.000
4 - Vendee Drive		ONE HOUR	✓	56	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	6
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	100	0	0	197
	4 - Vendee Drive	20	0	36	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.01	3.06	0.0	A	6	8
2 - Site Access	0.00	0.00	0.0	A	0	0
3 - Wendlebury Drive S	0.27	4.02	0.4	A	273	409
4 - Vendee Drive	0.05	2.98	0.1	A	51	77

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	27	1191	0.004	5	90	0.0	0.0	3.034	A
2 - Site Access	0	0	32	1285	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	224	56	5	1223	0.183	223	27	0.0	0.2	3.595	A
4 - Vendee Drive	42	11	75	1290	0.033	42	152	0.0	0.0	2.885	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	32	1188	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	267	67	5	1222	0.218	267	32	0.2	0.3	3.767	A
4 - Vendee Drive	50	13	90	1281	0.039	50	182	0.0	0.0	2.925	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	40	1184	0.006	7	132	0.0	0.0	3.058	A
2 - Site Access	0	0	46	1277	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	327	82	7	1222	0.268	327	40	0.3	0.4	4.022	A
4 - Vendee Drive	62	15	110	1269	0.049	62	223	0.0	0.1	2.981	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	7	2	40	1184	0.006	7	132	0.0	0.0	3.058	A
2 - Site Access	0	0	46	1277	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	327	82	7	1222	0.268	327	40	0.4	0.4	4.023	A
4 - Vendee Drive	62	15	110	1269	0.049	62	224	0.1	0.1	2.981	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	32	1188	0.005	5	108	0.0	0.0	3.044	A
2 - Site Access	0	0	38	1282	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	267	67	5	1222	0.218	267	32	0.4	0.3	3.769	A
4 - Vendee Drive	50	13	90	1281	0.039	50	183	0.1	0.0	2.927	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	5	1	27	1190	0.004	5	90	0.0	0.0	3.034	A
2 - Site Access	0	0	32	1285	0.000	0	0	0.0	0.0	0.000	A
3 - Wendlebury Drive S	224	56	5	1223	0.183	224	27	0.3	0.2	3.606	A
4 - Vendee Drive	42	11	75	1289	0.033	42	153	0.0	0.0	2.886	A

2031 SEPR Base + Dev, 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	4.14	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	122	3 - Wendlebury Drive S

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
D13	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road N		ONE HOUR	✓	101	100.000
2 - Site Access		ONE HOUR	✓	206	100.000
3 - Wendlebury Drive S		ONE HOUR	✓	298	100.000
4 - Vendee Drive		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	13	2	86
	2 - Site Access	0	0	0	206
	3 - Wendlebury Drive S	101	0	0	197
	4 - Vendee Drive	20	12	36	0

Vehicle Mix

HV %s

		To			
		1 - Wendlebury Road N	2 - Site Access	3 - Wendlebury Drive S	4 - Vendee Drive
From	1 - Wendlebury Road N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - Wendlebury Drive S	0	0	0	0
	4 - Vendee Drive	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Wendlebury Road N	0.09	3.38	0.1	A	93	139
2 - Site Access	0.19	3.61	0.2	A	189	284
3 - Wendlebury Drive S	0.31	5.02	0.5	A	273	410
4 - Vendee Drive	0.06	3.02	0.1	A	62	94

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	76	19	36	1186	0.064	76	91	0.0	0.1	3.243	A
2 - Site Access	155	39	93	1250	0.124	155	19	0.0	0.1	3.284	A
3 - Wendlebury Drive S	224	56	219	1102	0.204	223	29	0.0	0.3	4.092	A
4 - Vendee Drive	51	13	76	1289	0.040	51	367	0.0	0.0	2.907	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	91	23	43	1182	0.077	91	109	0.1	0.1	3.299	A
2 - Site Access	185	46	111	1239	0.149	185	22	0.1	0.2	3.414	A
3 - Wendlebury Drive S	268	67	262	1078	0.249	268	34	0.3	0.3	4.442	A
4 - Vendee Drive	61	15	91	1280	0.048	61	439	0.0	0.0	2.952	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	111	28	53	1176	0.095	111	133	0.1	0.1	3.379	A
2 - Site Access	227	57	136	1225	0.185	227	28	0.2	0.2	3.605	A
3 - Wendlebury Drive S	328	82	321	1045	0.314	328	42	0.3	0.5	5.016	A
4 - Vendee Drive	75	19	111	1268	0.059	75	538	0.0	0.1	3.016	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	111	28	53	1176	0.095	111	133	0.1	0.1	3.379	A
2 - Site Access	227	57	137	1225	0.185	227	28	0.2	0.2	3.606	A
3 - Wendlebury Drive S	328	82	321	1045	0.314	328	42	0.5	0.5	5.023	A
4 - Vendee Drive	75	19	111	1268	0.059	75	538	0.1	0.1	3.016	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	91	23	43	1182	0.077	91	109	0.1	0.1	3.302	A
2 - Site Access	185	46	112	1239	0.149	185	22	0.2	0.2	3.415	A
3 - Wendlebury Drive S	268	67	263	1078	0.249	268	34	0.5	0.3	4.452	A
4 - Vendee Drive	61	15	91	1280	0.048	61	440	0.1	0.1	2.952	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road N	76	19	36	1185	0.064	76	91	0.1	0.1	3.244	A
2 - Site Access	155	39	93	1250	0.124	155	19	0.2	0.1	3.288	A
3 - Wendlebury Drive S	224	56	220	1102	0.204	225	29	0.3	0.3	4.107	A
4 - Vendee Drive	51	13	76	1289	0.040	51	369	0.1	0.0	2.908	A

APPENDIX P

Junction Operational Appraisals

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

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

Filename: Sc 1 B1b.j9
Path: P:\19000's\19539\Technical\Junction models
Report generation date: 19/06/2019 10:32:27

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
	2026 Base							
1 - Vendee Drive	2.2	9.00	0.67	18 % [1 - Vendee Drive]	0.8	5.01	0.46	34 % [4 - A41 S]
2 - A41 N	0.9	2.44	0.46		1.1	2.46	0.51	
3 - Site Access	0.2	3.53	0.13		0.2	3.79	0.18	
4 - A41 S	1.6	3.33	0.60		2.3	4.39	0.69	
5 - Park and Ride	0.0	5.22	0.01		0.0	7.20	0.02	
	2026 Base + Dev							
1 - Vendee Drive	3.1	12.16	0.74	11 % [1 - Vendee Drive]	0.9	5.25	0.47	28 % [5 - Park and Ride]
2 - A41 N	1.0	2.61	0.47		1.1	2.37	0.52	
3 - Site Access	0.2	3.98	0.16		0.4	4.42	0.30	
4 - A41 S	1.8	3.64	0.62		2.5	4.68	0.71	
5 - Park and Ride	0.0	6.10	0.02		0.0	8.04	0.02	
	2031 Base							
1 - Vendee Drive	3.3	12.79	0.76	10 % [1 - Vendee Drive]	1.1	5.81	0.52	26 % [4 - A41 S]
2 - A41 N	1.1	2.61	0.50		1.4	2.83	0.58	
3 - Site Access	0.3	4.07	0.21		0.3	4.72	0.25	
4 - A41 S	1.9	3.75	0.64		2.8	5.22	0.74	
5 - Park and Ride	0.0	5.80	0.02		0.0	7.78	0.02	
	2031 Base + Dev							
1 - Vendee Drive	4.8	17.97	0.84	5 % [1 - Vendee Drive]	1.2	6.15	0.54	23 % [4 - A41 S]
2 - A41 N	1.0	2.55	0.51		1.4	2.75	0.58	
3 - Site Access	0.3	4.20	0.23		0.6	5.76	0.39	
4 - A41 S	1.9	3.77	0.66		3.1	5.64	0.76	
5 - Park and Ride	0.0	6.20	0.02		0.0	8.76	0.02	
	2031 SEPR Base							
1 - Vendee Drive	1.7	6.38	0.62	30 % [1 - Vendee Drive]	0.9	4.77	0.46	34 % [4 - A41 S]
2 - A41 N	0.3	1.74	0.24		0.8	2.07	0.43	
3 - Site Access	0.1	2.58	0.11		0.2	3.35	0.17	
4 - A41 S	0.9	2.48	0.46		2.2	4.32	0.68	
5 - Park and Ride	0.0	4.07	0.01		0.0	6.84	0.02	
	2031 SEPR Base + Dev							
1 - Vendee Drive	2.1	7.22	0.68	23 % [1 - Vendee Drive]	0.9	4.98	0.48	29 % [4 - A41 S]
2 - A41 N	0.3	1.68	0.25		0.8	2.04	0.43	
3 - Site Access	0.1	2.63	0.13		0.4	3.84	0.28	
4 - A41 S	0.9	2.45	0.49		2.4	4.67	0.70	
5 - Park and Ride	0.0	4.26	0.01		0.0	7.59	0.02	

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	13/06/2019
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

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.26	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	18	1 - Vendee Drive

Arms

Arms

Arm	Name	Description
1	Vendee Drive	
2	A41 N	
3	Site Access	
4	A41 S	
5	Park and Ride	

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Vendee Drive	3.75	8.20	92.0	20.0	70.0	35.0	
2 - A41 N	7.50	12.00	38.0	36.0	70.0	18.0	
3 - Site Access	3.50	10.50	32.0	20.0	70.0	22.5	
4 - A41 S	7.00	12.00	25.0	35.0	70.0	25.0	
5 - Park and Ride	3.50	8.00	14.0	15.0	70.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vendee Drive	0.590	2264
2 - A41 N	0.799	3468
3 - Site Access	0.617	2368
4 - A41 S	0.745	3161
5 - Park and Ride	0.502	1704

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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	799	100.000
2 - A41 N		ONE HOUR	✓	1232	100.000
3 - Site Access		ONE HOUR	✓	144	100.000
4 - A41 S		ONE HOUR	✓	1572	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	34	501	12
	2 - A41 N	105	63	0	1060	4
	3 - Site Access	13	126	0	1	4
	4 - A41 S	234	1265	11	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	21	10	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	3	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.67	9.00	2.2	A	733	1100
2 - A41 N	0.46	2.44	0.9	A	1131	1696
3 - Site Access	0.13	3.53	0.2	A	132	198
4 - A41 S	0.60	3.33	1.6	A	1442	2164
5 - Park and Ride	0.01	5.22	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1106	1611	0.373	599	266	0.0	0.6	3.792	A
2 - A41 N	928	232	425	3128	0.296	926	1280	0.0	0.5	1.784	A
3 - Site Access	108	27	1316	1556	0.070	108	35	0.0	0.1	2.485	A
4 - A41 S	1183	296	246	2978	0.397	1181	1178	0.0	0.7	2.149	A
5 - Park and Ride	7	2	1365	1018	0.007	7	62	0.0	0.0	3.557	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1323	1483	0.484	717	318	0.6	1.0	5.012	A
2 - A41 N	1108	277	509	3062	0.362	1107	1531	0.5	0.6	2.013	A
3 - Site Access	129	32	1574	1397	0.093	129	41	0.1	0.1	2.839	A
4 - A41 S	1413	353	295	2942	0.480	1412	1409	0.7	1.0	2.531	A
5 - Park and Ride	8	2	1633	884	0.009	8	74	0.0	0.0	4.109	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1620	1308	0.672	875	389	1.0	2.1	8.794	A
2 - A41 N	1356	339	621	2972	0.456	1355	1874	0.6	0.9	2.433	A
3 - Site Access	159	40	1926	1180	0.134	158	50	0.1	0.2	3.522	A
4 - A41 S	1731	433	361	2893	0.598	1728	1724	1.0	1.6	3.320	A
5 - Park and Ride	10	2	1999	700	0.014	10	90	0.0	0.0	5.215	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1622	1307	0.673	880	390	2.1	2.2	8.996	A
2 - A41 N	1356	339	624	2969	0.457	1356	1877	0.9	0.9	2.439	A
3 - Site Access	159	40	1930	1178	0.135	159	51	0.2	0.2	3.531	A
4 - A41 S	1731	433	361	2893	0.598	1731	1727	1.6	1.6	3.334	A
5 - Park and Ride	10	2	2002	699	0.014	10	90	0.0	0.0	5.225	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1326	1481	0.485	723	319	2.2	1.0	5.103	A
2 - A41 N	1108	277	513	3058	0.362	1109	1536	0.9	0.6	2.019	A
3 - Site Access	129	32	1580	1394	0.093	130	42	0.2	0.1	2.850	A
4 - A41 S	1413	353	295	2942	0.480	1416	1414	1.6	1.0	2.542	A
5 - Park and Ride	8	2	1637	882	0.009	8	74	0.0	0.0	4.120	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1110	1609	0.374	603	267	1.0	0.6	3.830	A
2 - A41 N	928	232	428	3126	0.297	928	1285	0.6	0.5	1.792	A
3 - Site Access	108	27	1321	1553	0.070	109	35	0.1	0.1	2.491	A
4 - A41 S	1183	296	247	2977	0.397	1185	1183	1.0	0.7	2.163	A
5 - Park and Ride	7	2	1370	1016	0.007	7	62	0.0	0.0	3.568	A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.74	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	551	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	185	100.000
4 - A41 S		ONE HOUR	✓	1735	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	29	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	40	128	0	13	4
	4 - A41 S	458	1216	19	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	5	0
	3 - Site Access	0	0	0	8	0
	4 - A41 S	2	4	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	5.01	0.8	A	506	758
2 - A41 N	0.51	2.46	1.1	A	1344	2016
3 - Site Access	0.18	3.79	0.2	A	170	255
4 - A41 S	0.69	4.39	2.3	A	1592	2388
5 - Park and Ride	0.02	7.20	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1077	1628	0.255	413	553	0.0	0.3	2.993	A
2 - A41 N	1103	276	285	3240	0.340	1101	1205	0.0	0.5	1.749	A
3 - Site Access	139	35	1337	1543	0.090	139	49	0.0	0.1	2.576	A
4 - A41 S	1306	327	370	2886	0.453	1303	1106	0.0	0.9	2.345	A
5 - Park and Ride	6	2	1624	889	0.007	6	50	0.0	0.0	4.077	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1288	1504	0.329	495	661	0.3	0.5	3.604	A
2 - A41 N	1317	329	341	3195	0.412	1316	1441	0.5	0.7	1.992	A
3 - Site Access	166	42	1599	1382	0.120	166	58	0.1	0.1	2.976	A
4 - A41 S	1560	390	443	2832	0.551	1558	1322	0.9	1.3	2.916	A
5 - Park and Ride	7	2	1942	729	0.010	7	59	0.0	0.0	4.987	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1576	1334	0.455	605	809	0.5	0.8	4.984	A
2 - A41 N	1613	403	417	3135	0.515	1612	1763	0.7	1.1	2.457	A
3 - Site Access	204	51	1958	1161	0.175	203	71	0.1	0.2	3.780	A
4 - A41 S	1910	478	542	2758	0.693	1906	1619	1.3	2.3	4.347	A
5 - Park and Ride	9	2	2376	511	0.017	9	73	0.0	0.0	7.169	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1579	1332	0.455	607	810	0.8	0.8	5.015	A
2 - A41 N	1613	403	418	3134	0.515	1613	1767	1.1	1.1	2.462	A
3 - Site Access	204	51	1960	1159	0.176	204	72	0.2	0.2	3.785	A
4 - A41 S	1910	478	543	2757	0.693	1910	1621	2.3	2.3	4.390	A
5 - Park and Ride	9	2	2380	509	0.017	9	73	0.0	0.0	7.202	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1292	1501	0.330	497	663	0.8	0.5	3.629	A
2 - A41 N	1317	329	343	3194	0.412	1318	1447	1.1	0.7	1.998	A
3 - Site Access	166	42	1602	1380	0.121	167	59	0.2	0.1	2.983	A
4 - A41 S	1560	390	444	2831	0.551	1564	1325	2.3	1.3	2.946	A
5 - Park and Ride	7	2	1948	726	0.010	7	59	0.0	0.0	5.010	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1081	1626	0.255	415	555	0.5	0.3	3.009	A
2 - A41 N	1103	276	287	3239	0.341	1104	1210	0.7	0.5	1.756	A
3 - Site Access	139	35	1341	1541	0.090	139	49	0.1	0.1	2.581	A
4 - A41 S	1306	327	371	2885	0.453	1308	1109	1.3	0.9	2.360	A
5 - Park and Ride	6	2	1630	886	0.007	6	50	0.0	0.0	4.093	A

2026 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.20	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	11	1 - Vendee Drive

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	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	854	100.000
2 - A41 N		ONE HOUR	✓	1230	100.000
3 - Site Access		ONE HOUR	✓	168	100.000
4 - A41 S		ONE HOUR	✓	1627	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	89	501	12
	2 - A41 N	105	63	0	1060	2
	3 - Site Access	20	136	0	8	4
	4 - A41 S	234	1265	66	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	10	10	10	10	10
	2 - A41 N	10	10	10	10	10
	3 - Site Access	10	10	10	10	10
	4 - A41 S	10	10	10	10	10
	5 - Park and Ride	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.74	12.16	3.1	B	784	1175
2 - A41 N	0.47	2.61	1.0	A	1129	1693
3 - Site Access	0.16	3.98	0.2	A	154	231
4 - A41 S	0.62	3.64	1.8	A	1493	2239
5 - Park and Ride	0.02	6.10	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	643	161	1155	1582	0.406	640	271	0.0	0.7	4.188	A
2 - A41 N	926	232	507	3063	0.302	924	1287	0.0	0.5	1.849	A
3 - Site Access	126	32	1315	1557	0.081	126	117	0.0	0.1	2.766	A
4 - A41 S	1225	306	258	2970	0.412	1222	1183	0.0	0.8	2.262	A
5 - Park and Ride	7	2	1419	991	0.007	7	60	0.0	0.0	4.021	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	768	192	1381	1449	0.530	766	324	0.7	1.2	5.782	A
2 - A41 N	1106	276	607	2983	0.371	1105	1540	0.5	0.6	2.109	A
3 - Site Access	151	38	1572	1398	0.108	151	140	0.1	0.1	3.174	A
4 - A41 S	1463	366	308	2932	0.499	1461	1415	0.8	1.1	2.690	A
5 - Park and Ride	8	2	1698	852	0.010	8	72	0.0	0.0	4.694	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	940	235	1691	1266	0.743	933	397	1.2	3.0	11.644	B
2 - A41 N	1354	339	740	2877	0.471	1353	1884	0.6	1.0	2.596	A
3 - Site Access	185	46	1922	1182	0.156	185	171	0.1	0.2	3.968	A
4 - A41 S	1791	448	377	2881	0.622	1789	1730	1.1	1.8	3.617	A
5 - Park and Ride	10	2	2078	661	0.015	10	88	0.0	0.0	6.085	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	940	235	1693	1265	0.744	940	397	3.0	3.1	12.164	B
2 - A41 N	1354	339	745	2873	0.471	1354	1888	1.0	1.0	2.607	A
3 - Site Access	185	46	1928	1179	0.157	185	172	0.2	0.2	3.982	A
4 - A41 S	1791	448	378	2880	0.622	1791	1735	1.8	1.8	3.635	A
5 - Park and Ride	10	2	2081	659	0.015	10	88	0.0	0.0	6.100	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	768	192	1385	1446	0.531	775	325	3.1	1.3	5.960	A
2 - A41 N	1106	276	614	2978	0.371	1107	1546	1.0	0.7	2.118	A
3 - Site Access	151	38	1580	1394	0.108	151	141	0.2	0.1	3.187	A
4 - A41 S	1463	366	309	2931	0.499	1465	1422	1.8	1.1	2.707	A
5 - Park and Ride	8	2	1702	849	0.010	8	72	0.0	0.0	4.707	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	643	161	1159	1580	0.407	645	272	1.3	0.8	4.244	A
2 - A41 N	926	232	511	3060	0.303	927	1293	0.7	0.5	1.859	A
3 - Site Access	126	32	1320	1554	0.081	127	118	0.1	0.1	2.774	A
4 - A41 S	1225	306	258	2969	0.413	1226	1188	1.1	0.8	2.275	A
5 - Park and Ride	7	2	1424	989	0.007	7	60	0.0	0.0	4.033	A

2026 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	3.91	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	28	5 - Park and Ride

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	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	553	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	313	100.000
4 - A41 S		ONE HOUR	✓	1737	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	31	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	76	184	0	49	4
	4 - A41 S	458	1216	21	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.47	5.25	0.9	A	507	761
2 - A41 N	0.52	2.37	1.1	A	1344	2016
3 - Site Access	0.30	4.42	0.4	A	287	431
4 - A41 S	0.71	4.68	2.5	A	1594	2391
5 - Park and Ride	0.02	8.04	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	416	104	1120	1603	0.260	415	580	0.0	0.3	3.028	A
2 - A41 N	1103	276	288	3238	0.341	1101	1247	0.0	0.5	1.682	A
3 - Site Access	236	59	1337	1543	0.153	235	52	0.0	0.2	2.750	A
4 - A41 S	1308	327	439	2834	0.461	1304	1133	0.0	0.9	2.348	A
5 - Park and Ride	6	2	1694	853	0.007	6	50	0.0	0.0	4.248	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	497	124	1340	1473	0.337	497	693	0.3	0.5	3.684	A
2 - A41 N	1317	329	345	3193	0.413	1316	1492	0.5	0.7	1.918	A
3 - Site Access	281	70	1599	1382	0.204	281	62	0.2	0.3	3.270	A
4 - A41 S	1562	390	525	2770	0.564	1560	1355	0.9	1.3	2.970	A
5 - Park and Ride	7	2	2026	687	0.010	7	59	0.0	0.0	5.298	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	609	152	1639	1297	0.470	607	848	0.5	0.9	5.212	A
2 - A41 N	1613	403	422	3131	0.515	1612	1825	0.7	1.1	2.367	A
3 - Site Access	345	86	1958	1161	0.297	344	76	0.3	0.4	4.403	A
4 - A41 S	1912	478	643	2683	0.713	1908	1658	1.3	2.4	4.619	A
5 - Park and Ride	9	2	2479	459	0.019	9	72	0.0	0.0	7.992	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	609	152	1643	1295	0.470	609	850	0.9	0.9	5.249	A
2 - A41 N	1613	403	423	3130	0.515	1613	1829	1.1	1.1	2.372	A
3 - Site Access	345	86	1960	1159	0.297	345	76	0.4	0.4	4.418	A
4 - A41 S	1912	478	644	2682	0.713	1912	1660	2.4	2.5	4.676	A
5 - Park and Ride	9	2	2484	457	0.019	9	73	0.0	0.0	8.039	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	497	124	1345	1470	0.338	499	696	0.9	0.5	3.710	A
2 - A41 N	1317	329	346	3191	0.413	1318	1497	1.1	0.7	1.923	A
3 - Site Access	281	70	1602	1380	0.204	282	62	0.4	0.3	3.280	A
4 - A41 S	1562	390	527	2769	0.564	1566	1358	2.5	1.3	3.005	A
5 - Park and Ride	7	2	2033	683	0.011	7	60	0.0	0.0	5.328	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	416	104	1125	1600	0.260	417	582	0.5	0.4	3.045	A
2 - A41 N	1103	276	290	3237	0.341	1104	1252	0.7	0.5	1.687	A
3 - Site Access	236	59	1341	1541	0.153	236	52	0.3	0.2	2.760	A
4 - A41 S	1308	327	441	2833	0.462	1309	1136	1.3	0.9	2.366	A
5 - Park and Ride	6	2	1701	850	0.007	6	50	0.0	0.0	4.264	A

2031 Base , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.31	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	10	1 - Vendee Drive

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
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	863	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	208	100.000
4 - A41 S		ONE HOUR	✓	1647	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	31	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	14	186	0	1	7
	4 - A41 S	256	1292	11	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	26	11	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.76	12.79	3.3	B	792	1188
2 - A41 N	0.50	2.61	1.1	A	1234	1851
3 - Site Access	0.21	4.07	0.3	A	191	286
4 - A41 S	0.64	3.75	1.9	A	1511	2267
5 - Park and Ride	0.02	5.80	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1172	1572	0.413	647	291	0.0	0.7	4.145	A
2 - A41 N	1013	253	411	3140	0.322	1011	1408	0.0	0.5	1.847	A
3 - Site Access	157	39	1388	1512	0.104	156	33	0.0	0.1	2.655	A
4 - A41 S	1240	310	291	2944	0.421	1237	1253	0.0	0.8	2.258	A
5 - Park and Ride	8	2	1455	973	0.009	8	73	0.0	0.0	3.729	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1402	1437	0.540	774	349	0.7	1.2	5.789	A
2 - A41 N	1209	302	491	3075	0.393	1208	1684	0.5	0.7	2.107	A
3 - Site Access	187	47	1660	1344	0.139	187	39	0.1	0.2	3.110	A
4 - A41 S	1481	370	349	2902	0.510	1479	1499	0.8	1.1	2.712	A
5 - Park and Ride	10	2	1741	830	0.012	10	87	0.0	0.0	4.389	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1716	1251	0.759	942	427	1.2	3.2	12.157	B
2 - A41 N	1481	370	599	2990	0.495	1479	2060	0.7	1.1	2.604	A
3 - Site Access	229	57	2030	1116	0.205	229	48	0.2	0.3	4.054	A
4 - A41 S	1813	453	427	2844	0.638	1810	1832	1.1	1.9	3.726	A
5 - Park and Ride	12	3	2130	634	0.019	12	107	0.0	0.0	5.786	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1719	1250	0.760	950	427	3.2	3.3	12.788	B
2 - A41 N	1481	370	603	2986	0.496	1481	2065	1.1	1.1	2.615	A
3 - Site Access	229	57	2036	1113	0.206	229	48	0.3	0.3	4.074	A
4 - A41 S	1813	453	427	2843	0.638	1813	1837	1.9	1.9	3.748	A
5 - Park and Ride	12	3	2134	632	0.019	12	107	0.0	0.0	5.802	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1406	1434	0.541	784	349	3.3	1.3	5.990	A
2 - A41 N	1209	302	498	3071	0.394	1211	1692	1.1	0.7	2.120	A
3 - Site Access	187	47	1668	1339	0.140	187	40	0.3	0.2	3.128	A
4 - A41 S	1481	370	349	2901	0.510	1484	1506	1.9	1.1	2.729	A
5 - Park and Ride	10	2	1746	827	0.012	10	87	0.0	0.0	4.405	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1176	1570	0.414	652	292	1.3	0.8	4.201	A
2 - A41 N	1013	253	414	3137	0.323	1013	1414	0.7	0.5	1.856	A
3 - Site Access	157	39	1394	1508	0.104	157	33	0.2	0.1	2.665	A
4 - A41 S	1240	310	292	2944	0.421	1241	1258	1.1	0.8	2.269	A
5 - Park and Ride	8	2	1461	971	0.009	8	73	0.0	0.0	3.740	A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.37	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	26	4 - A41 S

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
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	621	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	234	100.000
4 - A41 S		ONE HOUR	✓	1802	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	34	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	41	175	0	14	4
	4 - A41 S	468	1204	20	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	4	0
	3 - Site Access	0	0	0	7	0
	4 - A41 S	2	5	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.52	5.81	1.1	A	570	855
2 - A41 N	0.58	2.83	1.4	A	1509	2264
3 - Site Access	0.25	4.72	0.3	A	215	322
4 - A41 S	0.74	5.22	2.8	A	1654	2480
5 - Park and Ride	0.02	7.78	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1104	1613	0.290	466	576	0.0	0.4	3.166	A
2 - A41 N	1238	310	293	3234	0.383	1236	1277	0.0	0.6	1.860	A
3 - Site Access	176	44	1487	1451	0.121	176	41	0.0	0.1	2.832	A
4 - A41 S	1357	339	424	2846	0.477	1353	1239	0.0	0.9	2.497	A
5 - Park and Ride	6	2	1674	864	0.007	6	103	0.0	0.0	4.197	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1320	1485	0.376	557	689	0.4	0.6	3.916	A
2 - A41 N	1479	370	350	3188	0.464	1478	1527	0.6	0.9	2.174	A
3 - Site Access	210	53	1779	1271	0.165	210	49	0.1	0.2	3.406	A
4 - A41 S	1620	405	507	2784	0.582	1618	1482	0.9	1.4	3.199	A
5 - Park and Ride	7	2	2002	699	0.010	7	123	0.0	0.0	5.204	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1614	1311	0.521	682	843	0.6	1.1	5.757	A
2 - A41 N	1811	453	428	3126	0.579	1809	1868	0.9	1.4	2.820	A
3 - Site Access	258	64	2177	1025	0.251	257	60	0.2	0.3	4.701	A
4 - A41 S	1984	496	620	2700	0.735	1978	1814	1.4	2.8	5.142	A
5 - Park and Ride	9	2	2448	475	0.019	9	150	0.0	0.0	7.729	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1618	1309	0.522	684	844	1.1	1.1	5.814	A
2 - A41 N	1811	453	429	3125	0.580	1811	1873	1.4	1.4	2.831	A
3 - Site Access	258	64	2180	1023	0.252	258	61	0.3	0.3	4.718	A
4 - A41 S	1984	496	621	2699	0.735	1984	1817	2.8	2.8	5.224	A
5 - Park and Ride	9	2	2454	472	0.019	9	151	0.0	0.0	7.779	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1326	1482	0.377	560	691	1.1	0.6	3.953	A
2 - A41 N	1479	370	352	3187	0.464	1481	1534	1.4	0.9	2.183	A
3 - Site Access	210	53	1783	1268	0.166	211	50	0.3	0.2	3.418	A
4 - A41 S	1620	405	508	2783	0.582	1626	1486	2.8	1.5	3.245	A
5 - Park and Ride	7	2	2010	695	0.010	7	124	0.0	0.0	5.238	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1108	1610	0.290	468	578	0.6	0.4	3.188	A
2 - A41 N	1238	310	294	3233	0.383	1239	1283	0.9	0.6	1.866	A
3 - Site Access	176	44	1492	1448	0.122	176	41	0.2	0.1	2.842	A
4 - A41 S	1357	339	425	2845	0.477	1359	1243	1.5	1.0	2.519	A
5 - Park and Ride	6	2	1680	860	0.007	6	103	0.0	0.0	4.214	A

2031 Base + Dev , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	6.51	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	5	1 - Vendee Drive

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
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	918	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	232	100.000
4 - A41 S		ONE HOUR	✓	1702	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	86	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	21	196	0	8	7
	4 - A41 S	256	1292	66	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.84	17.97	4.8	C	842	1264
2 - A41 N	0.51	2.55	1.0	A	1234	1851
3 - Site Access	0.23	4.20	0.3	A	213	319
4 - A41 S	0.66	3.77	1.9	A	1562	2343
5 - Park and Ride	0.02	6.20	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	691	173	1221	1543	0.448	688	297	0.0	0.8	4.192	A
2 - A41 N	1013	253	493	3074	0.329	1011	1416	0.0	0.5	1.742	A
3 - Site Access	175	44	1388	1512	0.116	174	116	0.0	0.1	2.691	A
4 - A41 S	1281	320	304	2935	0.437	1278	1258	0.0	0.8	2.169	A
5 - Park and Ride	8	2	1510	946	0.009	8	73	0.0	0.0	3.837	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	825	206	1460	1402	0.589	823	355	0.8	1.4	6.189	A
2 - A41 N	1209	302	590	2997	0.403	1208	1693	0.5	0.7	2.011	A
3 - Site Access	209	52	1660	1344	0.155	208	138	0.1	0.2	3.169	A
4 - A41 S	1530	383	364	2891	0.529	1529	1505	0.8	1.1	2.641	A
5 - Park and Ride	10	2	1805	797	0.012	10	87	0.0	0.0	4.570	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1011	253	1787	1209	0.836	998	434	1.4	4.6	16.165	C
2 - A41 N	1481	370	716	2896	0.511	1479	2069	0.7	1.0	2.539	A
3 - Site Access	255	64	2027	1118	0.229	255	168	0.2	0.3	4.171	A
4 - A41 S	1874	468	445	2830	0.662	1871	1837	1.1	1.9	3.741	A
5 - Park and Ride	12	3	2209	594	0.020	12	107	0.0	0.0	6.180	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1011	253	1790	1207	0.837	1010	435	4.6	4.8	17.974	C
2 - A41 N	1481	370	724	2890	0.512	1481	2076	1.0	1.0	2.554	A
3 - Site Access	255	64	2035	1113	0.230	255	169	0.3	0.3	4.198	A
4 - A41 S	1874	468	446	2829	0.662	1874	1845	1.9	1.9	3.766	A
5 - Park and Ride	12	3	2213	593	0.020	12	107	0.0	0.0	6.200	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	825	206	1465	1399	0.590	839	356	4.8	1.5	6.571	A
2 - A41 N	1209	302	600	2989	0.405	1211	1703	1.0	0.7	2.027	A
3 - Site Access	209	52	1671	1337	0.156	209	140	0.3	0.2	3.190	A
4 - A41 S	1530	383	365	2890	0.529	1533	1515	1.9	1.1	2.661	A
5 - Park and Ride	10	2	1811	795	0.012	10	87	0.0	0.0	4.586	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	691	173	1225	1541	0.449	694	298	1.5	0.8	4.264	A
2 - A41 N	1013	253	497	3071	0.330	1013	1422	0.7	0.5	1.752	A
3 - Site Access	175	44	1394	1508	0.116	175	116	0.2	0.1	2.701	A
4 - A41 S	1281	320	305	2934	0.437	1283	1264	1.1	0.8	2.183	A
5 - Park and Ride	8	2	1515	943	0.009	8	73	0.0	0.0	3.849	A

2031 Base + Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.66	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	23	4 - A41 S

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
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	623	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	362	100.000
4 - A41 S		ONE HOUR	✓	1804	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	36	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	77	231	0	50	4
	4 - A41 S	468	1204	22	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.54	6.15	1.2	A	572	858
2 - A41 N	0.58	2.75	1.4	A	1509	2264
3 - Site Access	0.39	5.76	0.6	A	332	498
4 - A41 S	0.76	5.64	3.1	A	1655	2483
5 - Park and Ride	0.02	8.76	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	469	117	1147	1587	0.296	467	603	0.0	0.4	3.211	A
2 - A41 N	1238	310	296	3232	0.383	1236	1319	0.0	0.6	1.802	A
3 - Site Access	273	68	1487	1451	0.188	272	44	0.0	0.2	3.053	A
4 - A41 S	1358	340	493	2795	0.486	1354	1266	0.0	0.9	2.493	A
5 - Park and Ride	6	2	1744	828	0.007	6	103	0.0	0.0	4.378	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	560	140	1372	1454	0.385	559	721	0.4	0.6	4.019	A
2 - A41 N	1479	370	354	3185	0.464	1478	1577	0.6	0.9	2.107	A
3 - Site Access	325	81	1779	1271	0.256	325	53	0.2	0.3	3.802	A
4 - A41 S	1622	405	589	2723	0.596	1620	1514	0.9	1.5	3.258	A
5 - Park and Ride	7	2	2086	657	0.011	7	123	0.0	0.0	5.543	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	686	171	1677	1274	0.538	684	882	0.6	1.1	6.076	A
2 - A41 N	1811	453	432	3123	0.580	1809	1929	0.9	1.4	2.738	A
3 - Site Access	399	100	2177	1025	0.389	397	65	0.3	0.6	5.722	A
4 - A41 S	1986	497	721	2625	0.757	1980	1853	1.5	3.0	5.529	A
5 - Park and Ride	9	2	2550	423	0.021	9	150	0.0	0.0	8.688	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	686	171	1682	1271	0.540	686	884	1.1	1.2	6.150	A
2 - A41 N	1811	453	434	3122	0.580	1811	1934	1.4	1.4	2.746	A
3 - Site Access	399	100	2180	1024	0.389	399	65	0.6	0.6	5.760	A
4 - A41 S	1986	497	722	2624	0.757	1986	1856	3.0	3.1	5.642	A
5 - Park and Ride	9	2	2557	420	0.021	9	151	0.0	0.0	8.763	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	560	140	1379	1450	0.386	562	724	1.2	0.6	4.062	A
2 - A41 N	1479	370	356	3184	0.464	1481	1585	1.4	0.9	2.117	A
3 - Site Access	325	81	1783	1268	0.257	327	53	0.6	0.3	3.829	A
4 - A41 S	1622	405	591	2721	0.596	1628	1519	3.1	1.5	3.313	A
5 - Park and Ride	7	2	2096	652	0.011	7	124	0.0	0.0	5.586	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	469	117	1152	1584	0.296	470	605	0.6	0.4	3.232	A
2 - A41 N	1238	310	297	3231	0.383	1239	1325	0.9	0.6	1.807	A
3 - Site Access	273	68	1492	1448	0.188	273	44	0.3	0.2	3.067	A
4 - A41 S	1358	340	494	2793	0.486	1360	1271	1.5	1.0	2.515	A
5 - Park and Ride	6	2	1751	824	0.007	6	103	0.0	0.0	4.398	A

2031 SEPR Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.52	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	30	1 - Vendee Drive

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
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	886	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	156	100.000
4 - A41 S		ONE HOUR	✓	1209	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	42	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	9	137	0	2	8
	4 - A41 S	285	831	18	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	19	10	0
	2 - A41 N	0	0	0	12	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.62	6.38	1.7	A	813	1220
2 - A41 N	0.24	1.74	0.3	A	585	877
3 - Site Access	0.11	2.58	0.1	A	143	215
4 - A41 S	0.46	2.48	0.9	A	1109	1664
5 - Park and Ride	0.01	4.07	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	795	1795	0.372	665	311	0.0	0.6	3.385	A
2 - A41 N	480	120	453	3106	0.154	479	1006	0.0	0.2	1.483	A
3 - Site Access	117	29	885	1822	0.064	117	47	0.0	0.1	2.111	A
4 - A41 S	910	228	263	2966	0.307	908	739	0.0	0.5	1.862	A
5 - Park and Ride	8	2	1098	1153	0.007	8	74	0.0	0.0	3.144	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	951	1703	0.468	795	372	0.6	0.9	4.219	A
2 - A41 N	573	143	542	3035	0.189	572	1204	0.2	0.3	1.582	A
3 - Site Access	140	35	1059	1715	0.082	140	56	0.1	0.1	2.285	A
4 - A41 S	1087	272	314	2927	0.371	1086	885	0.5	0.6	2.083	A
5 - Park and Ride	10	2	1313	1045	0.009	10	88	0.0	0.0	3.477	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1164	1577	0.619	972	455	0.9	1.7	6.312	A
2 - A41 N	701	175	663	2938	0.239	701	1473	0.3	0.3	1.741	A
3 - Site Access	172	43	1296	1569	0.109	172	68	0.1	0.1	2.576	A
4 - A41 S	1331	333	385	2875	0.463	1330	1082	0.6	0.9	2.482	A
5 - Park and Ride	12	3	1607	897	0.014	12	108	0.0	0.0	4.068	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1165	1576	0.619	975	456	1.7	1.7	6.376	A
2 - A41 N	701	175	665	2937	0.239	701	1475	0.3	0.3	1.742	A
3 - Site Access	172	43	1298	1568	0.110	172	68	0.1	0.1	2.578	A
4 - A41 S	1331	333	385	2875	0.463	1331	1084	0.9	0.9	2.484	A
5 - Park and Ride	12	3	1609	896	0.014	12	108	0.0	0.0	4.071	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	952	1702	0.468	800	373	1.7	0.9	4.262	A
2 - A41 N	573	143	545	3033	0.189	573	1207	0.3	0.3	1.584	A
3 - Site Access	140	35	1062	1713	0.082	140	56	0.1	0.1	2.288	A
4 - A41 S	1087	272	315	2927	0.371	1088	888	0.9	0.6	2.086	A
5 - Park and Ride	10	2	1315	1044	0.009	10	88	0.0	0.0	3.480	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	797	1794	0.372	668	312	0.9	0.6	3.410	A
2 - A41 N	480	120	456	3104	0.154	480	1010	0.3	0.2	1.484	A
3 - Site Access	117	29	889	1820	0.065	118	47	0.1	0.1	2.115	A
4 - A41 S	910	228	264	2965	0.307	911	742	0.6	0.5	1.869	A
5 - Park and Ride	8	2	1101	1151	0.007	8	74	0.0	0.0	3.148	A

2031 SEPR Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.60	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	602	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	203	100.000
4 - A41 S		ONE HOUR	✓	1668	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	33	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	29	153	0	16	5
	4 - A41 S	493	1048	22	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	2	0
	3 - Site Access	0	0	0	6	0
	4 - A41 S	2	2	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	4.77	0.9	A	552	829
2 - A41 N	0.43	2.07	0.8	A	1119	1678
3 - Site Access	0.17	3.35	0.2	A	186	279
4 - A41 S	0.68	4.32	2.2	A	1531	2296
5 - Park and Ride	0.02	6.84	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	969	1692	0.268	452	625	0.0	0.4	2.928	A
2 - A41 N	918	229	305	3224	0.285	916	1115	0.0	0.4	1.585	A
3 - Site Access	153	38	1180	1641	0.093	152	42	0.0	0.1	2.430	A
4 - A41 S	1256	314	436	2836	0.443	1253	895	0.0	0.8	2.310	A
5 - Park and Ride	6	2	1588	907	0.007	6	101	0.0	0.0	3.996	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1159	1580	0.342	541	747	0.4	0.5	3.497	A
2 - A41 N	1096	274	365	3176	0.345	1095	1334	0.4	0.5	1.758	A
3 - Site Access	182	46	1411	1498	0.122	182	50	0.1	0.1	2.747	A
4 - A41 S	1499	375	522	2773	0.541	1498	1071	0.8	1.2	2.872	A
5 - Park and Ride	7	2	1899	751	0.010	7	121	0.0	0.0	4.842	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1418	1427	0.464	661	915	0.5	0.9	4.741	A
2 - A41 N	1342	336	447	3111	0.431	1341	1632	0.5	0.8	2.066	A
3 - Site Access	224	56	1727	1303	0.172	223	62	0.1	0.2	3.349	A
4 - A41 S	1837	459	639	2686	0.684	1833	1311	1.2	2.2	4.278	A
5 - Park and Ride	9	2	2323	537	0.016	9	148	0.0	0.0	6.812	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1420	1426	0.465	663	916	0.9	0.9	4.768	A
2 - A41 N	1342	336	448	3110	0.432	1342	1635	0.8	0.8	2.069	A
3 - Site Access	224	56	1729	1302	0.172	224	62	0.2	0.2	3.352	A
4 - A41 S	1837	459	640	2685	0.684	1836	1312	2.2	2.2	4.319	A
5 - Park and Ride	9	2	2327	535	0.016	9	149	0.0	0.0	6.839	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1162	1578	0.343	543	749	0.9	0.5	3.517	A
2 - A41 N	1096	274	367	3175	0.345	1097	1338	0.8	0.5	1.763	A
3 - Site Access	182	46	1413	1497	0.122	183	50	0.2	0.1	2.754	A
4 - A41 S	1499	375	523	2772	0.541	1503	1073	2.2	1.2	2.900	A
5 - Park and Ride	7	2	1905	748	0.010	7	122	0.0	0.0	4.862	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	972	1690	0.268	454	627	0.5	0.4	2.943	A
2 - A41 N	918	229	307	3223	0.285	918	1119	0.5	0.4	1.589	A
3 - Site Access	153	38	1183	1639	0.093	153	42	0.1	0.1	2.435	A
4 - A41 S	1256	314	438	2836	0.443	1257	898	1.2	0.8	2.326	A
5 - Park and Ride	6	2	1593	904	0.007	6	102	0.0	0.0	4.009	A

2031 SEPR Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	3.79	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	23	1 - Vendee Drive

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
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	941	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	180	100.000
4 - A41 S		ONE HOUR	✓	1264	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	97	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	16	147	0	9	8
	4 - A41 S	285	831	73	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.68	7.22	2.1	A	863	1295
2 - A41 N	0.25	1.68	0.3	A	585	877
3 - Site Access	0.13	2.63	0.1	A	165	248
4 - A41 S	0.49	2.45	0.9	A	1160	1740
5 - Park and Ride	0.01	4.26	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	708	177	844	1766	0.401	706	316	0.0	0.7	3.387	A
2 - A41 N	480	120	536	3040	0.158	479	1014	0.0	0.2	1.405	A
3 - Site Access	136	34	885	1822	0.074	135	129	0.0	0.1	2.134	A
4 - A41 S	952	238	276	2956	0.322	950	745	0.0	0.5	1.792	A
5 - Park and Ride	8	2	1152	1126	0.007	8	74	0.0	0.0	3.220	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	846	211	1009	1668	0.507	845	378	0.7	1.0	4.362	A
2 - A41 N	573	143	641	2956	0.194	572	1213	0.2	0.2	1.509	A
3 - Site Access	162	40	1059	1715	0.094	162	154	0.1	0.1	2.317	A
4 - A41 S	1136	284	330	2916	0.390	1136	891	0.5	0.6	2.022	A
5 - Park and Ride	10	2	1377	1012	0.010	10	88	0.0	0.0	3.589	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1036	259	1235	1535	0.675	1032	463	1.0	2.0	7.103	A
2 - A41 N	701	175	783	2842	0.247	701	1484	0.2	0.3	1.680	A
3 - Site Access	198	50	1295	1569	0.126	198	189	0.1	0.1	2.625	A
4 - A41 S	1392	348	404	2861	0.486	1390	1090	0.6	0.9	2.446	A
5 - Park and Ride	12	3	1686	857	0.014	12	108	0.0	0.0	4.259	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1036	259	1236	1534	0.675	1036	464	2.0	2.1	7.223	A
2 - A41 N	701	175	786	2840	0.247	701	1486	0.3	0.3	1.682	A
3 - Site Access	198	50	1298	1568	0.126	198	189	0.1	0.1	2.628	A
4 - A41 S	1392	348	404	2861	0.487	1392	1092	0.9	0.9	2.450	A
5 - Park and Ride	12	3	1688	856	0.014	12	108	0.0	0.0	4.263	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	846	211	1011	1668	0.507	850	379	2.1	1.0	4.424	A
2 - A41 N	573	143	645	2953	0.194	573	1216	0.3	0.2	1.512	A
3 - Site Access	162	40	1063	1713	0.094	162	155	0.1	0.1	2.321	A
4 - A41 S	1136	284	330	2916	0.390	1138	894	0.9	0.6	2.027	A
5 - Park and Ride	10	2	1380	1011	0.010	10	88	0.0	0.0	3.596	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	708	177	846	1765	0.401	710	317	1.0	0.7	3.419	A
2 - A41 N	480	120	539	3038	0.158	480	1017	0.2	0.2	1.409	A
3 - Site Access	136	34	889	1820	0.074	136	130	0.1	0.1	2.137	A
4 - A41 S	952	238	276	2956	0.322	952	748	0.6	0.5	1.796	A
5 - Park and Ride	8	2	1155	1124	0.007	8	74	0.0	0.0	3.225	A

2031 SEPR Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	3.81	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	29	4 - A41 S

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
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	604	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	331	100.000
4 - A41 S		ONE HOUR	✓	1670	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	35	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	65	209	0	52	5
	4 - A41 S	493	1048	24	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.48	4.98	0.9	A	554	831
2 - A41 N	0.43	2.04	0.8	A	1119	1678
3 - Site Access	0.28	3.84	0.4	A	304	456
4 - A41 S	0.70	4.67	2.4	A	1532	2299
5 - Park and Ride	0.02	7.59	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	455	114	1012	1667	0.273	453	652	0.0	0.4	2.962	A
2 - A41 N	918	229	308	3222	0.285	916	1157	0.0	0.4	1.561	A
3 - Site Access	249	62	1180	1641	0.152	248	45	0.0	0.2	2.584	A
4 - A41 S	1257	314	506	2785	0.451	1254	922	0.0	0.8	2.346	A
5 - Park and Ride	6	2	1658	871	0.007	6	101	0.0	0.0	4.159	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	543	136	1211	1550	0.350	542	780	0.4	0.5	3.572	A
2 - A41 N	1096	274	369	3173	0.345	1095	1384	0.4	0.5	1.732	A
3 - Site Access	298	74	1411	1498	0.199	297	54	0.2	0.2	2.997	A
4 - A41 S	1501	375	605	2711	0.554	1500	1103	0.8	1.2	2.967	A
5 - Park and Ride	7	2	1983	708	0.010	7	121	0.0	0.0	5.135	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	665	166	1481	1390	0.478	664	954	0.5	0.9	4.945	A
2 - A41 N	1342	336	451	3107	0.432	1341	1693	0.5	0.8	2.037	A
3 - Site Access	364	91	1727	1303	0.280	364	66	0.2	0.4	3.831	A
4 - A41 S	1839	460	740	2610	0.704	1834	1351	1.2	2.3	4.612	A
5 - Park and Ride	9	2	2426	486	0.018	9	148	0.0	0.0	7.550	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	665	166	1484	1388	0.479	665	956	0.9	0.9	4.978	A
2 - A41 N	1342	336	453	3107	0.432	1342	1697	0.8	0.8	2.040	A
3 - Site Access	364	91	1729	1302	0.280	364	66	0.4	0.4	3.838	A
4 - A41 S	1839	460	741	2610	0.705	1839	1352	2.3	2.4	4.666	A
5 - Park and Ride	9	2	2431	483	0.018	9	149	0.0	0.0	7.588	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	543	136	1215	1547	0.351	544	782	0.9	0.5	3.598	A
2 - A41 N	1096	274	370	3172	0.345	1097	1389	0.8	0.5	1.734	A
3 - Site Access	298	74	1413	1496	0.199	298	54	0.4	0.2	3.004	A
4 - A41 S	1501	375	606	2710	0.554	1506	1105	2.4	1.3	3.001	A
5 - Park and Ride	7	2	1990	705	0.010	7	122	0.0	0.0	5.160	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	455	114	1016	1664	0.273	455	654	0.5	0.4	2.981	A
2 - A41 N	918	229	310	3220	0.285	918	1162	0.5	0.4	1.563	A
3 - Site Access	249	62	1183	1639	0.152	249	45	0.2	0.2	2.591	A
4 - A41 S	1257	314	507	2784	0.452	1259	925	1.3	0.8	2.364	A
5 - Park and Ride	6	2	1664	868	0.007	6	102	0.0	0.0	4.174	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

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

Filename: Sc 1 B1c.j9
Path: P:\19000's\19539\Technical\Junction models
Report generation date: 18/06/2019 16:18:46

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
	2026 Base							
1 - Vendee Drive	2.2	9.00	0.67	18 % [1 - Vendee Drive]	0.8	5.01	0.46	34 % [4 - A41 S]
2 - A41 N	0.9	2.44	0.46		1.1	2.46	0.51	
3 - Site Access	0.2	3.53	0.13		0.2	3.79	0.18	
4 - A41 S	1.6	3.33	0.60		2.3	4.39	0.69	
5 - Park and Ride	0.0	5.22	0.01		0.0	7.20	0.02	
	2026 Base + Dev							
1 - Vendee Drive	3.0	11.91	0.74	12 % [1 - Vendee Drive]	0.9	5.41	0.48	25 % [5 - Park and Ride]
2 - A41 N	1.0	2.59	0.47		1.1	2.38	0.52	
3 - Site Access	0.2	3.97	0.16		0.5	4.74	0.35	
4 - A41 S	1.8	3.62	0.62		2.6	4.89	0.72	
5 - Park and Ride	0.0	6.07	0.01		0.0	8.46	0.02	
	2031 Base							
1 - Vendee Drive	3.3	12.79	0.76	10 % [1 - Vendee Drive]	1.1	5.81	0.52	26 % [4 - A41 S]
2 - A41 N	1.1	2.61	0.50		1.4	2.83	0.58	
3 - Site Access	0.3	4.07	0.21		0.3	4.72	0.25	
4 - A41 S	1.9	3.75	0.64		2.8	5.22	0.74	
5 - Park and Ride	0.0	5.80	0.02		0.0	7.78	0.02	
	2031 Base + Dev							
1 - Vendee Drive	4.7	17.39	0.83	5 % [1 - Vendee Drive]	1.2	6.37	0.55	21 % [4 - A41 S]
2 - A41 N	1.0	2.54	0.51		1.4	2.76	0.58	
3 - Site Access	0.3	4.19	0.23		0.8	6.33	0.44	
4 - A41 S	1.9	3.75	0.66		3.2	5.95	0.77	
5 - Park and Ride	0.0	6.17	0.02		0.0	9.26	0.02	
	2031 SEPR Base							
1 - Vendee Drive	1.7	6.38	0.62	30 % [1 - Vendee Drive]	0.9	4.77	0.46	34 % [4 - A41 S]
2 - A41 N	0.3	1.74	0.24		0.8	2.07	0.43	
3 - Site Access	0.1	2.58	0.11		0.2	3.35	0.17	
4 - A41 S	0.9	2.48	0.46		2.2	4.32	0.68	
5 - Park and Ride	0.0	4.07	0.01		0.0	6.84	0.02	
	2031 SEPR Base + Dev							
1 - Vendee Drive	2.0	7.12	0.67	24 % [1 - Vendee Drive]	0.9	5.12	0.49	28 % [4 - A41 S]
2 - A41 N	0.3	1.68	0.25		0.8	2.05	0.43	
3 - Site Access	0.1	2.62	0.13		0.5	4.08	0.32	
4 - A41 S	0.9	2.44	0.48		2.5	4.88	0.71	
5 - Park and Ride	0.0	4.25	0.01		0.0	7.96	0.02	

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	13/06/2019
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

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.26	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	18	1 - Vendee Drive

Arms

Arms

Arm	Name	Description
1	Vendee Drive	
2	A41 N	
3	Site Access	
4	A41 S	
5	Park and Ride	

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Vendee Drive	3.75	8.20	92.0	20.0	70.0	35.0	
2 - A41 N	7.50	12.00	38.0	36.0	70.0	18.0	
3 - Site Access	3.50	10.50	32.0	20.0	70.0	22.5	
4 - A41 S	7.00	12.00	25.0	35.0	70.0	25.0	
5 - Park and Ride	3.50	8.00	14.0	15.0	70.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vendee Drive	0.590	2264
2 - A41 N	0.799	3468
3 - Site Access	0.617	2368
4 - A41 S	0.745	3161
5 - Park and Ride	0.502	1704

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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	799	100.000
2 - A41 N		ONE HOUR	✓	1232	100.000
3 - Site Access		ONE HOUR	✓	144	100.000
4 - A41 S		ONE HOUR	✓	1572	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	34	501	12
	2 - A41 N	105	63	0	1060	4
	3 - Site Access	13	126	0	1	4
	4 - A41 S	234	1265	11	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	21	10	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	3	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.67	9.00	2.2	A	733	1100
2 - A41 N	0.46	2.44	0.9	A	1131	1696
3 - Site Access	0.13	3.53	0.2	A	132	198
4 - A41 S	0.60	3.33	1.6	A	1442	2164
5 - Park and Ride	0.01	5.22	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1106	1611	0.373	599	266	0.0	0.6	3.792	A
2 - A41 N	928	232	425	3128	0.296	926	1280	0.0	0.5	1.784	A
3 - Site Access	108	27	1316	1556	0.070	108	35	0.0	0.1	2.485	A
4 - A41 S	1183	296	246	2978	0.397	1181	1178	0.0	0.7	2.149	A
5 - Park and Ride	7	2	1365	1018	0.007	7	62	0.0	0.0	3.557	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1323	1483	0.484	717	318	0.6	1.0	5.012	A
2 - A41 N	1108	277	509	3062	0.362	1107	1531	0.5	0.6	2.013	A
3 - Site Access	129	32	1574	1397	0.093	129	41	0.1	0.1	2.839	A
4 - A41 S	1413	353	295	2942	0.480	1412	1409	0.7	1.0	2.531	A
5 - Park and Ride	8	2	1633	884	0.009	8	74	0.0	0.0	4.109	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1620	1308	0.672	875	389	1.0	2.1	8.794	A
2 - A41 N	1356	339	621	2972	0.456	1355	1874	0.6	0.9	2.433	A
3 - Site Access	159	40	1926	1180	0.134	158	50	0.1	0.2	3.522	A
4 - A41 S	1731	433	361	2893	0.598	1728	1724	1.0	1.6	3.320	A
5 - Park and Ride	10	2	1999	700	0.014	10	90	0.0	0.0	5.215	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1622	1307	0.673	880	390	2.1	2.2	8.996	A
2 - A41 N	1356	339	624	2969	0.457	1356	1877	0.9	0.9	2.439	A
3 - Site Access	159	40	1930	1178	0.135	159	51	0.2	0.2	3.531	A
4 - A41 S	1731	433	361	2893	0.598	1731	1727	1.6	1.6	3.334	A
5 - Park and Ride	10	2	2002	699	0.014	10	90	0.0	0.0	5.225	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1326	1481	0.485	723	319	2.2	1.0	5.103	A
2 - A41 N	1108	277	513	3058	0.362	1109	1536	0.9	0.6	2.019	A
3 - Site Access	129	32	1580	1394	0.093	130	42	0.2	0.1	2.850	A
4 - A41 S	1413	353	295	2942	0.480	1416	1414	1.6	1.0	2.542	A
5 - Park and Ride	8	2	1637	882	0.009	8	74	0.0	0.0	4.120	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1110	1609	0.374	603	267	1.0	0.6	3.830	A
2 - A41 N	928	232	428	3126	0.297	928	1285	0.6	0.5	1.792	A
3 - Site Access	108	27	1321	1553	0.070	109	35	0.1	0.1	2.491	A
4 - A41 S	1183	296	247	2977	0.397	1185	1183	1.0	0.7	2.163	A
5 - Park and Ride	7	2	1370	1016	0.007	7	62	0.0	0.0	3.568	A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.74	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	551	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	185	100.000
4 - A41 S		ONE HOUR	✓	1735	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	29	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	40	128	0	13	4
	4 - A41 S	458	1216	19	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	5	0
	3 - Site Access	0	0	0	8	0
	4 - A41 S	2	4	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	5.01	0.8	A	506	758
2 - A41 N	0.51	2.46	1.1	A	1344	2016
3 - Site Access	0.18	3.79	0.2	A	170	255
4 - A41 S	0.69	4.39	2.3	A	1592	2388
5 - Park and Ride	0.02	7.20	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1077	1628	0.255	413	553	0.0	0.3	2.993	A
2 - A41 N	1103	276	285	3240	0.340	1101	1205	0.0	0.5	1.749	A
3 - Site Access	139	35	1337	1543	0.090	139	49	0.0	0.1	2.576	A
4 - A41 S	1306	327	370	2886	0.453	1303	1106	0.0	0.9	2.345	A
5 - Park and Ride	6	2	1624	889	0.007	6	50	0.0	0.0	4.077	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1288	1504	0.329	495	661	0.3	0.5	3.604	A
2 - A41 N	1317	329	341	3195	0.412	1316	1441	0.5	0.7	1.992	A
3 - Site Access	166	42	1599	1382	0.120	166	58	0.1	0.1	2.976	A
4 - A41 S	1560	390	443	2832	0.551	1558	1322	0.9	1.3	2.916	A
5 - Park and Ride	7	2	1942	729	0.010	7	59	0.0	0.0	4.987	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1576	1334	0.455	605	809	0.5	0.8	4.984	A
2 - A41 N	1613	403	417	3135	0.515	1612	1763	0.7	1.1	2.457	A
3 - Site Access	204	51	1958	1161	0.175	203	71	0.1	0.2	3.780	A
4 - A41 S	1910	478	542	2758	0.693	1906	1619	1.3	2.3	4.347	A
5 - Park and Ride	9	2	2376	511	0.017	9	73	0.0	0.0	7.169	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1579	1332	0.455	607	810	0.8	0.8	5.015	A
2 - A41 N	1613	403	418	3134	0.515	1613	1767	1.1	1.1	2.462	A
3 - Site Access	204	51	1960	1159	0.176	204	72	0.2	0.2	3.785	A
4 - A41 S	1910	478	543	2757	0.693	1910	1621	2.3	2.3	4.390	A
5 - Park and Ride	9	2	2380	509	0.017	9	73	0.0	0.0	7.202	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1292	1501	0.330	497	663	0.8	0.5	3.629	A
2 - A41 N	1317	329	343	3194	0.412	1318	1447	1.1	0.7	1.998	A
3 - Site Access	166	42	1602	1380	0.121	167	59	0.2	0.1	2.983	A
4 - A41 S	1560	390	444	2831	0.551	1564	1325	2.3	1.3	2.946	A
5 - Park and Ride	7	2	1948	726	0.010	7	59	0.0	0.0	5.010	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1081	1626	0.255	415	555	0.5	0.3	3.009	A
2 - A41 N	1103	276	287	3239	0.341	1104	1210	0.7	0.5	1.756	A
3 - Site Access	139	35	1341	1541	0.090	139	49	0.1	0.1	2.581	A
4 - A41 S	1306	327	371	2885	0.453	1308	1109	1.3	0.9	2.360	A
5 - Park and Ride	6	2	1630	886	0.007	6	50	0.0	0.0	4.093	A

2026 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.13	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	12	1 - Vendee Drive

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	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	850	100.000
2 - A41 N		ONE HOUR	✓	1230	100.000
3 - Site Access		ONE HOUR	✓	166	100.000
4 - A41 S		ONE HOUR	✓	1623	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	85	501	12
	2 - A41 N	105	63	0	1060	2
	3 - Site Access	19	136	0	7	4
	4 - A41 S	234	1265	62	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	10	10	10	10	10
	2 - A41 N	10	10	10	10	10
	3 - Site Access	10	10	10	10	10
	4 - A41 S	10	10	10	10	10
	5 - Park and Ride	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.74	11.91	3.0	B	780	1170
2 - A41 N	0.47	2.59	1.0	A	1129	1693
3 - Site Access	0.16	3.97	0.2	A	152	228
4 - A41 S	0.62	3.62	1.8	A	1489	2234
5 - Park and Ride	0.01	6.07	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	640	160	1152	1584	0.404	637	270	0.0	0.7	4.169	A
2 - A41 N	926	232	501	3067	0.302	924	1287	0.0	0.5	1.845	A
3 - Site Access	125	31	1315	1557	0.080	125	111	0.0	0.1	2.764	A
4 - A41 S	1222	305	257	2970	0.411	1219	1182	0.0	0.8	2.257	A
5 - Park and Ride	7	2	1416	993	0.007	7	60	0.0	0.0	4.013	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	764	191	1378	1451	0.527	762	323	0.7	1.2	5.737	A
2 - A41 N	1106	276	600	2989	0.370	1105	1540	0.5	0.6	2.102	A
3 - Site Access	149	37	1572	1398	0.107	149	133	0.1	0.1	3.169	A
4 - A41 S	1459	365	307	2933	0.498	1458	1414	0.8	1.1	2.682	A
5 - Park and Ride	8	2	1693	854	0.009	8	72	0.0	0.0	4.681	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	936	234	1686	1269	0.738	929	396	1.2	3.0	11.423	B
2 - A41 N	1354	339	732	2884	0.470	1353	1884	0.6	1.0	2.584	A
3 - Site Access	183	46	1922	1182	0.155	182	162	0.1	0.2	3.959	A
4 - A41 S	1787	447	376	2881	0.620	1784	1729	1.1	1.8	3.600	A
5 - Park and Ride	10	2	2072	663	0.015	10	88	0.0	0.0	6.059	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	936	234	1689	1267	0.739	936	396	3.0	3.0	11.909	B
2 - A41 N	1354	339	736	2880	0.470	1354	1888	1.0	1.0	2.595	A
3 - Site Access	183	46	1928	1179	0.155	183	163	0.2	0.2	3.974	A
4 - A41 S	1787	447	377	2881	0.620	1787	1734	1.8	1.8	3.618	A
5 - Park and Ride	10	2	2075	662	0.015	10	88	0.0	0.0	6.074	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	764	191	1382	1449	0.528	771	324	3.0	1.2	5.905	A
2 - A41 N	1106	276	607	2984	0.371	1107	1546	1.0	0.7	2.113	A
3 - Site Access	149	37	1580	1394	0.107	150	134	0.2	0.1	3.182	A
4 - A41 S	1459	365	308	2932	0.498	1462	1421	1.8	1.1	2.699	A
5 - Park and Ride	8	2	1698	852	0.010	8	72	0.0	0.0	4.696	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	640	160	1156	1582	0.405	642	271	1.2	0.8	4.223	A
2 - A41 N	926	232	505	3065	0.302	927	1293	0.7	0.5	1.851	A
3 - Site Access	125	31	1320	1554	0.080	125	112	0.1	0.1	2.773	A
4 - A41 S	1222	305	258	2970	0.411	1223	1188	1.1	0.8	2.270	A
5 - Park and Ride	7	2	1421	991	0.007	7	60	0.0	0.0	4.024	A

2026 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.06	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	25	5 - Park and Ride

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	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	556	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	364	100.000
4 - A41 S		ONE HOUR	✓	1740	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	34	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	90	207	0	63	4
	4 - A41 S	458	1216	24	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.48	5.41	0.9	A	510	765
2 - A41 N	0.52	2.38	1.1	A	1344	2016
3 - Site Access	0.35	4.74	0.5	A	334	501
4 - A41 S	0.72	4.89	2.6	A	1597	2395
5 - Park and Ride	0.02	8.46	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	419	105	1140	1591	0.263	417	590	0.0	0.4	3.061	A
2 - A41 N	1103	276	293	3234	0.341	1101	1264	0.0	0.5	1.685	A
3 - Site Access	274	69	1337	1543	0.178	273	56	0.0	0.2	2.833	A
4 - A41 S	1310	327	467	2814	0.466	1306	1143	0.0	0.9	2.384	A
5 - Park and Ride	6	2	1724	838	0.007	6	50	0.0	0.0	4.325	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	500	125	1363	1460	0.342	499	706	0.4	0.5	3.747	A
2 - A41 N	1317	329	350	3188	0.413	1316	1512	0.5	0.7	1.922	A
3 - Site Access	327	82	1599	1382	0.237	327	67	0.2	0.3	3.412	A
4 - A41 S	1564	391	559	2745	0.570	1562	1367	0.9	1.3	3.039	A
5 - Park and Ride	7	2	2062	669	0.011	7	59	0.0	0.0	5.442	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	612	153	1667	1280	0.478	611	864	0.5	0.9	5.366	A
2 - A41 N	1613	403	428	3126	0.516	1612	1850	0.7	1.1	2.375	A
3 - Site Access	401	100	1957	1161	0.345	400	82	0.3	0.5	4.727	A
4 - A41 S	1916	479	684	2652	0.722	1911	1674	1.3	2.6	4.825	A
5 - Park and Ride	9	2	2522	437	0.020	9	72	0.0	0.0	8.400	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	612	153	1671	1278	0.479	612	865	0.9	0.9	5.408	A
2 - A41 N	1613	403	429	3125	0.516	1613	1854	1.1	1.1	2.380	A
3 - Site Access	401	100	1960	1159	0.346	401	83	0.5	0.5	4.745	A
4 - A41 S	1916	479	685	2652	0.723	1916	1676	2.6	2.6	4.890	A
5 - Park and Ride	9	2	2528	434	0.020	9	73	0.0	0.0	8.457	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	500	125	1369	1456	0.343	501	708	0.9	0.5	3.775	A
2 - A41 N	1317	329	352	3187	0.413	1318	1518	1.1	0.7	1.927	A
3 - Site Access	327	82	1603	1380	0.237	328	68	0.5	0.3	3.425	A
4 - A41 S	1564	391	560	2744	0.570	1569	1370	2.6	1.3	3.075	A
5 - Park and Ride	7	2	2070	665	0.011	7	60	0.0	0.0	5.478	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	419	105	1144	1589	0.264	419	592	0.5	0.4	3.082	A
2 - A41 N	1103	276	294	3233	0.341	1104	1270	0.7	0.5	1.693	A
3 - Site Access	274	69	1341	1541	0.178	274	57	0.3	0.2	2.842	A
4 - A41 S	1310	327	469	2812	0.466	1312	1147	1.3	0.9	2.403	A
5 - Park and Ride	6	2	1731	835	0.007	6	50	0.0	0.0	4.344	A

2031 Base , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.31	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	10	1 - Vendee Drive

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
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	863	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	208	100.000
4 - A41 S		ONE HOUR	✓	1647	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	31	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	14	186	0	1	7
	4 - A41 S	256	1292	11	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	26	11	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.76	12.79	3.3	B	792	1188
2 - A41 N	0.50	2.61	1.1	A	1234	1851
3 - Site Access	0.21	4.07	0.3	A	191	286
4 - A41 S	0.64	3.75	1.9	A	1511	2267
5 - Park and Ride	0.02	5.80	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1172	1572	0.413	647	291	0.0	0.7	4.145	A
2 - A41 N	1013	253	411	3140	0.322	1011	1408	0.0	0.5	1.847	A
3 - Site Access	157	39	1388	1512	0.104	156	33	0.0	0.1	2.655	A
4 - A41 S	1240	310	291	2944	0.421	1237	1253	0.0	0.8	2.258	A
5 - Park and Ride	8	2	1455	973	0.009	8	73	0.0	0.0	3.729	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1402	1437	0.540	774	349	0.7	1.2	5.789	A
2 - A41 N	1209	302	491	3075	0.393	1208	1684	0.5	0.7	2.107	A
3 - Site Access	187	47	1660	1344	0.139	187	39	0.1	0.2	3.110	A
4 - A41 S	1481	370	349	2902	0.510	1479	1499	0.8	1.1	2.712	A
5 - Park and Ride	10	2	1741	830	0.012	10	87	0.0	0.0	4.389	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1716	1251	0.759	942	427	1.2	3.2	12.157	B
2 - A41 N	1481	370	599	2990	0.495	1479	2060	0.7	1.1	2.604	A
3 - Site Access	229	57	2030	1116	0.205	229	48	0.2	0.3	4.054	A
4 - A41 S	1813	453	427	2844	0.638	1810	1832	1.1	1.9	3.726	A
5 - Park and Ride	12	3	2130	634	0.019	12	107	0.0	0.0	5.786	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1719	1250	0.760	950	427	3.2	3.3	12.788	B
2 - A41 N	1481	370	603	2986	0.496	1481	2065	1.1	1.1	2.615	A
3 - Site Access	229	57	2036	1113	0.206	229	48	0.3	0.3	4.074	A
4 - A41 S	1813	453	427	2843	0.638	1813	1837	1.9	1.9	3.748	A
5 - Park and Ride	12	3	2134	632	0.019	12	107	0.0	0.0	5.802	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1406	1434	0.541	784	349	3.3	1.3	5.990	A
2 - A41 N	1209	302	498	3071	0.394	1211	1692	1.1	0.7	2.120	A
3 - Site Access	187	47	1668	1339	0.140	187	40	0.3	0.2	3.128	A
4 - A41 S	1481	370	349	2901	0.510	1484	1506	1.9	1.1	2.729	A
5 - Park and Ride	10	2	1746	827	0.012	10	87	0.0	0.0	4.405	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1176	1570	0.414	652	292	1.3	0.8	4.201	A
2 - A41 N	1013	253	414	3137	0.323	1013	1414	0.7	0.5	1.856	A
3 - Site Access	157	39	1394	1508	0.104	157	33	0.2	0.1	2.665	A
4 - A41 S	1240	310	292	2944	0.421	1241	1258	1.1	0.8	2.269	A
5 - Park and Ride	8	2	1461	971	0.009	8	73	0.0	0.0	3.740	A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.37	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	26	4 - A41 S

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
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	621	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	234	100.000
4 - A41 S		ONE HOUR	✓	1802	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	34	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	41	175	0	14	4
	4 - A41 S	468	1204	20	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	4	0
	3 - Site Access	0	0	0	7	0
	4 - A41 S	2	5	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.52	5.81	1.1	A	570	855
2 - A41 N	0.58	2.83	1.4	A	1509	2264
3 - Site Access	0.25	4.72	0.3	A	215	322
4 - A41 S	0.74	5.22	2.8	A	1654	2480
5 - Park and Ride	0.02	7.78	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1104	1613	0.290	466	576	0.0	0.4	3.166	A
2 - A41 N	1238	310	293	3234	0.383	1236	1277	0.0	0.6	1.860	A
3 - Site Access	176	44	1487	1451	0.121	176	41	0.0	0.1	2.832	A
4 - A41 S	1357	339	424	2846	0.477	1353	1239	0.0	0.9	2.497	A
5 - Park and Ride	6	2	1674	864	0.007	6	103	0.0	0.0	4.197	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1320	1485	0.376	557	689	0.4	0.6	3.916	A
2 - A41 N	1479	370	350	3188	0.464	1478	1527	0.6	0.9	2.174	A
3 - Site Access	210	53	1779	1271	0.165	210	49	0.1	0.2	3.406	A
4 - A41 S	1620	405	507	2784	0.582	1618	1482	0.9	1.4	3.199	A
5 - Park and Ride	7	2	2002	699	0.010	7	123	0.0	0.0	5.204	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1614	1311	0.521	682	843	0.6	1.1	5.757	A
2 - A41 N	1811	453	428	3126	0.579	1809	1868	0.9	1.4	2.820	A
3 - Site Access	258	64	2177	1025	0.251	257	60	0.2	0.3	4.701	A
4 - A41 S	1984	496	620	2700	0.735	1978	1814	1.4	2.8	5.142	A
5 - Park and Ride	9	2	2448	475	0.019	9	150	0.0	0.0	7.729	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1618	1309	0.522	684	844	1.1	1.1	5.814	A
2 - A41 N	1811	453	429	3125	0.580	1811	1873	1.4	1.4	2.831	A
3 - Site Access	258	64	2180	1023	0.252	258	61	0.3	0.3	4.718	A
4 - A41 S	1984	496	621	2699	0.735	1984	1817	2.8	2.8	5.224	A
5 - Park and Ride	9	2	2454	472	0.019	9	151	0.0	0.0	7.779	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1326	1482	0.377	560	691	1.1	0.6	3.953	A
2 - A41 N	1479	370	352	3187	0.464	1481	1534	1.4	0.9	2.183	A
3 - Site Access	210	53	1783	1268	0.166	211	50	0.3	0.2	3.418	A
4 - A41 S	1620	405	508	2783	0.582	1626	1486	2.8	1.5	3.245	A
5 - Park and Ride	7	2	2010	695	0.010	7	124	0.0	0.0	5.238	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1108	1610	0.290	468	578	0.6	0.4	3.188	A
2 - A41 N	1238	310	294	3233	0.383	1239	1283	0.9	0.6	1.866	A
3 - Site Access	176	44	1492	1448	0.122	176	41	0.2	0.1	2.842	A
4 - A41 S	1357	339	425	2845	0.477	1359	1243	1.5	1.0	2.519	A
5 - Park and Ride	6	2	1680	860	0.007	6	103	0.0	0.0	4.214	A

2031 Base + Dev , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	6.36	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	5	1 - Vendee Drive

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
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	914	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	230	100.000
4 - A41 S		ONE HOUR	✓	1698	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	82	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	20	196	0	7	7
	4 - A41 S	256	1292	62	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.83	17.39	4.7	C	839	1258
2 - A41 N	0.51	2.54	1.0	A	1234	1851
3 - Site Access	0.23	4.19	0.3	A	211	317
4 - A41 S	0.66	3.75	1.9	A	1558	2337
5 - Park and Ride	0.02	6.17	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	688	172	1218	1545	0.445	685	296	0.0	0.8	4.170	A
2 - A41 N	1013	253	487	3079	0.329	1011	1416	0.0	0.5	1.738	A
3 - Site Access	173	43	1388	1512	0.115	173	110	0.0	0.1	2.688	A
4 - A41 S	1278	320	303	2936	0.435	1275	1258	0.0	0.8	2.165	A
5 - Park and Ride	8	2	1506	948	0.009	8	73	0.0	0.0	3.830	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	822	205	1457	1404	0.585	819	354	0.8	1.4	6.130	A
2 - A41 N	1209	302	583	3003	0.403	1208	1693	0.5	0.7	2.005	A
3 - Site Access	207	52	1660	1344	0.154	207	131	0.1	0.2	3.164	A
4 - A41 S	1526	382	363	2891	0.528	1525	1504	0.8	1.1	2.633	A
5 - Park and Ride	10	2	1801	800	0.012	10	87	0.0	0.0	4.557	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1006	252	1783	1212	0.830	994	433	1.4	4.4	15.735	C
2 - A41 N	1481	370	708	2903	0.510	1479	2069	0.7	1.0	2.527	A
3 - Site Access	253	63	2028	1117	0.227	253	160	0.2	0.3	4.162	A
4 - A41 S	1870	467	444	2831	0.660	1866	1836	1.1	1.9	3.721	A
5 - Park and Ride	12	3	2204	597	0.020	12	107	0.0	0.0	6.151	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1006	252	1786	1210	0.832	1005	434	4.4	4.7	17.389	C
2 - A41 N	1481	370	715	2897	0.511	1481	2076	1.0	1.0	2.541	A
3 - Site Access	253	63	2035	1113	0.228	253	161	0.3	0.3	4.187	A
4 - A41 S	1870	467	445	2830	0.661	1869	1844	1.9	1.9	3.746	A
5 - Park and Ride	12	3	2207	595	0.020	12	107	0.0	0.0	6.171	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	822	205	1461	1402	0.586	835	355	4.7	1.4	6.487	A
2 - A41 N	1209	302	593	2995	0.404	1211	1703	1.0	0.7	2.019	A
3 - Site Access	207	52	1671	1338	0.155	207	133	0.3	0.2	3.185	A
4 - A41 S	1526	382	364	2891	0.528	1530	1514	1.9	1.1	2.651	A
5 - Park and Ride	10	2	1806	797	0.012	10	87	0.0	0.0	4.573	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	688	172	1222	1543	0.446	691	297	1.4	0.8	4.239	A
2 - A41 N	1013	253	491	3076	0.329	1013	1422	0.7	0.5	1.747	A
3 - Site Access	173	43	1394	1508	0.115	173	110	0.2	0.1	2.698	A
4 - A41 S	1278	320	304	2935	0.436	1280	1263	1.1	0.8	2.176	A
5 - Park and Ride	8	2	1511	945	0.009	8	73	0.0	0.0	3.842	A

2031 Base + Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.88	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	21	4 - A41 S

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
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	626	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	413	100.000
4 - A41 S		ONE HOUR	✓	1807	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	39	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	91	254	0	64	4
	4 - A41 S	468	1204	25	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.55	6.37	1.2	A	574	862
2 - A41 N	0.58	2.76	1.4	A	1509	2264
3 - Site Access	0.44	6.33	0.8	A	379	568
4 - A41 S	0.77	5.95	3.2	A	1658	2487
5 - Park and Ride	0.02	9.26	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	471	118	1167	1576	0.299	470	613	0.0	0.4	3.251	A
2 - A41 N	1238	310	300	3228	0.384	1236	1336	0.0	0.6	1.805	A
3 - Site Access	311	78	1487	1451	0.214	310	49	0.0	0.3	3.152	A
4 - A41 S	1360	340	520	2774	0.490	1357	1277	0.0	1.0	2.534	A
5 - Park and Ride	6	2	1774	813	0.007	6	103	0.0	0.0	4.459	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	563	141	1395	1441	0.391	562	734	0.4	0.6	4.094	A
2 - A41 N	1479	370	359	3181	0.465	1478	1598	0.6	0.9	2.112	A
3 - Site Access	371	93	1779	1271	0.292	371	58	0.3	0.4	3.995	A
4 - A41 S	1624	406	622	2698	0.602	1622	1527	1.0	1.5	3.339	A
5 - Park and Ride	7	2	2122	639	0.011	7	123	0.0	0.0	5.701	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	689	172	1705	1258	0.548	687	897	0.6	1.2	6.290	A
2 - A41 N	1811	453	439	3117	0.581	1809	1953	0.9	1.4	2.746	A
3 - Site Access	455	114	2177	1025	0.443	453	71	0.4	0.8	6.274	A
4 - A41 S	1990	497	761	2595	0.767	1983	1869	1.5	3.2	5.818	A
5 - Park and Ride	9	2	2594	401	0.022	9	150	0.0	0.0	9.167	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	689	172	1711	1254	0.549	689	899	1.2	1.2	6.370	A
2 - A41 N	1811	453	440	3116	0.581	1811	1960	1.4	1.4	2.757	A
3 - Site Access	455	114	2180	1024	0.444	455	72	0.8	0.8	6.328	A
4 - A41 S	1990	497	763	2593	0.767	1989	1872	3.2	3.2	5.954	A
5 - Park and Ride	9	2	2602	397	0.022	9	151	0.0	0.0	9.262	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	563	141	1403	1436	0.392	565	737	1.2	0.6	4.144	A
2 - A41 N	1479	370	361	3180	0.465	1481	1607	1.4	0.9	2.121	A
3 - Site Access	371	93	1783	1268	0.293	373	59	0.8	0.4	4.026	A
4 - A41 S	1624	406	625	2696	0.602	1631	1531	3.2	1.5	3.401	A
5 - Park and Ride	7	2	2132	633	0.011	7	124	0.0	0.0	5.753	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	471	118	1172	1572	0.300	472	616	0.6	0.4	3.273	A
2 - A41 N	1238	310	302	3227	0.384	1239	1342	0.9	0.6	1.811	A
3 - Site Access	311	78	1492	1448	0.215	311	49	0.4	0.3	3.168	A
4 - A41 S	1360	340	522	2772	0.491	1363	1281	1.5	1.0	2.559	A
5 - Park and Ride	6	2	1782	809	0.007	6	103	0.0	0.0	4.481	A

2031 SEPR Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.52	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	30	1 - Vendee Drive

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
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	886	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	156	100.000
4 - A41 S		ONE HOUR	✓	1209	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	42	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	9	137	0	2	8
	4 - A41 S	285	831	18	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	19	10	0
	2 - A41 N	0	0	0	12	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.62	6.38	1.7	A	813	1220
2 - A41 N	0.24	1.74	0.3	A	585	877
3 - Site Access	0.11	2.58	0.1	A	143	215
4 - A41 S	0.46	2.48	0.9	A	1109	1664
5 - Park and Ride	0.01	4.07	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	795	1795	0.372	665	311	0.0	0.6	3.385	A
2 - A41 N	480	120	453	3106	0.154	479	1006	0.0	0.2	1.483	A
3 - Site Access	117	29	885	1822	0.064	117	47	0.0	0.1	2.111	A
4 - A41 S	910	228	263	2966	0.307	908	739	0.0	0.5	1.862	A
5 - Park and Ride	8	2	1098	1153	0.007	8	74	0.0	0.0	3.144	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	951	1703	0.468	795	372	0.6	0.9	4.219	A
2 - A41 N	573	143	542	3035	0.189	572	1204	0.2	0.3	1.582	A
3 - Site Access	140	35	1059	1715	0.082	140	56	0.1	0.1	2.285	A
4 - A41 S	1087	272	314	2927	0.371	1086	885	0.5	0.6	2.083	A
5 - Park and Ride	10	2	1313	1045	0.009	10	88	0.0	0.0	3.477	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1164	1577	0.619	972	455	0.9	1.7	6.312	A
2 - A41 N	701	175	663	2938	0.239	701	1473	0.3	0.3	1.741	A
3 - Site Access	172	43	1296	1569	0.109	172	68	0.1	0.1	2.576	A
4 - A41 S	1331	333	385	2875	0.463	1330	1082	0.6	0.9	2.482	A
5 - Park and Ride	12	3	1607	897	0.014	12	108	0.0	0.0	4.068	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1165	1576	0.619	975	456	1.7	1.7	6.376	A
2 - A41 N	701	175	665	2937	0.239	701	1475	0.3	0.3	1.742	A
3 - Site Access	172	43	1298	1568	0.110	172	68	0.1	0.1	2.578	A
4 - A41 S	1331	333	385	2875	0.463	1331	1084	0.9	0.9	2.484	A
5 - Park and Ride	12	3	1609	896	0.014	12	108	0.0	0.0	4.071	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	952	1702	0.468	800	373	1.7	0.9	4.262	A
2 - A41 N	573	143	545	3033	0.189	573	1207	0.3	0.3	1.584	A
3 - Site Access	140	35	1062	1713	0.082	140	56	0.1	0.1	2.288	A
4 - A41 S	1087	272	315	2927	0.371	1088	888	0.9	0.6	2.086	A
5 - Park and Ride	10	2	1315	1044	0.009	10	88	0.0	0.0	3.480	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	797	1794	0.372	668	312	0.9	0.6	3.410	A
2 - A41 N	480	120	456	3104	0.154	480	1010	0.3	0.2	1.484	A
3 - Site Access	117	29	889	1820	0.065	118	47	0.1	0.1	2.115	A
4 - A41 S	910	228	264	2965	0.307	911	742	0.6	0.5	1.869	A
5 - Park and Ride	8	2	1101	1151	0.007	8	74	0.0	0.0	3.148	A

2031 SEPR Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.60	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	602	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	203	100.000
4 - A41 S		ONE HOUR	✓	1668	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	33	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	29	153	0	16	5
	4 - A41 S	493	1048	22	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	2	0
	3 - Site Access	0	0	0	6	0
	4 - A41 S	2	2	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	4.77	0.9	A	552	829
2 - A41 N	0.43	2.07	0.8	A	1119	1678
3 - Site Access	0.17	3.35	0.2	A	186	279
4 - A41 S	0.68	4.32	2.2	A	1531	2296
5 - Park and Ride	0.02	6.84	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	969	1692	0.268	452	625	0.0	0.4	2.928	A
2 - A41 N	918	229	305	3224	0.285	916	1115	0.0	0.4	1.585	A
3 - Site Access	153	38	1180	1641	0.093	152	42	0.0	0.1	2.430	A
4 - A41 S	1256	314	436	2836	0.443	1253	895	0.0	0.8	2.310	A
5 - Park and Ride	6	2	1588	907	0.007	6	101	0.0	0.0	3.996	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1159	1580	0.342	541	747	0.4	0.5	3.497	A
2 - A41 N	1096	274	365	3176	0.345	1095	1334	0.4	0.5	1.758	A
3 - Site Access	182	46	1411	1498	0.122	182	50	0.1	0.1	2.747	A
4 - A41 S	1499	375	522	2773	0.541	1498	1071	0.8	1.2	2.872	A
5 - Park and Ride	7	2	1899	751	0.010	7	121	0.0	0.0	4.842	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1418	1427	0.464	661	915	0.5	0.9	4.741	A
2 - A41 N	1342	336	447	3111	0.431	1341	1632	0.5	0.8	2.066	A
3 - Site Access	224	56	1727	1303	0.172	223	62	0.1	0.2	3.349	A
4 - A41 S	1837	459	639	2686	0.684	1833	1311	1.2	2.2	4.278	A
5 - Park and Ride	9	2	2323	537	0.016	9	148	0.0	0.0	6.812	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1420	1426	0.465	663	916	0.9	0.9	4.768	A
2 - A41 N	1342	336	448	3110	0.432	1342	1635	0.8	0.8	2.069	A
3 - Site Access	224	56	1729	1302	0.172	224	62	0.2	0.2	3.352	A
4 - A41 S	1837	459	640	2685	0.684	1836	1312	2.2	2.2	4.319	A
5 - Park and Ride	9	2	2327	535	0.016	9	149	0.0	0.0	6.839	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1162	1578	0.343	543	749	0.9	0.5	3.517	A
2 - A41 N	1096	274	367	3175	0.345	1097	1338	0.8	0.5	1.763	A
3 - Site Access	182	46	1413	1497	0.122	183	50	0.2	0.1	2.754	A
4 - A41 S	1499	375	523	2772	0.541	1503	1073	2.2	1.2	2.900	A
5 - Park and Ride	7	2	1905	748	0.010	7	122	0.0	0.0	4.862	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	972	1690	0.268	454	627	0.5	0.4	2.943	A
2 - A41 N	918	229	307	3223	0.285	918	1119	0.5	0.4	1.589	A
3 - Site Access	153	38	1183	1639	0.093	153	42	0.1	0.1	2.435	A
4 - A41 S	1256	314	438	2836	0.443	1257	898	1.2	0.8	2.326	A
5 - Park and Ride	6	2	1593	904	0.007	6	102	0.0	0.0	4.009	A

2031 SEPR Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	3.75	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	24	1 - Vendee Drive

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
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	937	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	178	100.000
4 - A41 S		ONE HOUR	✓	1260	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	93	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	15	147	0	8	8
	4 - A41 S	285	831	69	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.67	7.12	2.0	A	860	1290
2 - A41 N	0.25	1.68	0.3	A	585	877
3 - Site Access	0.13	2.62	0.1	A	163	245
4 - A41 S	0.48	2.44	0.9	A	1156	1734
5 - Park and Ride	0.01	4.25	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	705	176	841	1768	0.399	703	316	0.0	0.7	3.372	A
2 - A41 N	480	120	530	3045	0.157	479	1014	0.0	0.2	1.402	A
3 - Site Access	134	34	885	1822	0.074	134	123	0.0	0.1	2.132	A
4 - A41 S	949	237	275	2957	0.321	947	744	0.0	0.5	1.789	A
5 - Park and Ride	8	2	1148	1128	0.007	8	74	0.0	0.0	3.215	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	842	211	1005	1671	0.504	841	377	0.7	1.0	4.332	A
2 - A41 N	573	143	634	2962	0.193	572	1213	0.2	0.2	1.506	A
3 - Site Access	160	40	1059	1715	0.093	160	147	0.1	0.1	2.314	A
4 - A41 S	1133	283	329	2917	0.388	1132	890	0.5	0.6	2.017	A
5 - Park and Ride	10	2	1373	1015	0.010	10	88	0.0	0.0	3.581	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1032	258	1231	1537	0.671	1028	462	1.0	2.0	7.007	A
2 - A41 N	701	175	775	2849	0.246	701	1484	0.2	0.3	1.675	A
3 - Site Access	196	49	1295	1569	0.125	196	180	0.1	0.1	2.621	A
4 - A41 S	1387	347	403	2862	0.485	1386	1089	0.6	0.9	2.437	A
5 - Park and Ride	12	3	1681	860	0.014	12	108	0.0	0.0	4.245	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1032	258	1232	1537	0.671	1032	462	2.0	2.0	7.122	A
2 - A41 N	701	175	777	2847	0.246	701	1486	0.3	0.3	1.676	A
3 - Site Access	196	49	1298	1568	0.125	196	181	0.1	0.1	2.624	A
4 - A41 S	1387	347	403	2861	0.485	1387	1091	0.9	0.9	2.441	A
5 - Park and Ride	12	3	1682	859	0.014	12	108	0.0	0.0	4.249	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	842	211	1007	1670	0.505	846	378	2.0	1.0	4.392	A
2 - A41 N	573	143	637	2959	0.194	573	1216	0.3	0.2	1.508	A
3 - Site Access	160	40	1063	1713	0.093	160	148	0.1	0.1	2.318	A
4 - A41 S	1133	283	329	2916	0.388	1134	893	0.9	0.6	2.022	A
5 - Park and Ride	10	2	1375	1014	0.010	10	88	0.0	0.0	3.588	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	705	176	843	1766	0.399	707	316	1.0	0.7	3.404	A
2 - A41 N	480	120	533	3043	0.158	480	1017	0.2	0.2	1.406	A
3 - Site Access	134	34	889	1820	0.074	134	124	0.1	0.1	2.135	A
4 - A41 S	949	237	276	2956	0.321	949	747	0.6	0.5	1.796	A
5 - Park and Ride	8	2	1151	1126	0.007	8	74	0.0	0.0	3.219	A

2031 SEPR Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	3.96	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	28	4 - A41 S

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
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	607	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	382	100.000
4 - A41 S		ONE HOUR	✓	1673	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	38	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	79	232	0	66	5
	4 - A41 S	493	1048	27	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.49	5.12	0.9	A	557	835
2 - A41 N	0.43	2.05	0.8	A	1119	1678
3 - Site Access	0.32	4.08	0.5	A	351	526
4 - A41 S	0.71	4.88	2.5	A	1535	2303
5 - Park and Ride	0.02	7.96	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	457	114	1032	1655	0.276	455	662	0.0	0.4	2.996	A
2 - A41 N	918	229	313	3218	0.285	916	1174	0.0	0.4	1.564	A
3 - Site Access	288	72	1180	1641	0.175	287	50	0.0	0.2	2.658	A
4 - A41 S	1260	315	533	2764	0.456	1256	933	0.0	0.8	2.382	A
5 - Park and Ride	6	2	1688	856	0.007	6	101	0.0	0.0	4.233	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	546	136	1234	1536	0.355	545	792	0.4	0.5	3.632	A
2 - A41 N	1096	274	374	3169	0.346	1095	1404	0.4	0.5	1.735	A
3 - Site Access	343	86	1410	1498	0.229	343	59	0.2	0.3	3.116	A
4 - A41 S	1504	376	638	2687	0.560	1502	1116	0.8	1.3	3.036	A
5 - Park and Ride	7	2	2019	690	0.010	7	121	0.0	0.0	5.270	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	668	167	1509	1373	0.487	667	969	0.5	0.9	5.084	A
2 - A41 N	1342	336	458	3102	0.433	1341	1718	0.5	0.8	2.043	A
3 - Site Access	421	105	1727	1303	0.323	420	72	0.3	0.5	4.072	A
4 - A41 S	1842	461	781	2580	0.714	1837	1366	1.3	2.5	4.815	A
5 - Park and Ride	9	2	2470	464	0.019	9	148	0.0	0.0	7.914	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	668	167	1513	1371	0.487	668	971	0.9	0.9	5.121	A
2 - A41 N	1342	336	459	3101	0.433	1342	1722	0.8	0.8	2.046	A
3 - Site Access	421	105	1729	1302	0.323	421	73	0.5	0.5	4.084	A
4 - A41 S	1842	461	782	2579	0.714	1842	1367	2.5	2.5	4.879	A
5 - Park and Ride	9	2	2475	461	0.019	9	149	0.0	0.0	7.960	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	546	136	1239	1533	0.356	547	795	0.9	0.6	3.660	A
2 - A41 N	1096	274	376	3168	0.346	1097	1410	0.8	0.5	1.738	A
3 - Site Access	343	86	1413	1496	0.229	344	60	0.5	0.3	3.125	A
4 - A41 S	1504	376	639	2686	0.560	1509	1118	2.5	1.3	3.070	A
5 - Park and Ride	7	2	2026	686	0.010	7	122	0.0	0.0	5.301	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	457	114	1036	1653	0.277	458	665	0.6	0.4	3.013	A
2 - A41 N	918	229	314	3217	0.285	918	1179	0.5	0.4	1.565	A
3 - Site Access	288	72	1183	1639	0.176	288	50	0.3	0.2	2.667	A
4 - A41 S	1260	315	535	2763	0.456	1261	936	1.3	0.8	2.399	A
5 - Park and Ride	6	2	1695	853	0.007	6	102	0.0	0.0	4.251	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

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

Filename: Sc 2 B1b.j9
Path: P:\19000's\19539\Technical\Junction models
Report generation date: 19/06/2019 10:33:46

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
	2026 Base							
1 - Vendee Drive	2.2	9.00	0.67	18 % [1 - Vendee Drive]	0.8	5.01	0.46	34 % [4 - A41 S]
2 - A41 N	0.9	2.44	0.46		1.1	2.46	0.51	
3 - Site Access	0.2	3.53	0.13		0.2	3.79	0.18	
4 - A41 S	1.6	3.33	0.60		2.3	4.39	0.69	
5 - Park and Ride	0.0	5.22	0.01		0.0	7.20	0.02	
	2026 Base + Dev							
1 - Vendee Drive	3.1	12.07	0.74	11 % [1 - Vendee Drive]	1.0	5.57	0.49	25 % [5 - Park and Ride]
2 - A41 N	1.0	2.58	0.47		1.1	2.40	0.52	
3 - Site Access	0.2	4.11	0.18		0.5	4.70	0.34	
4 - A41 S	1.8	3.66	0.62		2.6	4.95	0.72	
5 - Park and Ride	0.0	6.17	0.02		0.0	8.57	0.02	
	2031 Base							
1 - Vendee Drive	3.3	12.79	0.76	10 % [1 - Vendee Drive]	1.1	5.81	0.52	26 % [4 - A41 S]
2 - A41 N	1.1	2.61	0.50		1.4	2.83	0.58	
3 - Site Access	0.3	4.07	0.21		0.3	4.72	0.25	
4 - A41 S	1.9	3.75	0.64		2.8	5.22	0.74	
5 - Park and Ride	0.0	5.80	0.02		0.0	7.78	0.02	
	2031 Base + Dev							
1 - Vendee Drive	4.8	17.77	0.83	5 % [1 - Vendee Drive]	1.3	6.59	0.56	21 % [4 - A41 S]
2 - A41 N	1.0	2.53	0.51		1.4	2.78	0.58	
3 - Site Access	0.3	4.35	0.26		0.8	6.26	0.44	
4 - A41 S	2.0	3.80	0.66		3.3	6.04	0.77	
5 - Park and Ride	0.0	6.28	0.02		0.0	9.40	0.02	
	2031 SEPR Base							
1 - Vendee Drive	1.7	6.38	0.62	30 % [1 - Vendee Drive]	0.9	4.77	0.46	34 % [4 - A41 S]
2 - A41 N	0.3	1.74	0.24		0.8	2.07	0.43	
3 - Site Access	0.1	2.58	0.11		0.2	3.35	0.17	
4 - A41 S	0.9	2.48	0.46		2.2	4.32	0.68	
5 - Park and Ride	0.0	4.07	0.01		0.0	6.84	0.02	
	2031 SEPR Base + Dev							
1 - Vendee Drive	2.0	7.19	0.67	23 % [1 - Vendee Drive]	1.0	5.27	0.50	27 % [4 - A41 S]
2 - A41 N	0.3	1.67	0.25		0.8	2.06	0.43	
3 - Site Access	0.2	2.69	0.15		0.5	4.05	0.32	
4 - A41 S	0.9	2.46	0.49		2.5	4.94	0.72	
5 - Park and Ride	0.0	4.30	0.01		0.0	8.06	0.02	

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	13/06/2019
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

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.26	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	18	1 - Vendee Drive

Arms

Arms

Arm	Name	Description
1	Vendee Drive	
2	A41 N	
3	Site Access	
4	A41 S	
5	Park and Ride	

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Vendee Drive	3.75	8.20	92.0	20.0	70.0	35.0	
2 - A41 N	7.50	12.00	38.0	36.0	70.0	18.0	
3 - Site Access	3.50	10.50	32.0	20.0	70.0	22.5	
4 - A41 S	7.00	12.00	25.0	35.0	70.0	25.0	
5 - Park and Ride	3.50	8.00	14.0	15.0	70.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vendee Drive	0.590	2264
2 - A41 N	0.799	3468
3 - Site Access	0.617	2368
4 - A41 S	0.745	3161
5 - Park and Ride	0.502	1704

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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	799	100.000
2 - A41 N		ONE HOUR	✓	1232	100.000
3 - Site Access		ONE HOUR	✓	144	100.000
4 - A41 S		ONE HOUR	✓	1572	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	34	501	12
	2 - A41 N	105	63	0	1060	4
	3 - Site Access	13	126	0	1	4
	4 - A41 S	234	1265	11	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	21	10	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	3	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.67	9.00	2.2	A	733	1100
2 - A41 N	0.46	2.44	0.9	A	1131	1696
3 - Site Access	0.13	3.53	0.2	A	132	198
4 - A41 S	0.60	3.33	1.6	A	1442	2164
5 - Park and Ride	0.01	5.22	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1106	1611	0.373	599	266	0.0	0.6	3.792	A
2 - A41 N	928	232	425	3128	0.296	926	1280	0.0	0.5	1.784	A
3 - Site Access	108	27	1316	1556	0.070	108	35	0.0	0.1	2.485	A
4 - A41 S	1183	296	246	2978	0.397	1181	1178	0.0	0.7	2.149	A
5 - Park and Ride	7	2	1365	1018	0.007	7	62	0.0	0.0	3.557	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1323	1483	0.484	717	318	0.6	1.0	5.012	A
2 - A41 N	1108	277	509	3062	0.362	1107	1531	0.5	0.6	2.013	A
3 - Site Access	129	32	1574	1397	0.093	129	41	0.1	0.1	2.839	A
4 - A41 S	1413	353	295	2942	0.480	1412	1409	0.7	1.0	2.531	A
5 - Park and Ride	8	2	1633	884	0.009	8	74	0.0	0.0	4.109	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1620	1308	0.672	875	389	1.0	2.1	8.794	A
2 - A41 N	1356	339	621	2972	0.456	1355	1874	0.6	0.9	2.433	A
3 - Site Access	159	40	1926	1180	0.134	158	50	0.1	0.2	3.522	A
4 - A41 S	1731	433	361	2893	0.598	1728	1724	1.0	1.6	3.320	A
5 - Park and Ride	10	2	1999	700	0.014	10	90	0.0	0.0	5.215	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1622	1307	0.673	880	390	2.1	2.2	8.996	A
2 - A41 N	1356	339	624	2969	0.457	1356	1877	0.9	0.9	2.439	A
3 - Site Access	159	40	1930	1178	0.135	159	51	0.2	0.2	3.531	A
4 - A41 S	1731	433	361	2893	0.598	1731	1727	1.6	1.6	3.334	A
5 - Park and Ride	10	2	2002	699	0.014	10	90	0.0	0.0	5.225	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1326	1481	0.485	723	319	2.2	1.0	5.103	A
2 - A41 N	1108	277	513	3058	0.362	1109	1536	0.9	0.6	2.019	A
3 - Site Access	129	32	1580	1394	0.093	130	42	0.2	0.1	2.850	A
4 - A41 S	1413	353	295	2942	0.480	1416	1414	1.6	1.0	2.542	A
5 - Park and Ride	8	2	1637	882	0.009	8	74	0.0	0.0	4.120	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1110	1609	0.374	603	267	1.0	0.6	3.830	A
2 - A41 N	928	232	428	3126	0.297	928	1285	0.6	0.5	1.792	A
3 - Site Access	108	27	1321	1553	0.070	109	35	0.1	0.1	2.491	A
4 - A41 S	1183	296	247	2977	0.397	1185	1183	1.0	0.7	2.163	A
5 - Park and Ride	7	2	1370	1016	0.007	7	62	0.0	0.0	3.568	A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.74	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	551	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	185	100.000
4 - A41 S		ONE HOUR	✓	1735	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	29	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	40	128	0	13	4
	4 - A41 S	458	1216	19	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	5	0
	3 - Site Access	0	0	0	8	0
	4 - A41 S	2	4	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	5.01	0.8	A	506	758
2 - A41 N	0.51	2.46	1.1	A	1344	2016
3 - Site Access	0.18	3.79	0.2	A	170	255
4 - A41 S	0.69	4.39	2.3	A	1592	2388
5 - Park and Ride	0.02	7.20	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1077	1628	0.255	413	553	0.0	0.3	2.993	A
2 - A41 N	1103	276	285	3240	0.340	1101	1205	0.0	0.5	1.749	A
3 - Site Access	139	35	1337	1543	0.090	139	49	0.0	0.1	2.576	A
4 - A41 S	1306	327	370	2886	0.453	1303	1106	0.0	0.9	2.345	A
5 - Park and Ride	6	2	1624	889	0.007	6	50	0.0	0.0	4.077	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1288	1504	0.329	495	661	0.3	0.5	3.604	A
2 - A41 N	1317	329	341	3195	0.412	1316	1441	0.5	0.7	1.992	A
3 - Site Access	166	42	1599	1382	0.120	166	58	0.1	0.1	2.976	A
4 - A41 S	1560	390	443	2832	0.551	1558	1322	0.9	1.3	2.916	A
5 - Park and Ride	7	2	1942	729	0.010	7	59	0.0	0.0	4.987	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1576	1334	0.455	605	809	0.5	0.8	4.984	A
2 - A41 N	1613	403	417	3135	0.515	1612	1763	0.7	1.1	2.457	A
3 - Site Access	204	51	1958	1161	0.175	203	71	0.1	0.2	3.780	A
4 - A41 S	1910	478	542	2758	0.693	1906	1619	1.3	2.3	4.347	A
5 - Park and Ride	9	2	2376	511	0.017	9	73	0.0	0.0	7.169	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1579	1332	0.455	607	810	0.8	0.8	5.015	A
2 - A41 N	1613	403	418	3134	0.515	1613	1767	1.1	1.1	2.462	A
3 - Site Access	204	51	1960	1159	0.176	204	72	0.2	0.2	3.785	A
4 - A41 S	1910	478	543	2757	0.693	1910	1621	2.3	2.3	4.390	A
5 - Park and Ride	9	2	2380	509	0.017	9	73	0.0	0.0	7.202	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1292	1501	0.330	497	663	0.8	0.5	3.629	A
2 - A41 N	1317	329	343	3194	0.412	1318	1447	1.1	0.7	1.998	A
3 - Site Access	166	42	1602	1380	0.121	167	59	0.2	0.1	2.983	A
4 - A41 S	1560	390	444	2831	0.551	1564	1325	2.3	1.3	2.946	A
5 - Park and Ride	7	2	1948	726	0.010	7	59	0.0	0.0	5.010	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1081	1626	0.255	415	555	0.5	0.3	3.009	A
2 - A41 N	1103	276	287	3239	0.341	1104	1210	0.7	0.5	1.756	A
3 - Site Access	139	35	1341	1541	0.090	139	49	0.1	0.1	2.581	A
4 - A41 S	1306	327	371	2885	0.453	1308	1109	1.3	0.9	2.360	A
5 - Park and Ride	6	2	1630	886	0.007	6	50	0.0	0.0	4.093	A

2026 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.18	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	11	1 - Vendee Drive

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	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	850	100.000
2 - A41 N		ONE HOUR	✓	1230	100.000
3 - Site Access		ONE HOUR	✓	195	100.000
4 - A41 S		ONE HOUR	✓	1615	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	85	501	12
	2 - A41 N	105	63	0	1060	2
	3 - Site Access	31	151	0	9	4
	4 - A41 S	234	1265	54	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	10	10	10	10	10
	2 - A41 N	10	10	10	10	10
	3 - Site Access	10	10	10	10	10
	4 - A41 S	10	10	10	10	10
	5 - Park and Ride	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.74	12.07	3.1	B	780	1170
2 - A41 N	0.47	2.58	1.0	A	1129	1693
3 - Site Access	0.18	4.11	0.2	A	179	268
4 - A41 S	0.62	3.66	1.8	A	1482	2223
5 - Park and Ride	0.02	6.17	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	640	160	1157	1581	0.405	637	279	0.0	0.7	4.182	A
2 - A41 N	926	232	495	3072	0.301	924	1299	0.0	0.5	1.841	A
3 - Site Access	147	37	1315	1557	0.094	146	105	0.0	0.1	2.806	A
4 - A41 S	1216	304	277	2955	0.411	1213	1184	0.0	0.8	2.269	A
5 - Park and Ride	7	2	1430	986	0.007	7	60	0.0	0.0	4.043	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	764	191	1384	1447	0.528	762	334	0.7	1.2	5.765	A
2 - A41 N	1106	276	593	2994	0.369	1105	1554	0.5	0.6	2.096	A
3 - Site Access	175	44	1572	1398	0.125	175	126	0.1	0.2	3.237	A
4 - A41 S	1452	363	331	2915	0.498	1451	1416	0.8	1.1	2.702	A
5 - Park and Ride	8	2	1710	845	0.010	8	72	0.0	0.0	4.729	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	936	234	1694	1264	0.740	929	409	1.2	3.0	11.566	B
2 - A41 N	1354	339	723	2891	0.468	1353	1900	0.6	1.0	2.572	A
3 - Site Access	215	54	1922	1182	0.182	214	153	0.2	0.2	4.090	A
4 - A41 S	1778	445	406	2859	0.622	1775	1731	1.1	1.8	3.644	A
5 - Park and Ride	10	2	2093	653	0.015	10	88	0.0	0.0	6.158	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	936	234	1697	1263	0.741	936	410	3.0	3.1	12.073	B
2 - A41 N	1354	339	728	2887	0.469	1354	1905	1.0	1.0	2.583	A
3 - Site Access	215	54	1928	1179	0.182	215	154	0.2	0.2	4.105	A
4 - A41 S	1778	445	406	2859	0.622	1778	1736	1.8	1.8	3.663	A
5 - Park and Ride	10	2	2096	651	0.015	10	88	0.0	0.0	6.173	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	764	191	1388	1445	0.529	771	335	3.1	1.3	5.941	A
2 - A41 N	1106	276	599	2989	0.370	1107	1560	1.0	0.6	2.106	A
3 - Site Access	175	44	1580	1394	0.126	176	127	0.2	0.2	3.253	A
4 - A41 S	1452	363	332	2914	0.498	1455	1423	1.8	1.1	2.718	A
5 - Park and Ride	8	2	1715	843	0.010	8	72	0.0	0.0	4.743	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	640	160	1161	1579	0.405	642	280	1.3	0.8	4.236	A
2 - A41 N	926	232	499	3069	0.302	927	1304	0.6	0.5	1.847	A
3 - Site Access	147	37	1320	1554	0.094	147	106	0.2	0.1	2.814	A
4 - A41 S	1216	304	278	2954	0.412	1217	1189	1.1	0.8	2.280	A
5 - Park and Ride	7	2	1435	984	0.007	7	60	0.0	0.0	4.054	A

2026 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.12	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	25	5 - Park and Ride

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	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	569	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	358	100.000
4 - A41 S		ONE HOUR	✓	1741	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	47	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	92	214	0	48	4
	4 - A41 S	458	1216	25	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.49	5.57	1.0	A	522	783
2 - A41 N	0.52	2.40	1.1	A	1344	2016
3 - Site Access	0.34	4.70	0.5	A	329	493
4 - A41 S	0.72	4.95	2.6	A	1598	2396
5 - Park and Ride	0.02	8.57	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	428	107	1146	1588	0.270	427	592	0.0	0.4	3.097	A
2 - A41 N	1103	276	303	3226	0.342	1101	1270	0.0	0.5	1.692	A
3 - Site Access	270	67	1337	1543	0.175	269	67	0.0	0.2	2.823	A
4 - A41 S	1311	328	474	2809	0.467	1307	1132	0.0	0.9	2.393	A
5 - Park and Ride	6	2	1732	835	0.007	6	50	0.0	0.0	4.344	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	512	128	1370	1455	0.351	511	708	0.4	0.5	3.810	A
2 - A41 N	1317	329	363	3178	0.414	1316	1518	0.5	0.7	1.932	A
3 - Site Access	322	80	1599	1382	0.233	321	80	0.2	0.3	3.395	A
4 - A41 S	1565	391	567	2739	0.571	1563	1354	0.9	1.3	3.057	A
5 - Park and Ride	7	2	2071	664	0.011	7	59	0.0	0.0	5.479	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	626	157	1676	1275	0.491	625	866	0.5	1.0	5.523	A
2 - A41 N	1613	403	444	3114	0.518	1612	1857	0.7	1.1	2.394	A
3 - Site Access	394	99	1957	1161	0.340	393	98	0.3	0.5	4.686	A
4 - A41 S	1917	479	694	2645	0.725	1912	1657	1.3	2.6	4.878	A
5 - Park and Ride	9	2	2533	432	0.020	9	72	0.0	0.0	8.509	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	626	157	1680	1272	0.492	626	868	1.0	1.0	5.572	A
2 - A41 N	1613	403	445	3113	0.518	1613	1862	1.1	1.1	2.399	A
3 - Site Access	394	99	1960	1159	0.340	394	98	0.5	0.5	4.704	A
4 - A41 S	1917	479	695	2644	0.725	1917	1659	2.6	2.6	4.947	A
5 - Park and Ride	9	2	2539	429	0.021	9	73	0.0	0.0	8.568	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	512	128	1376	1452	0.352	513	710	1.0	0.5	3.841	A
2 - A41 N	1317	329	364	3177	0.415	1318	1525	1.1	0.7	1.939	A
3 - Site Access	322	80	1603	1380	0.233	323	80	0.5	0.3	3.407	A
4 - A41 S	1565	391	568	2738	0.572	1570	1357	2.6	1.3	3.096	A
5 - Park and Ride	7	2	2079	660	0.011	7	60	0.0	0.0	5.515	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	428	107	1150	1585	0.270	429	594	0.5	0.4	3.117	A
2 - A41 N	1103	276	305	3225	0.342	1104	1275	0.7	0.5	1.699	A
3 - Site Access	270	67	1341	1541	0.175	270	67	0.3	0.2	2.834	A
4 - A41 S	1311	328	476	2807	0.467	1313	1136	1.3	0.9	2.412	A
5 - Park and Ride	6	2	1738	831	0.007	6	50	0.0	0.0	4.364	A

2031 Base , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.31	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	10	1 - Vendee Drive

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
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	863	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	208	100.000
4 - A41 S		ONE HOUR	✓	1647	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	31	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	14	186	0	1	7
	4 - A41 S	256	1292	11	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	26	11	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.76	12.79	3.3	B	792	1188
2 - A41 N	0.50	2.61	1.1	A	1234	1851
3 - Site Access	0.21	4.07	0.3	A	191	286
4 - A41 S	0.64	3.75	1.9	A	1511	2267
5 - Park and Ride	0.02	5.80	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1172	1572	0.413	647	291	0.0	0.7	4.145	A
2 - A41 N	1013	253	411	3140	0.322	1011	1408	0.0	0.5	1.847	A
3 - Site Access	157	39	1388	1512	0.104	156	33	0.0	0.1	2.655	A
4 - A41 S	1240	310	291	2944	0.421	1237	1253	0.0	0.8	2.258	A
5 - Park and Ride	8	2	1455	973	0.009	8	73	0.0	0.0	3.729	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1402	1437	0.540	774	349	0.7	1.2	5.789	A
2 - A41 N	1209	302	491	3075	0.393	1208	1684	0.5	0.7	2.107	A
3 - Site Access	187	47	1660	1344	0.139	187	39	0.1	0.2	3.110	A
4 - A41 S	1481	370	349	2902	0.510	1479	1499	0.8	1.1	2.712	A
5 - Park and Ride	10	2	1741	830	0.012	10	87	0.0	0.0	4.389	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1716	1251	0.759	942	427	1.2	3.2	12.157	B
2 - A41 N	1481	370	599	2990	0.495	1479	2060	0.7	1.1	2.604	A
3 - Site Access	229	57	2030	1116	0.205	229	48	0.2	0.3	4.054	A
4 - A41 S	1813	453	427	2844	0.638	1810	1832	1.1	1.9	3.726	A
5 - Park and Ride	12	3	2130	634	0.019	12	107	0.0	0.0	5.786	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1719	1250	0.760	950	427	3.2	3.3	12.788	B
2 - A41 N	1481	370	603	2986	0.496	1481	2065	1.1	1.1	2.615	A
3 - Site Access	229	57	2036	1113	0.206	229	48	0.3	0.3	4.074	A
4 - A41 S	1813	453	427	2843	0.638	1813	1837	1.9	1.9	3.748	A
5 - Park and Ride	12	3	2134	632	0.019	12	107	0.0	0.0	5.802	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1406	1434	0.541	784	349	3.3	1.3	5.990	A
2 - A41 N	1209	302	498	3071	0.394	1211	1692	1.1	0.7	2.120	A
3 - Site Access	187	47	1668	1339	0.140	187	40	0.3	0.2	3.128	A
4 - A41 S	1481	370	349	2901	0.510	1484	1506	1.9	1.1	2.729	A
5 - Park and Ride	10	2	1746	827	0.012	10	87	0.0	0.0	4.405	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1176	1570	0.414	652	292	1.3	0.8	4.201	A
2 - A41 N	1013	253	414	3137	0.323	1013	1414	0.7	0.5	1.856	A
3 - Site Access	157	39	1394	1508	0.104	157	33	0.2	0.1	2.665	A
4 - A41 S	1240	310	292	2944	0.421	1241	1258	1.1	0.8	2.269	A
5 - Park and Ride	8	2	1461	971	0.009	8	73	0.0	0.0	3.740	A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.37	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	26	4 - A41 S

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
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	621	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	234	100.000
4 - A41 S		ONE HOUR	✓	1802	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	34	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	41	175	0	14	4
	4 - A41 S	468	1204	20	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	4	0
	3 - Site Access	0	0	0	7	0
	4 - A41 S	2	5	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.52	5.81	1.1	A	570	855
2 - A41 N	0.58	2.83	1.4	A	1509	2264
3 - Site Access	0.25	4.72	0.3	A	215	322
4 - A41 S	0.74	5.22	2.8	A	1654	2480
5 - Park and Ride	0.02	7.78	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1104	1613	0.290	466	576	0.0	0.4	3.166	A
2 - A41 N	1238	310	293	3234	0.383	1236	1277	0.0	0.6	1.860	A
3 - Site Access	176	44	1487	1451	0.121	176	41	0.0	0.1	2.832	A
4 - A41 S	1357	339	424	2846	0.477	1353	1239	0.0	0.9	2.497	A
5 - Park and Ride	6	2	1674	864	0.007	6	103	0.0	0.0	4.197	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1320	1485	0.376	557	689	0.4	0.6	3.916	A
2 - A41 N	1479	370	350	3188	0.464	1478	1527	0.6	0.9	2.174	A
3 - Site Access	210	53	1779	1271	0.165	210	49	0.1	0.2	3.406	A
4 - A41 S	1620	405	507	2784	0.582	1618	1482	0.9	1.4	3.199	A
5 - Park and Ride	7	2	2002	699	0.010	7	123	0.0	0.0	5.204	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1614	1311	0.521	682	843	0.6	1.1	5.757	A
2 - A41 N	1811	453	428	3126	0.579	1809	1868	0.9	1.4	2.820	A
3 - Site Access	258	64	2177	1025	0.251	257	60	0.2	0.3	4.701	A
4 - A41 S	1984	496	620	2700	0.735	1978	1814	1.4	2.8	5.142	A
5 - Park and Ride	9	2	2448	475	0.019	9	150	0.0	0.0	7.729	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1618	1309	0.522	684	844	1.1	1.1	5.814	A
2 - A41 N	1811	453	429	3125	0.580	1811	1873	1.4	1.4	2.831	A
3 - Site Access	258	64	2180	1023	0.252	258	61	0.3	0.3	4.718	A
4 - A41 S	1984	496	621	2699	0.735	1984	1817	2.8	2.8	5.224	A
5 - Park and Ride	9	2	2454	472	0.019	9	151	0.0	0.0	7.779	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1326	1482	0.377	560	691	1.1	0.6	3.953	A
2 - A41 N	1479	370	352	3187	0.464	1481	1534	1.4	0.9	2.183	A
3 - Site Access	210	53	1783	1268	0.166	211	50	0.3	0.2	3.418	A
4 - A41 S	1620	405	508	2783	0.582	1626	1486	2.8	1.5	3.245	A
5 - Park and Ride	7	2	2010	695	0.010	7	124	0.0	0.0	5.238	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1108	1610	0.290	468	578	0.6	0.4	3.188	A
2 - A41 N	1238	310	294	3233	0.383	1239	1283	0.9	0.6	1.866	A
3 - Site Access	176	44	1492	1448	0.122	176	41	0.2	0.1	2.842	A
4 - A41 S	1357	339	425	2845	0.477	1359	1243	1.5	1.0	2.519	A
5 - Park and Ride	6	2	1680	860	0.007	6	103	0.0	0.0	4.214	A

2031 Base + Dev , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	6.46	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	5	1 - Vendee Drive

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
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	914	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	259	100.000
4 - A41 S		ONE HOUR	✓	1690	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	82	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	32	211	0	9	7
	4 - A41 S	256	1292	54	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.83	17.77	4.8	C	839	1258
2 - A41 N	0.51	2.53	1.0	A	1234	1851
3 - Site Access	0.26	4.35	0.3	A	238	356
4 - A41 S	0.66	3.80	2.0	A	1551	2326
5 - Park and Ride	0.02	6.28	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	688	172	1223	1542	0.446	685	305	0.0	0.8	4.186	A
2 - A41 N	1013	253	481	3084	0.328	1011	1427	0.0	0.5	1.734	A
3 - Site Access	195	49	1388	1512	0.129	194	104	0.0	0.1	2.731	A
4 - A41 S	1272	318	324	2920	0.436	1269	1259	0.0	0.8	2.177	A
5 - Park and Ride	8	2	1520	941	0.009	8	73	0.0	0.0	3.860	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	822	205	1463	1401	0.587	819	365	0.8	1.4	6.167	A
2 - A41 N	1209	302	576	3008	0.402	1208	1707	0.5	0.7	1.999	A
3 - Site Access	233	58	1660	1344	0.173	233	124	0.1	0.2	3.238	A
4 - A41 S	1519	380	387	2873	0.529	1518	1506	0.8	1.1	2.654	A
5 - Park and Ride	10	2	1818	791	0.013	10	87	0.0	0.0	4.607	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1006	252	1790	1207	0.834	994	446	1.4	4.5	16.013	C
2 - A41 N	1481	370	699	2910	0.509	1479	2085	0.7	1.0	2.514	A
3 - Site Access	285	71	2028	1118	0.255	285	151	0.2	0.3	4.319	A
4 - A41 S	1861	465	474	2809	0.663	1857	1838	1.1	1.9	3.773	A
5 - Park and Ride	12	3	2225	587	0.021	12	107	0.0	0.0	6.263	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1006	252	1794	1206	0.835	1005	447	4.5	4.8	17.767	C
2 - A41 N	1481	370	706	2904	0.510	1481	2093	1.0	1.0	2.529	A
3 - Site Access	285	71	2035	1113	0.256	285	152	0.3	0.3	4.349	A
4 - A41 S	1861	465	475	2808	0.663	1861	1846	1.9	2.0	3.798	A
5 - Park and Ride	12	3	2228	585	0.021	12	107	0.0	0.0	6.284	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	822	205	1468	1398	0.588	835	366	4.8	1.4	6.542	A
2 - A41 N	1209	302	586	3000	0.403	1211	1717	1.0	0.7	2.012	A
3 - Site Access	233	58	1671	1338	0.174	233	125	0.3	0.2	3.263	A
4 - A41 S	1519	380	388	2872	0.529	1523	1516	2.0	1.1	2.672	A
5 - Park and Ride	10	2	1823	788	0.013	10	87	0.0	0.0	4.626	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	688	172	1228	1539	0.447	691	306	1.4	0.8	4.253	A
2 - A41 N	1013	253	485	3081	0.329	1013	1433	0.7	0.5	1.743	A
3 - Site Access	195	49	1394	1508	0.129	195	104	0.2	0.1	2.743	A
4 - A41 S	1272	318	325	2920	0.436	1274	1265	1.1	0.8	2.190	A
5 - Park and Ride	8	2	1525	938	0.009	8	73	0.0	0.0	3.873	A

2031 Base + Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.95	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	21	4 - A41 S

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
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	639	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	407	100.000
4 - A41 S		ONE HOUR	✓	1808	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	52	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	93	261	0	49	4
	4 - A41 S	468	1204	26	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.56	6.59	1.3	A	586	880
2 - A41 N	0.58	2.78	1.4	A	1509	2264
3 - Site Access	0.44	6.26	0.8	A	373	560
4 - A41 S	0.77	6.04	3.3	A	1659	2489
5 - Park and Ride	0.02	9.40	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	481	120	1173	1572	0.306	479	615	0.0	0.4	3.288	A
2 - A41 N	1238	310	311	3220	0.385	1236	1341	0.0	0.6	1.813	A
3 - Site Access	306	77	1487	1451	0.211	305	59	0.0	0.3	3.140	A
4 - A41 S	1361	340	527	2769	0.492	1357	1266	0.0	1.0	2.544	A
5 - Park and Ride	6	2	1781	809	0.007	6	103	0.0	0.0	4.480	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	574	144	1402	1436	0.400	574	735	0.4	0.7	4.168	A
2 - A41 N	1479	370	372	3171	0.466	1478	1604	0.6	0.9	2.125	A
3 - Site Access	366	91	1779	1271	0.288	365	71	0.3	0.4	3.971	A
4 - A41 S	1625	406	630	2692	0.604	1623	1513	1.0	1.5	3.360	A
5 - Park and Ride	7	2	2131	634	0.011	7	123	0.0	0.0	5.742	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	704	176	1714	1252	0.562	701	899	0.7	1.3	6.501	A
2 - A41 N	1811	453	454	3105	0.583	1809	1961	0.9	1.4	2.772	A
3 - Site Access	448	112	2177	1026	0.437	447	87	0.4	0.8	6.204	A
4 - A41 S	1991	498	771	2587	0.769	1984	1852	1.5	3.2	5.898	A
5 - Park and Ride	9	2	2605	396	0.022	9	150	0.0	0.0	9.296	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	704	176	1720	1249	0.563	703	902	1.3	1.3	6.595	A
2 - A41 N	1811	453	456	3104	0.584	1811	1967	1.4	1.4	2.784	A
3 - Site Access	448	112	2180	1024	0.438	448	87	0.8	0.8	6.255	A
4 - A41 S	1991	498	773	2586	0.770	1990	1855	3.2	3.3	6.039	A
5 - Park and Ride	9	2	2613	392	0.022	9	151	0.0	0.0	9.395	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	574	144	1410	1432	0.401	577	739	1.3	0.7	4.223	A
2 - A41 N	1479	370	374	3169	0.467	1481	1613	1.4	0.9	2.134	A
3 - Site Access	366	91	1783	1268	0.289	367	71	0.8	0.4	4.004	A
4 - A41 S	1625	406	633	2690	0.604	1632	1518	3.3	1.5	3.424	A
5 - Park and Ride	7	2	2142	629	0.011	7	124	0.0	0.0	5.794	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	481	120	1178	1569	0.307	482	617	0.7	0.4	3.314	A
2 - A41 N	1238	310	312	3219	0.385	1239	1348	0.9	0.6	1.819	A
3 - Site Access	306	77	1492	1448	0.212	307	60	0.4	0.3	3.158	A
4 - A41 S	1361	340	529	2767	0.492	1363	1270	1.5	1.0	2.569	A
5 - Park and Ride	6	2	1789	805	0.007	6	103	0.0	0.0	4.502	A

2031 SEPR Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.52	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	30	1 - Vendee Drive

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
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	886	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	156	100.000
4 - A41 S		ONE HOUR	✓	1209	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	42	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	9	137	0	2	8
	4 - A41 S	285	831	18	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	19	10	0
	2 - A41 N	0	0	0	12	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.62	6.38	1.7	A	813	1220
2 - A41 N	0.24	1.74	0.3	A	585	877
3 - Site Access	0.11	2.58	0.1	A	143	215
4 - A41 S	0.46	2.48	0.9	A	1109	1664
5 - Park and Ride	0.01	4.07	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	795	1795	0.372	665	311	0.0	0.6	3.385	A
2 - A41 N	480	120	453	3106	0.154	479	1006	0.0	0.2	1.483	A
3 - Site Access	117	29	885	1822	0.064	117	47	0.0	0.1	2.111	A
4 - A41 S	910	228	263	2966	0.307	908	739	0.0	0.5	1.862	A
5 - Park and Ride	8	2	1098	1153	0.007	8	74	0.0	0.0	3.144	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	951	1703	0.468	795	372	0.6	0.9	4.219	A
2 - A41 N	573	143	542	3035	0.189	572	1204	0.2	0.3	1.582	A
3 - Site Access	140	35	1059	1715	0.082	140	56	0.1	0.1	2.285	A
4 - A41 S	1087	272	314	2927	0.371	1086	885	0.5	0.6	2.083	A
5 - Park and Ride	10	2	1313	1045	0.009	10	88	0.0	0.0	3.477	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1164	1577	0.619	972	455	0.9	1.7	6.312	A
2 - A41 N	701	175	663	2938	0.239	701	1473	0.3	0.3	1.741	A
3 - Site Access	172	43	1296	1569	0.109	172	68	0.1	0.1	2.576	A
4 - A41 S	1331	333	385	2875	0.463	1330	1082	0.6	0.9	2.482	A
5 - Park and Ride	12	3	1607	897	0.014	12	108	0.0	0.0	4.068	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1165	1576	0.619	975	456	1.7	1.7	6.376	A
2 - A41 N	701	175	665	2937	0.239	701	1475	0.3	0.3	1.742	A
3 - Site Access	172	43	1298	1568	0.110	172	68	0.1	0.1	2.578	A
4 - A41 S	1331	333	385	2875	0.463	1331	1084	0.9	0.9	2.484	A
5 - Park and Ride	12	3	1609	896	0.014	12	108	0.0	0.0	4.071	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	952	1702	0.468	800	373	1.7	0.9	4.262	A
2 - A41 N	573	143	545	3033	0.189	573	1207	0.3	0.3	1.584	A
3 - Site Access	140	35	1062	1713	0.082	140	56	0.1	0.1	2.288	A
4 - A41 S	1087	272	315	2927	0.371	1088	888	0.9	0.6	2.086	A
5 - Park and Ride	10	2	1315	1044	0.009	10	88	0.0	0.0	3.480	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	797	1794	0.372	668	312	0.9	0.6	3.410	A
2 - A41 N	480	120	456	3104	0.154	480	1010	0.3	0.2	1.484	A
3 - Site Access	117	29	889	1820	0.065	118	47	0.1	0.1	2.115	A
4 - A41 S	910	228	264	2965	0.307	911	742	0.6	0.5	1.869	A
5 - Park and Ride	8	2	1101	1151	0.007	8	74	0.0	0.0	3.148	A

2031 SEPR Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.60	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	602	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	203	100.000
4 - A41 S		ONE HOUR	✓	1668	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	33	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	29	153	0	16	5
	4 - A41 S	493	1048	22	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	2	0
	3 - Site Access	0	0	0	6	0
	4 - A41 S	2	2	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	4.77	0.9	A	552	829
2 - A41 N	0.43	2.07	0.8	A	1119	1678
3 - Site Access	0.17	3.35	0.2	A	186	279
4 - A41 S	0.68	4.32	2.2	A	1531	2296
5 - Park and Ride	0.02	6.84	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	969	1692	0.268	452	625	0.0	0.4	2.928	A
2 - A41 N	918	229	305	3224	0.285	916	1115	0.0	0.4	1.585	A
3 - Site Access	153	38	1180	1641	0.093	152	42	0.0	0.1	2.430	A
4 - A41 S	1256	314	436	2836	0.443	1253	895	0.0	0.8	2.310	A
5 - Park and Ride	6	2	1588	907	0.007	6	101	0.0	0.0	3.996	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1159	1580	0.342	541	747	0.4	0.5	3.497	A
2 - A41 N	1096	274	365	3176	0.345	1095	1334	0.4	0.5	1.758	A
3 - Site Access	182	46	1411	1498	0.122	182	50	0.1	0.1	2.747	A
4 - A41 S	1499	375	522	2773	0.541	1498	1071	0.8	1.2	2.872	A
5 - Park and Ride	7	2	1899	751	0.010	7	121	0.0	0.0	4.842	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1418	1427	0.464	661	915	0.5	0.9	4.741	A
2 - A41 N	1342	336	447	3111	0.431	1341	1632	0.5	0.8	2.066	A
3 - Site Access	224	56	1727	1303	0.172	223	62	0.1	0.2	3.349	A
4 - A41 S	1837	459	639	2686	0.684	1833	1311	1.2	2.2	4.278	A
5 - Park and Ride	9	2	2323	537	0.016	9	148	0.0	0.0	6.812	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1420	1426	0.465	663	916	0.9	0.9	4.768	A
2 - A41 N	1342	336	448	3110	0.432	1342	1635	0.8	0.8	2.069	A
3 - Site Access	224	56	1729	1302	0.172	224	62	0.2	0.2	3.352	A
4 - A41 S	1837	459	640	2685	0.684	1836	1312	2.2	2.2	4.319	A
5 - Park and Ride	9	2	2327	535	0.016	9	149	0.0	0.0	6.839	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1162	1578	0.343	543	749	0.9	0.5	3.517	A
2 - A41 N	1096	274	367	3175	0.345	1097	1338	0.8	0.5	1.763	A
3 - Site Access	182	46	1413	1497	0.122	183	50	0.2	0.1	2.754	A
4 - A41 S	1499	375	523	2772	0.541	1503	1073	2.2	1.2	2.900	A
5 - Park and Ride	7	2	1905	748	0.010	7	122	0.0	0.0	4.862	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	972	1690	0.268	454	627	0.5	0.4	2.943	A
2 - A41 N	918	229	307	3223	0.285	918	1119	0.5	0.4	1.589	A
3 - Site Access	153	38	1183	1639	0.093	153	42	0.1	0.1	2.435	A
4 - A41 S	1256	314	438	2836	0.443	1257	898	1.2	0.8	2.326	A
5 - Park and Ride	6	2	1593	904	0.007	6	102	0.0	0.0	4.009	A

2031 SEPR Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	3.77	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	23	1 - Vendee Drive

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
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	937	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	207	100.000
4 - A41 S		ONE HOUR	✓	1252	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	93	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	27	162	0	10	8
	4 - A41 S	285	831	61	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.67	7.19	2.0	A	860	1290
2 - A41 N	0.25	1.67	0.3	A	585	877
3 - Site Access	0.15	2.69	0.2	A	190	285
4 - A41 S	0.49	2.46	0.9	A	1149	1723
5 - Park and Ride	0.01	4.30	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	705	176	846	1765	0.400	703	325	0.0	0.7	3.381	A
2 - A41 N	480	120	524	3050	0.157	479	1025	0.0	0.2	1.400	A
3 - Site Access	156	39	885	1822	0.086	155	117	0.0	0.1	2.160	A
4 - A41 S	943	236	295	2942	0.320	941	746	0.0	0.5	1.797	A
5 - Park and Ride	8	2	1162	1120	0.007	8	74	0.0	0.0	3.236	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	842	211	1012	1667	0.505	841	388	0.7	1.0	4.351	A
2 - A41 N	573	143	627	2968	0.193	572	1226	0.2	0.2	1.502	A
3 - Site Access	186	47	1059	1715	0.109	186	140	0.1	0.1	2.354	A
4 - A41 S	1126	281	353	2899	0.388	1125	892	0.5	0.6	2.030	A
5 - Park and Ride	10	2	1390	1006	0.010	10	88	0.0	0.0	3.612	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1032	258	1239	1533	0.673	1028	475	1.0	2.0	7.068	A
2 - A41 N	701	175	766	2856	0.246	701	1501	0.2	0.3	1.669	A
3 - Site Access	228	57	1295	1569	0.145	228	171	0.1	0.2	2.683	A
4 - A41 S	1378	345	432	2840	0.485	1377	1091	0.6	0.9	2.459	A
5 - Park and Ride	12	3	1702	849	0.014	12	108	0.0	0.0	4.299	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1032	258	1240	1532	0.673	1032	476	2.0	2.0	7.186	A
2 - A41 N	701	175	768	2854	0.246	701	1503	0.3	0.3	1.671	A
3 - Site Access	228	57	1298	1568	0.145	228	172	0.2	0.2	2.686	A
4 - A41 S	1378	345	433	2839	0.486	1378	1093	0.9	0.9	2.463	A
5 - Park and Ride	12	3	1703	849	0.014	12	108	0.0	0.0	4.302	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	842	211	1013	1666	0.506	846	389	2.0	1.0	4.413	A
2 - A41 N	573	143	630	2965	0.193	573	1229	0.3	0.2	1.504	A
3 - Site Access	186	47	1063	1713	0.109	186	141	0.2	0.1	2.358	A
4 - A41 S	1126	281	354	2898	0.388	1127	895	0.9	0.6	2.033	A
5 - Park and Ride	10	2	1392	1005	0.010	10	88	0.0	0.0	3.616	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	705	176	848	1763	0.400	707	325	1.0	0.7	3.414	A
2 - A41 N	480	120	527	3047	0.157	480	1029	0.2	0.2	1.401	A
3 - Site Access	156	39	889	1820	0.086	156	118	0.1	0.1	2.163	A
4 - A41 S	943	236	296	2941	0.320	943	749	0.6	0.5	1.804	A
5 - Park and Ride	8	2	1165	1119	0.007	8	74	0.0	0.0	3.243	A

2031 SEPR Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.01	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	27	4 - A41 S

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
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	620	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	376	100.000
4 - A41 S		ONE HOUR	✓	1674	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	51	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	81	239	0	51	5
	4 - A41 S	493	1048	28	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.50	5.27	1.0	A	569	853
2 - A41 N	0.43	2.06	0.8	A	1119	1678
3 - Site Access	0.32	4.05	0.5	A	345	518
4 - A41 S	0.72	4.94	2.5	A	1536	2304
5 - Park and Ride	0.02	8.06	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	467	117	1038	1652	0.283	465	664	0.0	0.4	3.030	A
2 - A41 N	918	229	323	3210	0.286	916	1179	0.0	0.4	1.569	A
3 - Site Access	283	71	1179	1641	0.173	282	60	0.0	0.2	2.649	A
4 - A41 S	1260	315	540	2759	0.457	1257	922	0.0	0.8	2.391	A
5 - Park and Ride	6	2	1696	853	0.007	6	101	0.0	0.0	4.252	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	557	139	1241	1532	0.364	557	794	0.4	0.6	3.691	A
2 - A41 N	1096	274	387	3159	0.347	1095	1411	0.4	0.5	1.744	A
3 - Site Access	338	85	1410	1498	0.226	338	72	0.2	0.3	3.102	A
4 - A41 S	1505	376	646	2681	0.561	1503	1102	0.8	1.3	3.054	A
5 - Park and Ride	7	2	2028	686	0.010	7	121	0.0	0.0	5.305	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	683	171	1518	1368	0.499	681	971	0.6	1.0	5.226	A
2 - A41 N	1342	336	473	3090	0.434	1341	1726	0.5	0.8	2.057	A
3 - Site Access	414	103	1727	1303	0.318	413	88	0.3	0.5	4.046	A
4 - A41 S	1843	461	791	2573	0.716	1838	1349	1.3	2.5	4.869	A
5 - Park and Ride	9	2	2481	458	0.019	9	148	0.0	0.0	8.011	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	683	171	1522	1366	0.500	683	973	1.0	1.0	5.267	A
2 - A41 N	1342	336	475	3089	0.434	1342	1730	0.8	0.8	2.060	A
3 - Site Access	414	103	1729	1302	0.318	414	88	0.5	0.5	4.053	A
4 - A41 S	1843	461	792	2572	0.717	1843	1351	2.5	2.5	4.936	A
5 - Park and Ride	9	2	2486	455	0.019	9	149	0.0	0.0	8.059	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	557	139	1246	1529	0.365	559	797	1.0	0.6	3.721	A
2 - A41 N	1096	274	389	3158	0.347	1097	1416	0.8	0.5	1.749	A
3 - Site Access	338	85	1413	1496	0.226	339	72	0.5	0.3	3.113	A
4 - A41 S	1505	376	647	2679	0.562	1510	1105	2.5	1.3	3.091	A
5 - Park and Ride	7	2	2035	682	0.011	7	122	0.0	0.0	5.337	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	467	117	1042	1649	0.283	467	666	0.6	0.4	3.047	A
2 - A41 N	918	229	325	3208	0.286	918	1184	0.5	0.4	1.574	A
3 - Site Access	283	71	1183	1639	0.173	283	60	0.3	0.2	2.656	A
4 - A41 S	1260	315	542	2758	0.457	1262	925	1.3	0.8	2.410	A
5 - Park and Ride	6	2	1702	849	0.007	6	102	0.0	0.0	4.268	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

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

Filename: Sc 2 B1c.j9
Path: P:\19000's\19539\Technical\Junction models
Report generation date: 18/06/2019 16:34:25

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
2026 Base								
1 - Vendee Drive	2.2	9.00	0.67	18 % [1 - Vendee Drive]	0.8	5.01	0.46	34 % [4 - A41 S]
2 - A41 N	0.9	2.44	0.46		1.1	2.46	0.51	
3 - Site Access	0.2	3.53	0.13		0.2	3.79	0.18	
4 - A41 S	1.6	3.33	0.60		2.3	4.39	0.69	
5 - Park and Ride	0.0	5.22	0.01		0.0	7.20	0.02	
2026 Base + Dev								
1 - Vendee Drive	3.0	11.92	0.74	12 % [1 - Vendee Drive]	1.0	5.69	0.50	23 % [5 - Park and Ride]
2 - A41 N	1.0	2.58	0.47		1.1	2.41	0.52	
3 - Site Access	0.2	4.09	0.18		0.6	4.95	0.37	
4 - A41 S	1.8	3.65	0.62		2.7	5.11	0.73	
5 - Park and Ride	0.0	6.15	0.02		0.0	8.88	0.02	
2031 Base								
1 - Vendee Drive	3.3	12.79	0.76	10 % [1 - Vendee Drive]	1.1	5.81	0.52	26 % [4 - A41 S]
2 - A41 N	1.1	2.61	0.50		1.4	2.83	0.58	
3 - Site Access	0.3	4.07	0.21		0.3	4.72	0.25	
4 - A41 S	1.9	3.75	0.64		2.8	5.22	0.74	
5 - Park and Ride	0.0	5.80	0.02		0.0	7.78	0.02	
2031 Base + Dev								
1 - Vendee Drive	4.7	17.42	0.83	5 % [1 - Vendee Drive]	1.3	6.76	0.57	20 % [4 - A41 S]
2 - A41 N	1.0	2.52	0.51		1.4	2.79	0.58	
3 - Site Access	0.3	4.33	0.25		0.9	6.70	0.48	
4 - A41 S	1.9	3.78	0.66		3.4	6.28	0.78	
5 - Park and Ride	0.0	6.26	0.02		0.0	9.78	0.02	
2031 SEPR Base								
1 - Vendee Drive	1.7	6.38	0.62	30 % [1 - Vendee Drive]	0.9	4.77	0.46	34 % [4 - A41 S]
2 - A41 N	0.3	1.74	0.24		0.8	2.07	0.43	
3 - Site Access	0.1	2.58	0.11		0.2	3.35	0.17	
4 - A41 S	0.9	2.48	0.46		2.2	4.32	0.68	
5 - Park and Ride	0.0	4.07	0.01		0.0	6.84	0.02	
2031 SEPR Base + Dev								
1 - Vendee Drive	2.0	7.13	0.67	24 % [1 - Vendee Drive]	1.0	5.37	0.51	26 % [4 - A41 S]
2 - A41 N	0.3	1.67	0.25		0.8	2.06	0.43	
3 - Site Access	0.2	2.68	0.14		0.5	4.24	0.35	
4 - A41 S	0.9	2.46	0.48		2.6	5.09	0.72	
5 - Park and Ride	0.0	4.29	0.01		0.0	8.34	0.02	

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	13/06/2019
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

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.26	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	18	1 - Vendee Drive

Arms

Arms

Arm	Name	Description
1	Vendee Drive	
2	A41 N	
3	Site Access	
4	A41 S	
5	Park and Ride	

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Vendee Drive	3.75	8.20	92.0	20.0	70.0	35.0	
2 - A41 N	7.50	12.00	38.0	36.0	70.0	18.0	
3 - Site Access	3.50	10.50	32.0	20.0	70.0	22.5	
4 - A41 S	7.00	12.00	25.0	35.0	70.0	25.0	
5 - Park and Ride	3.50	8.00	14.0	15.0	70.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vendee Drive	0.590	2264
2 - A41 N	0.799	3468
3 - Site Access	0.617	2368
4 - A41 S	0.745	3161
5 - Park and Ride	0.502	1704

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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	799	100.000
2 - A41 N		ONE HOUR	✓	1232	100.000
3 - Site Access		ONE HOUR	✓	144	100.000
4 - A41 S		ONE HOUR	✓	1572	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	34	501	12
	2 - A41 N	105	63	0	1060	4
	3 - Site Access	13	126	0	1	4
	4 - A41 S	234	1265	11	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	21	10	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	3	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.67	9.00	2.2	A	733	1100
2 - A41 N	0.46	2.44	0.9	A	1131	1696
3 - Site Access	0.13	3.53	0.2	A	132	198
4 - A41 S	0.60	3.33	1.6	A	1442	2164
5 - Park and Ride	0.01	5.22	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1106	1611	0.373	599	266	0.0	0.6	3.792	A
2 - A41 N	928	232	425	3128	0.296	926	1280	0.0	0.5	1.784	A
3 - Site Access	108	27	1316	1556	0.070	108	35	0.0	0.1	2.485	A
4 - A41 S	1183	296	246	2978	0.397	1181	1178	0.0	0.7	2.149	A
5 - Park and Ride	7	2	1365	1018	0.007	7	62	0.0	0.0	3.557	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1323	1483	0.484	717	318	0.6	1.0	5.012	A
2 - A41 N	1108	277	509	3062	0.362	1107	1531	0.5	0.6	2.013	A
3 - Site Access	129	32	1574	1397	0.093	129	41	0.1	0.1	2.839	A
4 - A41 S	1413	353	295	2942	0.480	1412	1409	0.7	1.0	2.531	A
5 - Park and Ride	8	2	1633	884	0.009	8	74	0.0	0.0	4.109	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1620	1308	0.672	875	389	1.0	2.1	8.794	A
2 - A41 N	1356	339	621	2972	0.456	1355	1874	0.6	0.9	2.433	A
3 - Site Access	159	40	1926	1180	0.134	158	50	0.1	0.2	3.522	A
4 - A41 S	1731	433	361	2893	0.598	1728	1724	1.0	1.6	3.320	A
5 - Park and Ride	10	2	1999	700	0.014	10	90	0.0	0.0	5.215	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1622	1307	0.673	880	390	2.1	2.2	8.996	A
2 - A41 N	1356	339	624	2969	0.457	1356	1877	0.9	0.9	2.439	A
3 - Site Access	159	40	1930	1178	0.135	159	51	0.2	0.2	3.531	A
4 - A41 S	1731	433	361	2893	0.598	1731	1727	1.6	1.6	3.334	A
5 - Park and Ride	10	2	2002	699	0.014	10	90	0.0	0.0	5.225	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1326	1481	0.485	723	319	2.2	1.0	5.103	A
2 - A41 N	1108	277	513	3058	0.362	1109	1536	0.9	0.6	2.019	A
3 - Site Access	129	32	1580	1394	0.093	130	42	0.2	0.1	2.850	A
4 - A41 S	1413	353	295	2942	0.480	1416	1414	1.6	1.0	2.542	A
5 - Park and Ride	8	2	1637	882	0.009	8	74	0.0	0.0	4.120	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1110	1609	0.374	603	267	1.0	0.6	3.830	A
2 - A41 N	928	232	428	3126	0.297	928	1285	0.6	0.5	1.792	A
3 - Site Access	108	27	1321	1553	0.070	109	35	0.1	0.1	2.491	A
4 - A41 S	1183	296	247	2977	0.397	1185	1183	1.0	0.7	2.163	A
5 - Park and Ride	7	2	1370	1016	0.007	7	62	0.0	0.0	3.568	A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.74	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	551	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	185	100.000
4 - A41 S		ONE HOUR	✓	1735	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	29	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	40	128	0	13	4
	4 - A41 S	458	1216	19	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	5	0
	3 - Site Access	0	0	0	8	0
	4 - A41 S	2	4	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	5.01	0.8	A	506	758
2 - A41 N	0.51	2.46	1.1	A	1344	2016
3 - Site Access	0.18	3.79	0.2	A	170	255
4 - A41 S	0.69	4.39	2.3	A	1592	2388
5 - Park and Ride	0.02	7.20	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1077	1628	0.255	413	553	0.0	0.3	2.993	A
2 - A41 N	1103	276	285	3240	0.340	1101	1205	0.0	0.5	1.749	A
3 - Site Access	139	35	1337	1543	0.090	139	49	0.0	0.1	2.576	A
4 - A41 S	1306	327	370	2886	0.453	1303	1106	0.0	0.9	2.345	A
5 - Park and Ride	6	2	1624	889	0.007	6	50	0.0	0.0	4.077	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1288	1504	0.329	495	661	0.3	0.5	3.604	A
2 - A41 N	1317	329	341	3195	0.412	1316	1441	0.5	0.7	1.992	A
3 - Site Access	166	42	1599	1382	0.120	166	58	0.1	0.1	2.976	A
4 - A41 S	1560	390	443	2832	0.551	1558	1322	0.9	1.3	2.916	A
5 - Park and Ride	7	2	1942	729	0.010	7	59	0.0	0.0	4.987	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1576	1334	0.455	605	809	0.5	0.8	4.984	A
2 - A41 N	1613	403	417	3135	0.515	1612	1763	0.7	1.1	2.457	A
3 - Site Access	204	51	1958	1161	0.175	203	71	0.1	0.2	3.780	A
4 - A41 S	1910	478	542	2758	0.693	1906	1619	1.3	2.3	4.347	A
5 - Park and Ride	9	2	2376	511	0.017	9	73	0.0	0.0	7.169	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1579	1332	0.455	607	810	0.8	0.8	5.015	A
2 - A41 N	1613	403	418	3134	0.515	1613	1767	1.1	1.1	2.462	A
3 - Site Access	204	51	1960	1159	0.176	204	72	0.2	0.2	3.785	A
4 - A41 S	1910	478	543	2757	0.693	1910	1621	2.3	2.3	4.390	A
5 - Park and Ride	9	2	2380	509	0.017	9	73	0.0	0.0	7.202	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1292	1501	0.330	497	663	0.8	0.5	3.629	A
2 - A41 N	1317	329	343	3194	0.412	1318	1447	1.1	0.7	1.998	A
3 - Site Access	166	42	1602	1380	0.121	167	59	0.2	0.1	2.983	A
4 - A41 S	1560	390	444	2831	0.551	1564	1325	2.3	1.3	2.946	A
5 - Park and Ride	7	2	1948	726	0.010	7	59	0.0	0.0	5.010	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1081	1626	0.255	415	555	0.5	0.3	3.009	A
2 - A41 N	1103	276	287	3239	0.341	1104	1210	0.7	0.5	1.756	A
3 - Site Access	139	35	1341	1541	0.090	139	49	0.1	0.1	2.581	A
4 - A41 S	1306	327	371	2885	0.453	1308	1109	1.3	0.9	2.360	A
5 - Park and Ride	6	2	1630	886	0.007	6	50	0.0	0.0	4.093	A

2026 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.14	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	12	1 - Vendee Drive

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	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	848	100.000
2 - A41 N		ONE HOUR	✓	1230	100.000
3 - Site Access		ONE HOUR	✓	192	100.000
4 - A41 S		ONE HOUR	✓	1613	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	83	501	12
	2 - A41 N	105	63	0	1060	2
	3 - Site Access	30	150	0	8	4
	4 - A41 S	234	1265	52	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	10	10	10	10	10
	2 - A41 N	10	10	10	10	10
	3 - Site Access	10	10	10	10	10
	4 - A41 S	10	10	10	10	10
	5 - Park and Ride	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.74	11.92	3.0	B	778	1167
2 - A41 N	0.47	2.58	1.0	A	1129	1693
3 - Site Access	0.18	4.09	0.2	A	176	264
4 - A41 S	0.62	3.65	1.8	A	1480	2220
5 - Park and Ride	0.02	6.15	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	638	160	1155	1582	0.403	635	279	0.0	0.7	4.170	A
2 - A41 N	926	232	492	3075	0.301	924	1298	0.0	0.5	1.839	A
3 - Site Access	145	36	1315	1557	0.093	144	102	0.0	0.1	2.802	A
4 - A41 S	1214	304	276	2956	0.411	1211	1183	0.0	0.8	2.265	A
5 - Park and Ride	7	2	1427	988	0.007	7	60	0.0	0.0	4.037	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	762	191	1381	1449	0.526	760	333	0.7	1.2	5.739	A
2 - A41 N	1106	276	589	2997	0.369	1105	1553	0.5	0.6	2.093	A
3 - Site Access	173	43	1572	1398	0.123	172	122	0.1	0.2	3.229	A
4 - A41 S	1450	363	330	2916	0.497	1449	1415	0.8	1.1	2.696	A
5 - Park and Ride	8	2	1707	847	0.010	8	72	0.0	0.0	4.719	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	934	233	1691	1266	0.737	927	408	1.2	2.9	11.436	B
2 - A41 N	1354	339	718	2894	0.468	1353	1899	0.6	1.0	2.566	A
3 - Site Access	211	53	1922	1182	0.179	211	149	0.2	0.2	4.076	A
4 - A41 S	1776	444	403	2861	0.621	1773	1730	1.1	1.8	3.631	A
5 - Park and Ride	10	2	2089	655	0.015	10	88	0.0	0.0	6.137	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	934	233	1693	1265	0.738	933	408	2.9	3.0	11.923	B
2 - A41 N	1354	339	723	2890	0.469	1354	1904	1.0	1.0	2.577	A
3 - Site Access	211	53	1928	1179	0.179	211	150	0.2	0.2	4.091	A
4 - A41 S	1776	444	404	2861	0.621	1776	1735	1.8	1.8	3.650	A
5 - Park and Ride	10	2	2092	653	0.015	10	88	0.0	0.0	6.152	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	762	191	1385	1446	0.527	769	334	3.0	1.2	5.908	A
2 - A41 N	1106	276	596	2992	0.370	1107	1559	1.0	0.6	2.101	A
3 - Site Access	173	43	1580	1394	0.124	173	123	0.2	0.2	3.243	A
4 - A41 S	1450	363	331	2915	0.497	1453	1422	1.8	1.1	2.712	A
5 - Park and Ride	8	2	1711	845	0.010	8	72	0.0	0.0	4.733	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	638	160	1159	1580	0.404	640	280	1.2	0.8	4.225	A
2 - A41 N	926	232	496	3072	0.301	927	1303	0.6	0.5	1.845	A
3 - Site Access	145	36	1320	1554	0.093	145	103	0.2	0.1	2.809	A
4 - A41 S	1214	304	277	2955	0.411	1216	1188	1.1	0.8	2.277	A
5 - Park and Ride	7	2	1432	985	0.007	7	60	0.0	0.0	4.047	A

2026 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.23	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	23	5 - Park and Ride

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	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	571	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	393	100.000
4 - A41 S		ONE HOUR	✓	1743	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	49	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	102	229	0	58	4
	4 - A41 S	458	1216	27	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.50	5.69	1.0	A	524	786
2 - A41 N	0.52	2.41	1.1	A	1344	2016
3 - Site Access	0.37	4.95	0.6	A	361	541
4 - A41 S	0.73	5.11	2.7	A	1599	2399
5 - Park and Ride	0.02	8.88	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	430	107	1158	1580	0.272	428	599	0.0	0.4	3.121	A
2 - A41 N	1103	276	306	3223	0.342	1101	1281	0.0	0.5	1.694	A
3 - Site Access	296	74	1337	1543	0.192	295	70	0.0	0.2	2.882	A
4 - A41 S	1312	328	493	2795	0.470	1309	1140	0.0	0.9	2.416	A
5 - Park and Ride	6	2	1752	824	0.007	6	50	0.0	0.0	4.398	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	513	128	1386	1446	0.355	513	717	0.4	0.5	3.853	A
2 - A41 N	1317	329	366	3175	0.415	1316	1532	0.5	0.7	1.935	A
3 - Site Access	353	88	1599	1382	0.256	353	84	0.2	0.3	3.496	A
4 - A41 S	1567	392	589	2723	0.575	1565	1363	0.9	1.3	3.104	A
5 - Park and Ride	7	2	2095	652	0.011	7	59	0.0	0.0	5.583	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	629	157	1694	1264	0.497	627	877	0.5	1.0	5.637	A
2 - A41 N	1613	403	448	3110	0.519	1612	1873	0.7	1.1	2.400	A
3 - Site Access	433	108	1957	1161	0.373	432	102	0.3	0.6	4.932	A
4 - A41 S	1919	480	721	2625	0.731	1914	1668	1.3	2.7	5.028	A
5 - Park and Ride	9	2	2562	417	0.021	9	72	0.0	0.0	8.814	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	629	157	1699	1261	0.498	629	879	1.0	1.0	5.688	A
2 - A41 N	1613	403	449	3109	0.519	1613	1878	1.1	1.1	2.405	A
3 - Site Access	433	108	1960	1159	0.373	433	102	0.6	0.6	4.953	A
4 - A41 S	1919	480	722	2624	0.731	1919	1670	2.7	2.7	5.106	A
5 - Park and Ride	9	2	2569	414	0.021	9	73	0.0	0.0	8.883	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	513	128	1392	1443	0.356	515	719	1.0	0.6	3.889	A
2 - A41 N	1317	329	368	3174	0.415	1318	1539	1.1	0.7	1.941	A
3 - Site Access	353	88	1603	1380	0.256	354	84	0.6	0.3	3.516	A
4 - A41 S	1567	392	591	2721	0.576	1572	1366	2.7	1.4	3.148	A
5 - Park and Ride	7	2	2104	648	0.011	7	60	0.0	0.0	5.621	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	430	107	1163	1577	0.273	431	602	0.6	0.4	3.140	A
2 - A41 N	1103	276	308	3222	0.342	1104	1286	0.7	0.5	1.699	A
3 - Site Access	296	74	1341	1541	0.192	296	70	0.3	0.2	2.895	A
4 - A41 S	1312	328	494	2793	0.470	1314	1143	1.4	0.9	2.438	A
5 - Park and Ride	6	2	1759	821	0.007	6	50	0.0	0.0	4.418	A

2031 Base , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.31	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	10	1 - Vendee Drive

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
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	863	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	208	100.000
4 - A41 S		ONE HOUR	✓	1647	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	31	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	14	186	0	1	7
	4 - A41 S	256	1292	11	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	26	11	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.76	12.79	3.3	B	792	1188
2 - A41 N	0.50	2.61	1.1	A	1234	1851
3 - Site Access	0.21	4.07	0.3	A	191	286
4 - A41 S	0.64	3.75	1.9	A	1511	2267
5 - Park and Ride	0.02	5.80	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1172	1572	0.413	647	291	0.0	0.7	4.145	A
2 - A41 N	1013	253	411	3140	0.322	1011	1408	0.0	0.5	1.847	A
3 - Site Access	157	39	1388	1512	0.104	156	33	0.0	0.1	2.655	A
4 - A41 S	1240	310	291	2944	0.421	1237	1253	0.0	0.8	2.258	A
5 - Park and Ride	8	2	1455	973	0.009	8	73	0.0	0.0	3.729	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1402	1437	0.540	774	349	0.7	1.2	5.789	A
2 - A41 N	1209	302	491	3075	0.393	1208	1684	0.5	0.7	2.107	A
3 - Site Access	187	47	1660	1344	0.139	187	39	0.1	0.2	3.110	A
4 - A41 S	1481	370	349	2902	0.510	1479	1499	0.8	1.1	2.712	A
5 - Park and Ride	10	2	1741	830	0.012	10	87	0.0	0.0	4.389	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1716	1251	0.759	942	427	1.2	3.2	12.157	B
2 - A41 N	1481	370	599	2990	0.495	1479	2060	0.7	1.1	2.604	A
3 - Site Access	229	57	2030	1116	0.205	229	48	0.2	0.3	4.054	A
4 - A41 S	1813	453	427	2844	0.638	1810	1832	1.1	1.9	3.726	A
5 - Park and Ride	12	3	2130	634	0.019	12	107	0.0	0.0	5.786	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1719	1250	0.760	950	427	3.2	3.3	12.788	B
2 - A41 N	1481	370	603	2986	0.496	1481	2065	1.1	1.1	2.615	A
3 - Site Access	229	57	2036	1113	0.206	229	48	0.3	0.3	4.074	A
4 - A41 S	1813	453	427	2843	0.638	1813	1837	1.9	1.9	3.748	A
5 - Park and Ride	12	3	2134	632	0.019	12	107	0.0	0.0	5.802	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1406	1434	0.541	784	349	3.3	1.3	5.990	A
2 - A41 N	1209	302	498	3071	0.394	1211	1692	1.1	0.7	2.120	A
3 - Site Access	187	47	1668	1339	0.140	187	40	0.3	0.2	3.128	A
4 - A41 S	1481	370	349	2901	0.510	1484	1506	1.9	1.1	2.729	A
5 - Park and Ride	10	2	1746	827	0.012	10	87	0.0	0.0	4.405	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1176	1570	0.414	652	292	1.3	0.8	4.201	A
2 - A41 N	1013	253	414	3137	0.323	1013	1414	0.7	0.5	1.856	A
3 - Site Access	157	39	1394	1508	0.104	157	33	0.2	0.1	2.665	A
4 - A41 S	1240	310	292	2944	0.421	1241	1258	1.1	0.8	2.269	A
5 - Park and Ride	8	2	1461	971	0.009	8	73	0.0	0.0	3.740	A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.37	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	26	4 - A41 S

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
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	621	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	234	100.000
4 - A41 S		ONE HOUR	✓	1802	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	34	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	41	175	0	14	4
	4 - A41 S	468	1204	20	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	4	0
	3 - Site Access	0	0	0	7	0
	4 - A41 S	2	5	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.52	5.81	1.1	A	570	855
2 - A41 N	0.58	2.83	1.4	A	1509	2264
3 - Site Access	0.25	4.72	0.3	A	215	322
4 - A41 S	0.74	5.22	2.8	A	1654	2480
5 - Park and Ride	0.02	7.78	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1104	1613	0.290	466	576	0.0	0.4	3.166	A
2 - A41 N	1238	310	293	3234	0.383	1236	1277	0.0	0.6	1.860	A
3 - Site Access	176	44	1487	1451	0.121	176	41	0.0	0.1	2.832	A
4 - A41 S	1357	339	424	2846	0.477	1353	1239	0.0	0.9	2.497	A
5 - Park and Ride	6	2	1674	864	0.007	6	103	0.0	0.0	4.197	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1320	1485	0.376	557	689	0.4	0.6	3.916	A
2 - A41 N	1479	370	350	3188	0.464	1478	1527	0.6	0.9	2.174	A
3 - Site Access	210	53	1779	1271	0.165	210	49	0.1	0.2	3.406	A
4 - A41 S	1620	405	507	2784	0.582	1618	1482	0.9	1.4	3.199	A
5 - Park and Ride	7	2	2002	699	0.010	7	123	0.0	0.0	5.204	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1614	1311	0.521	682	843	0.6	1.1	5.757	A
2 - A41 N	1811	453	428	3126	0.579	1809	1868	0.9	1.4	2.820	A
3 - Site Access	258	64	2177	1025	0.251	257	60	0.2	0.3	4.701	A
4 - A41 S	1984	496	620	2700	0.735	1978	1814	1.4	2.8	5.142	A
5 - Park and Ride	9	2	2448	475	0.019	9	150	0.0	0.0	7.729	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1618	1309	0.522	684	844	1.1	1.1	5.814	A
2 - A41 N	1811	453	429	3125	0.580	1811	1873	1.4	1.4	2.831	A
3 - Site Access	258	64	2180	1023	0.252	258	61	0.3	0.3	4.718	A
4 - A41 S	1984	496	621	2699	0.735	1984	1817	2.8	2.8	5.224	A
5 - Park and Ride	9	2	2454	472	0.019	9	151	0.0	0.0	7.779	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1326	1482	0.377	560	691	1.1	0.6	3.953	A
2 - A41 N	1479	370	352	3187	0.464	1481	1534	1.4	0.9	2.183	A
3 - Site Access	210	53	1783	1268	0.166	211	50	0.3	0.2	3.418	A
4 - A41 S	1620	405	508	2783	0.582	1626	1486	2.8	1.5	3.245	A
5 - Park and Ride	7	2	2010	695	0.010	7	124	0.0	0.0	5.238	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1108	1610	0.290	468	578	0.6	0.4	3.188	A
2 - A41 N	1238	310	294	3233	0.383	1239	1283	0.9	0.6	1.866	A
3 - Site Access	176	44	1492	1448	0.122	176	41	0.2	0.1	2.842	A
4 - A41 S	1357	339	425	2845	0.477	1359	1243	1.5	1.0	2.519	A
5 - Park and Ride	6	2	1680	860	0.007	6	103	0.0	0.0	4.214	A

2031 Base + Dev , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	6.37	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	5	1 - Vendee Drive

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
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	912	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	256	100.000
4 - A41 S		ONE HOUR	✓	1688	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	80	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	31	210	0	8	7
	4 - A41 S	256	1292	52	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.83	17.42	4.7	C	837	1255
2 - A41 N	0.51	2.52	1.0	A	1234	1851
3 - Site Access	0.25	4.33	0.3	A	235	352
4 - A41 S	0.66	3.78	1.9	A	1549	2323
5 - Park and Ride	0.02	6.26	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	687	172	1221	1543	0.445	683	304	0.0	0.8	4.172	A
2 - A41 N	1013	253	478	3086	0.328	1011	1426	0.0	0.5	1.732	A
3 - Site Access	193	48	1388	1512	0.127	192	101	0.0	0.1	2.726	A
4 - A41 S	1271	318	322	2922	0.435	1268	1258	0.0	0.8	2.173	A
5 - Park and Ride	8	2	1517	942	0.009	8	73	0.0	0.0	3.854	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	820	205	1460	1402	0.585	818	364	0.8	1.4	6.134	A
2 - A41 N	1209	302	572	3011	0.402	1208	1706	0.5	0.7	1.995	A
3 - Site Access	230	58	1660	1344	0.171	230	120	0.1	0.2	3.230	A
4 - A41 S	1517	379	385	2875	0.528	1516	1505	0.8	1.1	2.648	A
5 - Park and Ride	10	2	1814	793	0.012	10	87	0.0	0.0	4.597	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1004	251	1787	1209	0.830	992	445	1.4	4.4	15.761	C
2 - A41 N	1481	370	695	2913	0.508	1479	2084	0.7	1.0	2.508	A
3 - Site Access	282	70	2028	1117	0.252	281	146	0.2	0.3	4.303	A
4 - A41 S	1859	465	472	2810	0.661	1855	1837	1.1	1.9	3.757	A
5 - Park and Ride	12	3	2220	589	0.021	12	107	0.0	0.0	6.239	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1004	251	1790	1207	0.832	1003	446	4.4	4.7	17.423	C
2 - A41 N	1481	370	702	2907	0.509	1481	2092	1.0	1.0	2.523	A
3 - Site Access	282	70	2035	1113	0.253	282	147	0.3	0.3	4.332	A
4 - A41 S	1859	465	472	2810	0.661	1858	1845	1.9	1.9	3.783	A
5 - Park and Ride	12	3	2224	587	0.021	12	107	0.0	0.0	6.260	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	820	205	1465	1399	0.586	833	365	4.7	1.4	6.494	A
2 - A41 N	1209	302	582	3003	0.403	1211	1716	1.0	0.7	2.011	A
3 - Site Access	230	58	1671	1338	0.172	231	122	0.3	0.2	3.252	A
4 - A41 S	1517	379	386	2874	0.528	1521	1515	1.9	1.1	2.668	A
5 - Park and Ride	10	2	1820	790	0.013	10	87	0.0	0.0	4.615	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	687	172	1226	1541	0.446	689	305	1.4	0.8	4.239	A
2 - A41 N	1013	253	482	3083	0.328	1013	1433	0.7	0.5	1.739	A
3 - Site Access	193	48	1394	1508	0.128	193	101	0.2	0.1	2.737	A
4 - A41 S	1271	318	323	2921	0.435	1272	1264	1.1	0.8	2.187	A
5 - Park and Ride	8	2	1522	940	0.009	8	73	0.0	0.0	3.867	A

2031 Base + Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	5.13	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	20	4 - A41 S

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
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	641	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	442	100.000
4 - A41 S		ONE HOUR	✓	1810	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	54	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	103	276	0	59	4
	4 - A41 S	468	1204	28	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.57	6.76	1.3	A	588	882
2 - A41 N	0.58	2.79	1.4	A	1509	2264
3 - Site Access	0.48	6.70	0.9	A	406	608
4 - A41 S	0.78	6.28	3.4	A	1661	2491
5 - Park and Ride	0.02	9.78	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	483	121	1185	1564	0.308	481	622	0.0	0.4	3.316	A
2 - A41 N	1238	310	314	3218	0.385	1236	1352	0.0	0.6	1.815	A
3 - Site Access	333	83	1487	1451	0.229	332	62	0.0	0.3	3.214	A
4 - A41 S	1363	341	546	2755	0.495	1359	1273	0.0	1.0	2.570	A
5 - Park and Ride	6	2	1802	799	0.008	6	103	0.0	0.0	4.537	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	576	144	1418	1427	0.404	575	744	0.4	0.7	4.220	A
2 - A41 N	1479	370	375	3168	0.467	1478	1618	0.6	0.9	2.128	A
3 - Site Access	397	99	1779	1271	0.313	397	75	0.3	0.5	4.114	A
4 - A41 S	1627	407	653	2675	0.608	1625	1522	1.0	1.5	3.420	A
5 - Park and Ride	7	2	2155	622	0.012	7	123	0.0	0.0	5.855	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	706	176	1732	1242	0.568	703	910	0.7	1.3	6.656	A
2 - A41 N	1811	453	459	3102	0.584	1809	1977	0.9	1.4	2.780	A
3 - Site Access	487	122	2177	1026	0.475	485	91	0.5	0.9	6.637	A
4 - A41 S	1993	498	798	2567	0.776	1986	1863	1.5	3.4	6.115	A
5 - Park and Ride	9	2	2634	381	0.023	9	150	0.0	0.0	9.661	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	706	176	1738	1238	0.570	706	913	1.3	1.3	6.759	A
2 - A41 N	1811	453	460	3100	0.584	1811	1984	1.4	1.4	2.791	A
3 - Site Access	487	122	2180	1024	0.475	487	91	0.9	0.9	6.704	A
4 - A41 S	1993	498	800	2566	0.777	1993	1866	3.4	3.4	6.278	A
5 - Park and Ride	9	2	2642	377	0.023	9	151	0.0	0.0	9.776	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	576	144	1426	1423	0.405	579	748	1.3	0.7	4.280	A
2 - A41 N	1479	370	377	3167	0.467	1481	1627	1.4	0.9	2.137	A
3 - Site Access	397	99	1783	1268	0.313	399	75	0.9	0.5	4.150	A
4 - A41 S	1627	407	656	2673	0.609	1635	1527	3.4	1.6	3.491	A
5 - Park and Ride	7	2	2166	616	0.012	7	124	0.0	0.0	5.915	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	483	121	1191	1561	0.309	484	625	0.7	0.4	3.345	A
2 - A41 N	1238	310	315	3216	0.385	1239	1359	0.9	0.6	1.821	A
3 - Site Access	333	83	1492	1448	0.230	333	63	0.5	0.3	3.231	A
4 - A41 S	1363	341	548	2753	0.495	1365	1277	1.6	1.0	2.598	A
5 - Park and Ride	6	2	1810	795	0.008	6	103	0.0	0.0	4.563	A

2031 SEPR Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.52	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	30	1 - Vendee Drive

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
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	886	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	156	100.000
4 - A41 S		ONE HOUR	✓	1209	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	42	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	9	137	0	2	8
	4 - A41 S	285	831	18	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	19	10	0
	2 - A41 N	0	0	0	12	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.62	6.38	1.7	A	813	1220
2 - A41 N	0.24	1.74	0.3	A	585	877
3 - Site Access	0.11	2.58	0.1	A	143	215
4 - A41 S	0.46	2.48	0.9	A	1109	1664
5 - Park and Ride	0.01	4.07	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	795	1795	0.372	665	311	0.0	0.6	3.385	A
2 - A41 N	480	120	453	3106	0.154	479	1006	0.0	0.2	1.483	A
3 - Site Access	117	29	885	1822	0.064	117	47	0.0	0.1	2.111	A
4 - A41 S	910	228	263	2966	0.307	908	739	0.0	0.5	1.862	A
5 - Park and Ride	8	2	1098	1153	0.007	8	74	0.0	0.0	3.144	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	951	1703	0.468	795	372	0.6	0.9	4.219	A
2 - A41 N	573	143	542	3035	0.189	572	1204	0.2	0.3	1.582	A
3 - Site Access	140	35	1059	1715	0.082	140	56	0.1	0.1	2.285	A
4 - A41 S	1087	272	314	2927	0.371	1086	885	0.5	0.6	2.083	A
5 - Park and Ride	10	2	1313	1045	0.009	10	88	0.0	0.0	3.477	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1164	1577	0.619	972	455	0.9	1.7	6.312	A
2 - A41 N	701	175	663	2938	0.239	701	1473	0.3	0.3	1.741	A
3 - Site Access	172	43	1296	1569	0.109	172	68	0.1	0.1	2.576	A
4 - A41 S	1331	333	385	2875	0.463	1330	1082	0.6	0.9	2.482	A
5 - Park and Ride	12	3	1607	897	0.014	12	108	0.0	0.0	4.068	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1165	1576	0.619	975	456	1.7	1.7	6.376	A
2 - A41 N	701	175	665	2937	0.239	701	1475	0.3	0.3	1.742	A
3 - Site Access	172	43	1298	1568	0.110	172	68	0.1	0.1	2.578	A
4 - A41 S	1331	333	385	2875	0.463	1331	1084	0.9	0.9	2.484	A
5 - Park and Ride	12	3	1609	896	0.014	12	108	0.0	0.0	4.071	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	952	1702	0.468	800	373	1.7	0.9	4.262	A
2 - A41 N	573	143	545	3033	0.189	573	1207	0.3	0.3	1.584	A
3 - Site Access	140	35	1062	1713	0.082	140	56	0.1	0.1	2.288	A
4 - A41 S	1087	272	315	2927	0.371	1088	888	0.9	0.6	2.086	A
5 - Park and Ride	10	2	1315	1044	0.009	10	88	0.0	0.0	3.480	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	797	1794	0.372	668	312	0.9	0.6	3.410	A
2 - A41 N	480	120	456	3104	0.154	480	1010	0.3	0.2	1.484	A
3 - Site Access	117	29	889	1820	0.065	118	47	0.1	0.1	2.115	A
4 - A41 S	910	228	264	2965	0.307	911	742	0.6	0.5	1.869	A
5 - Park and Ride	8	2	1101	1151	0.007	8	74	0.0	0.0	3.148	A

2031 SEPR Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.60	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	602	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	203	100.000
4 - A41 S		ONE HOUR	✓	1668	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	33	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	29	153	0	16	5
	4 - A41 S	493	1048	22	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	2	0
	3 - Site Access	0	0	0	6	0
	4 - A41 S	2	2	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	4.77	0.9	A	552	829
2 - A41 N	0.43	2.07	0.8	A	1119	1678
3 - Site Access	0.17	3.35	0.2	A	186	279
4 - A41 S	0.68	4.32	2.2	A	1531	2296
5 - Park and Ride	0.02	6.84	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	969	1692	0.268	452	625	0.0	0.4	2.928	A
2 - A41 N	918	229	305	3224	0.285	916	1115	0.0	0.4	1.585	A
3 - Site Access	153	38	1180	1641	0.093	152	42	0.0	0.1	2.430	A
4 - A41 S	1256	314	436	2836	0.443	1253	895	0.0	0.8	2.310	A
5 - Park and Ride	6	2	1588	907	0.007	6	101	0.0	0.0	3.996	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1159	1580	0.342	541	747	0.4	0.5	3.497	A
2 - A41 N	1096	274	365	3176	0.345	1095	1334	0.4	0.5	1.758	A
3 - Site Access	182	46	1411	1498	0.122	182	50	0.1	0.1	2.747	A
4 - A41 S	1499	375	522	2773	0.541	1498	1071	0.8	1.2	2.872	A
5 - Park and Ride	7	2	1899	751	0.010	7	121	0.0	0.0	4.842	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1418	1427	0.464	661	915	0.5	0.9	4.741	A
2 - A41 N	1342	336	447	3111	0.431	1341	1632	0.5	0.8	2.066	A
3 - Site Access	224	56	1727	1303	0.172	223	62	0.1	0.2	3.349	A
4 - A41 S	1837	459	639	2686	0.684	1833	1311	1.2	2.2	4.278	A
5 - Park and Ride	9	2	2323	537	0.016	9	148	0.0	0.0	6.812	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1420	1426	0.465	663	916	0.9	0.9	4.768	A
2 - A41 N	1342	336	448	3110	0.432	1342	1635	0.8	0.8	2.069	A
3 - Site Access	224	56	1729	1302	0.172	224	62	0.2	0.2	3.352	A
4 - A41 S	1837	459	640	2685	0.684	1836	1312	2.2	2.2	4.319	A
5 - Park and Ride	9	2	2327	535	0.016	9	149	0.0	0.0	6.839	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1162	1578	0.343	543	749	0.9	0.5	3.517	A
2 - A41 N	1096	274	367	3175	0.345	1097	1338	0.8	0.5	1.763	A
3 - Site Access	182	46	1413	1497	0.122	183	50	0.2	0.1	2.754	A
4 - A41 S	1499	375	523	2772	0.541	1503	1073	2.2	1.2	2.900	A
5 - Park and Ride	7	2	1905	748	0.010	7	122	0.0	0.0	4.862	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	972	1690	0.268	454	627	0.5	0.4	2.943	A
2 - A41 N	918	229	307	3223	0.285	918	1119	0.5	0.4	1.589	A
3 - Site Access	153	38	1183	1639	0.093	153	42	0.1	0.1	2.435	A
4 - A41 S	1256	314	438	2836	0.443	1257	898	1.2	0.8	2.326	A
5 - Park and Ride	6	2	1593	904	0.007	6	102	0.0	0.0	4.009	A

2031 SEPR Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	3.75	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	24	1 - Vendee Drive

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
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	935	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	204	100.000
4 - A41 S		ONE HOUR	✓	1250	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	91	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	26	161	0	9	8
	4 - A41 S	285	831	59	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.67	7.13	2.0	A	858	1287
2 - A41 N	0.25	1.67	0.3	A	585	877
3 - Site Access	0.14	2.68	0.2	A	187	281
4 - A41 S	0.48	2.46	0.9	A	1147	1721
5 - Park and Ride	0.01	4.29	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	704	176	844	1766	0.399	701	324	0.0	0.7	3.372	A
2 - A41 N	480	120	521	3052	0.157	479	1024	0.0	0.2	1.398	A
3 - Site Access	154	38	885	1822	0.084	153	114	0.0	0.1	2.157	A
4 - A41 S	941	235	294	2943	0.320	939	745	0.0	0.5	1.794	A
5 - Park and Ride	8	2	1159	1122	0.007	8	74	0.0	0.0	3.231	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	841	210	1009	1668	0.504	839	387	0.7	1.0	4.334	A
2 - A41 N	573	143	623	2970	0.193	572	1225	0.2	0.2	1.500	A
3 - Site Access	183	46	1059	1715	0.107	183	136	0.1	0.1	2.349	A
4 - A41 S	1124	281	351	2900	0.388	1123	891	0.5	0.6	2.026	A
5 - Park and Ride	10	2	1386	1008	0.010	10	88	0.0	0.0	3.606	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1029	257	1235	1535	0.671	1026	474	1.0	2.0	7.013	A
2 - A41 N	701	175	761	2860	0.245	701	1499	0.2	0.3	1.667	A
3 - Site Access	225	56	1295	1569	0.143	224	167	0.1	0.2	2.677	A
4 - A41 S	1376	344	430	2841	0.484	1375	1090	0.6	0.9	2.453	A
5 - Park and Ride	12	3	1697	852	0.014	12	108	0.0	0.0	4.287	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1029	257	1236	1534	0.671	1029	475	2.0	2.0	7.127	A
2 - A41 N	701	175	764	2858	0.245	701	1502	0.3	0.3	1.668	A
3 - Site Access	225	56	1298	1568	0.143	225	167	0.2	0.2	2.680	A
4 - A41 S	1376	344	430	2841	0.484	1376	1092	0.9	0.9	2.457	A
5 - Park and Ride	12	3	1699	851	0.014	12	108	0.0	0.0	4.291	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	841	210	1011	1668	0.504	845	388	2.0	1.0	4.396	A
2 - A41 N	573	143	627	2968	0.193	573	1228	0.3	0.2	1.505	A
3 - Site Access	183	46	1063	1713	0.107	184	137	0.2	0.1	2.354	A
4 - A41 S	1124	281	352	2899	0.388	1125	894	0.9	0.6	2.029	A
5 - Park and Ride	10	2	1389	1007	0.010	10	88	0.0	0.0	3.613	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	704	176	846	1765	0.399	705	325	1.0	0.7	3.404	A
2 - A41 N	480	120	523	3050	0.157	480	1028	0.2	0.2	1.400	A
3 - Site Access	154	38	889	1820	0.084	154	115	0.1	0.1	2.160	A
4 - A41 S	941	235	295	2942	0.320	942	748	0.6	0.5	1.802	A
5 - Park and Ride	8	2	1162	1120	0.007	8	74	0.0	0.0	3.236	A

2031 SEPR Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.12	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	26	4 - A41 S

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
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	622	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	411	100.000
4 - A41 S		ONE HOUR	✓	1676	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	53	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	91	254	0	61	5
	4 - A41 S	493	1048	30	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.51	5.37	1.0	A	571	856
2 - A41 N	0.43	2.06	0.8	A	1119	1678
3 - Site Access	0.35	4.24	0.5	A	377	566
4 - A41 S	0.72	5.09	2.6	A	1538	2307
5 - Park and Ride	0.02	8.34	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1050	1644	0.285	467	671	0.0	0.4	3.053	A
2 - A41 N	918	229	326	3207	0.286	916	1191	0.0	0.4	1.571	A
3 - Site Access	309	77	1179	1641	0.189	308	63	0.0	0.2	2.701	A
4 - A41 S	1262	315	559	2745	0.460	1258	929	0.0	0.8	2.416	A
5 - Park and Ride	6	2	1716	842	0.007	6	101	0.0	0.0	4.303	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	559	140	1256	1523	0.367	558	803	0.4	0.6	3.732	A
2 - A41 N	1096	274	391	3156	0.347	1095	1424	0.4	0.5	1.746	A
3 - Site Access	369	92	1410	1498	0.247	369	75	0.2	0.3	3.188	A
4 - A41 S	1507	377	668	2664	0.566	1505	1111	0.8	1.3	3.103	A
5 - Park and Ride	7	2	2052	674	0.011	7	121	0.0	0.0	5.402	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	685	171	1536	1357	0.505	683	982	0.6	1.0	5.326	A
2 - A41 N	1342	336	478	3086	0.435	1341	1742	0.5	0.8	2.061	A
3 - Site Access	453	113	1727	1303	0.347	452	92	0.3	0.5	4.225	A
4 - A41 S	1845	461	818	2552	0.723	1840	1360	1.3	2.6	5.019	A
5 - Park and Ride	9	2	2510	443	0.020	9	148	0.0	0.0	8.283	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	685	171	1540	1355	0.505	685	984	1.0	1.0	5.371	A
2 - A41 N	1342	336	479	3085	0.435	1342	1746	0.8	0.8	2.064	A
3 - Site Access	453	113	1729	1302	0.348	453	92	0.5	0.5	4.237	A
4 - A41 S	1845	461	819	2552	0.723	1845	1362	2.6	2.6	5.094	A
5 - Park and Ride	9	2	2516	441	0.020	9	149	0.0	0.0	8.337	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	559	140	1262	1519	0.368	561	806	1.0	0.6	3.761	A
2 - A41 N	1096	274	392	3155	0.347	1097	1430	0.8	0.5	1.749	A
3 - Site Access	369	92	1413	1496	0.247	370	76	0.5	0.3	3.200	A
4 - A41 S	1507	377	670	2663	0.566	1512	1114	2.6	1.3	3.140	A
5 - Park and Ride	7	2	2060	670	0.011	7	122	0.0	0.0	5.435	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1055	1642	0.285	469	674	0.6	0.4	3.071	A
2 - A41 N	918	229	328	3206	0.286	918	1196	0.5	0.4	1.573	A
3 - Site Access	309	77	1183	1639	0.189	310	63	0.3	0.2	2.709	A
4 - A41 S	1262	315	561	2744	0.460	1264	932	1.3	0.9	2.436	A
5 - Park and Ride	6	2	1722	839	0.007	6	102	0.0	0.0	4.322	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

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

Filename: Sc 2 B1b.j9
Path: P:\19000's\19539\Technical\Junction models
Report generation date: 13/06/2019 15:52:36

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
	2026 Base							
1 - Vendee Drive	2.2	9.00	0.67	18 % [1 - Vendee Drive]	0.8	5.01	0.46	34 % [4 - A41 S]
2 - A41 N	0.9	2.44	0.46		1.1	2.46	0.51	
3 - Site Access	0.2	3.53	0.13		0.2	3.79	0.18	
4 - A41 S	1.6	3.33	0.60		2.3	4.39	0.69	
5 - Park and Ride	0.0	5.22	0.01		0.0	7.20	0.02	
	2026 Base + Dev							
1 - Vendee Drive	3.1	12.07	0.74	11 % [1 - Vendee Drive]	1.0	5.57	0.49	25 % [5 - Park and Ride]
2 - A41 N	1.0	2.58	0.47		1.1	2.40	0.52	
3 - Site Access	0.2	4.11	0.18		0.5	4.70	0.34	
4 - A41 S	1.8	3.66	0.62		2.6	4.95	0.72	
5 - Park and Ride	0.0	6.17	0.02		0.0	8.57	0.02	
	2031 Base							
1 - Vendee Drive	3.3	12.79	0.76	10 % [1 - Vendee Drive]	1.1	5.81	0.52	26 % [4 - A41 S]
2 - A41 N	1.1	2.61	0.50		1.4	2.83	0.58	
3 - Site Access	0.3	4.07	0.21		0.3	4.72	0.25	
4 - A41 S	1.9	3.75	0.64		2.8	5.22	0.74	
5 - Park and Ride	0.0	5.80	0.02		0.0	7.78	0.02	
	2031 Base + Dev							
1 - Vendee Drive	4.8	17.77	0.83	5 % [1 - Vendee Drive]	1.3	6.59	0.56	21 % [4 - A41 S]
2 - A41 N	1.0	2.53	0.51		1.4	2.78	0.58	
3 - Site Access	0.3	4.35	0.26		0.8	6.26	0.44	
4 - A41 S	2.0	3.80	0.66		3.3	6.04	0.77	
5 - Park and Ride	0.0	6.28	0.02		0.0	9.40	0.02	
	2031 SEPR Base							
1 - Vendee Drive	1.7	6.38	0.62	30 % [1 - Vendee Drive]	0.9	4.77	0.46	34 % [4 - A41 S]
2 - A41 N	0.3	1.74	0.24		0.8	2.07	0.43	
3 - Site Access	0.1	2.58	0.11		0.2	3.35	0.17	
4 - A41 S	0.9	2.48	0.46		2.2	4.32	0.68	
5 - Park and Ride	0.0	4.07	0.01		0.0	6.84	0.02	
	2031 SEPR Base + Dev							
1 - Vendee Drive	2.0	7.19	0.67	23 % [1 - Vendee Drive]	1.0	5.27	0.50	27 % [4 - A41 S]
2 - A41 N	0.3	1.67	0.25		0.8	2.06	0.43	
3 - Site Access	0.2	2.69	0.15		0.5	4.05	0.32	
4 - A41 S	0.9	2.46	0.49		2.5	4.94	0.72	
5 - Park and Ride	0.0	4.30	0.01		0.0	8.06	0.02	

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	13/06/2019
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

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.26	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	18	1 - Vendee Drive

Arms

Arms

Arm	Name	Description
1	Vendee Drive	
2	A41 N	
3	Site Access	
4	A41 S	
5	Park and Ride	

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Vendee Drive	3.75	8.20	92.0	20.0	70.0	35.0	
2 - A41 N	7.50	12.00	38.0	36.0	70.0	18.0	
3 - Site Access	3.50	10.50	32.0	20.0	70.0	22.5	
4 - A41 S	7.00	12.00	25.0	35.0	70.0	25.0	
5 - Park and Ride	3.50	8.00	14.0	15.0	70.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vendee Drive	0.590	2264
2 - A41 N	0.799	3468
3 - Site Access	0.617	2368
4 - A41 S	0.745	3161
5 - Park and Ride	0.502	1704

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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	799	100.000
2 - A41 N		ONE HOUR	✓	1232	100.000
3 - Site Access		ONE HOUR	✓	144	100.000
4 - A41 S		ONE HOUR	✓	1572	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	34	501	12
	2 - A41 N	105	63	0	1060	4
	3 - Site Access	13	126	0	1	4
	4 - A41 S	234	1265	11	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	21	10	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	3	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.67	9.00	2.2	A	733	1100
2 - A41 N	0.46	2.44	0.9	A	1131	1696
3 - Site Access	0.13	3.53	0.2	A	132	198
4 - A41 S	0.60	3.33	1.6	A	1442	2164
5 - Park and Ride	0.01	5.22	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1106	1611	0.373	599	266	0.0	0.6	3.792	A
2 - A41 N	928	232	425	3128	0.296	926	1280	0.0	0.5	1.784	A
3 - Site Access	108	27	1316	1556	0.070	108	35	0.0	0.1	2.485	A
4 - A41 S	1183	296	246	2978	0.397	1181	1178	0.0	0.7	2.149	A
5 - Park and Ride	7	2	1365	1018	0.007	7	62	0.0	0.0	3.557	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1323	1483	0.484	717	318	0.6	1.0	5.012	A
2 - A41 N	1108	277	509	3062	0.362	1107	1531	0.5	0.6	2.013	A
3 - Site Access	129	32	1574	1397	0.093	129	41	0.1	0.1	2.839	A
4 - A41 S	1413	353	295	2942	0.480	1412	1409	0.7	1.0	2.531	A
5 - Park and Ride	8	2	1633	884	0.009	8	74	0.0	0.0	4.109	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1620	1308	0.672	875	389	1.0	2.1	8.794	A
2 - A41 N	1356	339	621	2972	0.456	1355	1874	0.6	0.9	2.433	A
3 - Site Access	159	40	1926	1180	0.134	158	50	0.1	0.2	3.522	A
4 - A41 S	1731	433	361	2893	0.598	1728	1724	1.0	1.6	3.320	A
5 - Park and Ride	10	2	1999	700	0.014	10	90	0.0	0.0	5.215	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1622	1307	0.673	880	390	2.1	2.2	8.996	A
2 - A41 N	1356	339	624	2969	0.457	1356	1877	0.9	0.9	2.439	A
3 - Site Access	159	40	1930	1178	0.135	159	51	0.2	0.2	3.531	A
4 - A41 S	1731	433	361	2893	0.598	1731	1727	1.6	1.6	3.334	A
5 - Park and Ride	10	2	2002	699	0.014	10	90	0.0	0.0	5.225	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1326	1481	0.485	723	319	2.2	1.0	5.103	A
2 - A41 N	1108	277	513	3058	0.362	1109	1536	0.9	0.6	2.019	A
3 - Site Access	129	32	1580	1394	0.093	130	42	0.2	0.1	2.850	A
4 - A41 S	1413	353	295	2942	0.480	1416	1414	1.6	1.0	2.542	A
5 - Park and Ride	8	2	1637	882	0.009	8	74	0.0	0.0	4.120	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1110	1609	0.374	603	267	1.0	0.6	3.830	A
2 - A41 N	928	232	428	3126	0.297	928	1285	0.6	0.5	1.792	A
3 - Site Access	108	27	1321	1553	0.070	109	35	0.1	0.1	2.491	A
4 - A41 S	1183	296	247	2977	0.397	1185	1183	1.0	0.7	2.163	A
5 - Park and Ride	7	2	1370	1016	0.007	7	62	0.0	0.0	3.568	A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.74	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	551	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	185	100.000
4 - A41 S		ONE HOUR	✓	1735	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	29	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	40	128	0	13	4
	4 - A41 S	458	1216	19	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	5	0
	3 - Site Access	0	0	0	8	0
	4 - A41 S	2	4	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	5.01	0.8	A	506	758
2 - A41 N	0.51	2.46	1.1	A	1344	2016
3 - Site Access	0.18	3.79	0.2	A	170	255
4 - A41 S	0.69	4.39	2.3	A	1592	2388
5 - Park and Ride	0.02	7.20	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1077	1628	0.255	413	553	0.0	0.3	2.993	A
2 - A41 N	1103	276	285	3240	0.340	1101	1205	0.0	0.5	1.749	A
3 - Site Access	139	35	1337	1543	0.090	139	49	0.0	0.1	2.576	A
4 - A41 S	1306	327	370	2886	0.453	1303	1106	0.0	0.9	2.345	A
5 - Park and Ride	6	2	1624	889	0.007	6	50	0.0	0.0	4.077	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1288	1504	0.329	495	661	0.3	0.5	3.604	A
2 - A41 N	1317	329	341	3195	0.412	1316	1441	0.5	0.7	1.992	A
3 - Site Access	166	42	1599	1382	0.120	166	58	0.1	0.1	2.976	A
4 - A41 S	1560	390	443	2832	0.551	1558	1322	0.9	1.3	2.916	A
5 - Park and Ride	7	2	1942	729	0.010	7	59	0.0	0.0	4.987	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1576	1334	0.455	605	809	0.5	0.8	4.984	A
2 - A41 N	1613	403	417	3135	0.515	1612	1763	0.7	1.1	2.457	A
3 - Site Access	204	51	1958	1161	0.175	203	71	0.1	0.2	3.780	A
4 - A41 S	1910	478	542	2758	0.693	1906	1619	1.3	2.3	4.347	A
5 - Park and Ride	9	2	2376	511	0.017	9	73	0.0	0.0	7.169	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1579	1332	0.455	607	810	0.8	0.8	5.015	A
2 - A41 N	1613	403	418	3134	0.515	1613	1767	1.1	1.1	2.462	A
3 - Site Access	204	51	1960	1159	0.176	204	72	0.2	0.2	3.785	A
4 - A41 S	1910	478	543	2757	0.693	1910	1621	2.3	2.3	4.390	A
5 - Park and Ride	9	2	2380	509	0.017	9	73	0.0	0.0	7.202	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1292	1501	0.330	497	663	0.8	0.5	3.629	A
2 - A41 N	1317	329	343	3194	0.412	1318	1447	1.1	0.7	1.998	A
3 - Site Access	166	42	1602	1380	0.121	167	59	0.2	0.1	2.983	A
4 - A41 S	1560	390	444	2831	0.551	1564	1325	2.3	1.3	2.946	A
5 - Park and Ride	7	2	1948	726	0.010	7	59	0.0	0.0	5.010	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1081	1626	0.255	415	555	0.5	0.3	3.009	A
2 - A41 N	1103	276	287	3239	0.341	1104	1210	0.7	0.5	1.756	A
3 - Site Access	139	35	1341	1541	0.090	139	49	0.1	0.1	2.581	A
4 - A41 S	1306	327	371	2885	0.453	1308	1109	1.3	0.9	2.360	A
5 - Park and Ride	6	2	1630	886	0.007	6	50	0.0	0.0	4.093	A

2026 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.18	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	11	1 - Vendee Drive

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	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	850	100.000
2 - A41 N		ONE HOUR	✓	1230	100.000
3 - Site Access		ONE HOUR	✓	195	100.000
4 - A41 S		ONE HOUR	✓	1615	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	85	501	12
	2 - A41 N	105	63	0	1060	2
	3 - Site Access	31	151	0	9	4
	4 - A41 S	234	1265	54	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	10	10	10	10	10
	2 - A41 N	10	10	10	10	10
	3 - Site Access	10	10	10	10	10
	4 - A41 S	10	10	10	10	10
	5 - Park and Ride	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.74	12.07	3.1	B	780	1170
2 - A41 N	0.47	2.58	1.0	A	1129	1693
3 - Site Access	0.18	4.11	0.2	A	179	268
4 - A41 S	0.62	3.66	1.8	A	1482	2223
5 - Park and Ride	0.02	6.17	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	640	160	1157	1581	0.405	637	279	0.0	0.7	4.182	A
2 - A41 N	926	232	495	3072	0.301	924	1299	0.0	0.5	1.841	A
3 - Site Access	147	37	1315	1557	0.094	146	105	0.0	0.1	2.806	A
4 - A41 S	1216	304	277	2955	0.411	1213	1184	0.0	0.8	2.269	A
5 - Park and Ride	7	2	1430	986	0.007	7	60	0.0	0.0	4.043	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	764	191	1384	1447	0.528	762	334	0.7	1.2	5.765	A
2 - A41 N	1106	276	593	2994	0.369	1105	1554	0.5	0.6	2.096	A
3 - Site Access	175	44	1572	1398	0.125	175	126	0.1	0.2	3.237	A
4 - A41 S	1452	363	331	2915	0.498	1451	1416	0.8	1.1	2.702	A
5 - Park and Ride	8	2	1710	845	0.010	8	72	0.0	0.0	4.729	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	936	234	1694	1264	0.740	929	409	1.2	3.0	11.566	B
2 - A41 N	1354	339	723	2891	0.468	1353	1900	0.6	1.0	2.572	A
3 - Site Access	215	54	1922	1182	0.182	214	153	0.2	0.2	4.090	A
4 - A41 S	1778	445	406	2859	0.622	1775	1731	1.1	1.8	3.644	A
5 - Park and Ride	10	2	2093	653	0.015	10	88	0.0	0.0	6.158	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	936	234	1697	1263	0.741	936	410	3.0	3.1	12.073	B
2 - A41 N	1354	339	728	2887	0.469	1354	1905	1.0	1.0	2.583	A
3 - Site Access	215	54	1928	1179	0.182	215	154	0.2	0.2	4.105	A
4 - A41 S	1778	445	406	2859	0.622	1778	1736	1.8	1.8	3.663	A
5 - Park and Ride	10	2	2096	651	0.015	10	88	0.0	0.0	6.173	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	764	191	1388	1445	0.529	771	335	3.1	1.3	5.941	A
2 - A41 N	1106	276	599	2989	0.370	1107	1560	1.0	0.6	2.106	A
3 - Site Access	175	44	1580	1394	0.126	176	127	0.2	0.2	3.253	A
4 - A41 S	1452	363	332	2914	0.498	1455	1423	1.8	1.1	2.718	A
5 - Park and Ride	8	2	1715	843	0.010	8	72	0.0	0.0	4.743	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	640	160	1161	1579	0.405	642	280	1.3	0.8	4.236	A
2 - A41 N	926	232	499	3069	0.302	927	1304	0.6	0.5	1.847	A
3 - Site Access	147	37	1320	1554	0.094	147	106	0.2	0.1	2.814	A
4 - A41 S	1216	304	278	2954	0.412	1217	1189	1.1	0.8	2.280	A
5 - Park and Ride	7	2	1435	984	0.007	7	60	0.0	0.0	4.054	A

2026 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.12	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	25	5 - Park and Ride

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	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	569	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	358	100.000
4 - A41 S		ONE HOUR	✓	1741	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	47	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	92	214	0	48	4
	4 - A41 S	458	1216	25	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.49	5.57	1.0	A	522	783
2 - A41 N	0.52	2.40	1.1	A	1344	2016
3 - Site Access	0.34	4.70	0.5	A	329	493
4 - A41 S	0.72	4.95	2.6	A	1598	2396
5 - Park and Ride	0.02	8.57	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	428	107	1146	1588	0.270	427	592	0.0	0.4	3.097	A
2 - A41 N	1103	276	303	3226	0.342	1101	1270	0.0	0.5	1.692	A
3 - Site Access	270	67	1337	1543	0.175	269	67	0.0	0.2	2.823	A
4 - A41 S	1311	328	474	2809	0.467	1307	1132	0.0	0.9	2.393	A
5 - Park and Ride	6	2	1732	835	0.007	6	50	0.0	0.0	4.344	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	512	128	1370	1455	0.351	511	708	0.4	0.5	3.810	A
2 - A41 N	1317	329	363	3178	0.414	1316	1518	0.5	0.7	1.932	A
3 - Site Access	322	80	1599	1382	0.233	321	80	0.2	0.3	3.395	A
4 - A41 S	1565	391	567	2739	0.571	1563	1354	0.9	1.3	3.057	A
5 - Park and Ride	7	2	2071	664	0.011	7	59	0.0	0.0	5.479	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	626	157	1676	1275	0.491	625	866	0.5	1.0	5.523	A
2 - A41 N	1613	403	444	3114	0.518	1612	1857	0.7	1.1	2.394	A
3 - Site Access	394	99	1957	1161	0.340	393	98	0.3	0.5	4.686	A
4 - A41 S	1917	479	694	2645	0.725	1912	1657	1.3	2.6	4.878	A
5 - Park and Ride	9	2	2533	432	0.020	9	72	0.0	0.0	8.509	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	626	157	1680	1272	0.492	626	868	1.0	1.0	5.572	A
2 - A41 N	1613	403	445	3113	0.518	1613	1862	1.1	1.1	2.399	A
3 - Site Access	394	99	1960	1159	0.340	394	98	0.5	0.5	4.704	A
4 - A41 S	1917	479	695	2644	0.725	1917	1659	2.6	2.6	4.947	A
5 - Park and Ride	9	2	2539	429	0.021	9	73	0.0	0.0	8.568	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	512	128	1376	1452	0.352	513	710	1.0	0.5	3.841	A
2 - A41 N	1317	329	364	3177	0.415	1318	1525	1.1	0.7	1.939	A
3 - Site Access	322	80	1603	1380	0.233	323	80	0.5	0.3	3.407	A
4 - A41 S	1565	391	568	2738	0.572	1570	1357	2.6	1.3	3.096	A
5 - Park and Ride	7	2	2079	660	0.011	7	60	0.0	0.0	5.515	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	428	107	1150	1585	0.270	429	594	0.5	0.4	3.117	A
2 - A41 N	1103	276	305	3225	0.342	1104	1275	0.7	0.5	1.699	A
3 - Site Access	270	67	1341	1541	0.175	270	67	0.3	0.2	2.834	A
4 - A41 S	1311	328	476	2807	0.467	1313	1136	1.3	0.9	2.412	A
5 - Park and Ride	6	2	1738	831	0.007	6	50	0.0	0.0	4.364	A

2031 Base , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.31	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	10	1 - Vendee Drive

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
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	863	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	208	100.000
4 - A41 S		ONE HOUR	✓	1647	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	31	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	14	186	0	1	7
	4 - A41 S	256	1292	11	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	26	11	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.76	12.79	3.3	B	792	1188
2 - A41 N	0.50	2.61	1.1	A	1234	1851
3 - Site Access	0.21	4.07	0.3	A	191	286
4 - A41 S	0.64	3.75	1.9	A	1511	2267
5 - Park and Ride	0.02	5.80	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1172	1572	0.413	647	291	0.0	0.7	4.145	A
2 - A41 N	1013	253	411	3140	0.322	1011	1408	0.0	0.5	1.847	A
3 - Site Access	157	39	1388	1512	0.104	156	33	0.0	0.1	2.655	A
4 - A41 S	1240	310	291	2944	0.421	1237	1253	0.0	0.8	2.258	A
5 - Park and Ride	8	2	1455	973	0.009	8	73	0.0	0.0	3.729	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1402	1437	0.540	774	349	0.7	1.2	5.789	A
2 - A41 N	1209	302	491	3075	0.393	1208	1684	0.5	0.7	2.107	A
3 - Site Access	187	47	1660	1344	0.139	187	39	0.1	0.2	3.110	A
4 - A41 S	1481	370	349	2902	0.510	1479	1499	0.8	1.1	2.712	A
5 - Park and Ride	10	2	1741	830	0.012	10	87	0.0	0.0	4.389	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1716	1251	0.759	942	427	1.2	3.2	12.157	B
2 - A41 N	1481	370	599	2990	0.495	1479	2060	0.7	1.1	2.604	A
3 - Site Access	229	57	2030	1116	0.205	229	48	0.2	0.3	4.054	A
4 - A41 S	1813	453	427	2844	0.638	1810	1832	1.1	1.9	3.726	A
5 - Park and Ride	12	3	2130	634	0.019	12	107	0.0	0.0	5.786	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1719	1250	0.760	950	427	3.2	3.3	12.788	B
2 - A41 N	1481	370	603	2986	0.496	1481	2065	1.1	1.1	2.615	A
3 - Site Access	229	57	2036	1113	0.206	229	48	0.3	0.3	4.074	A
4 - A41 S	1813	453	427	2843	0.638	1813	1837	1.9	1.9	3.748	A
5 - Park and Ride	12	3	2134	632	0.019	12	107	0.0	0.0	5.802	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1406	1434	0.541	784	349	3.3	1.3	5.990	A
2 - A41 N	1209	302	498	3071	0.394	1211	1692	1.1	0.7	2.120	A
3 - Site Access	187	47	1668	1339	0.140	187	40	0.3	0.2	3.128	A
4 - A41 S	1481	370	349	2901	0.510	1484	1506	1.9	1.1	2.729	A
5 - Park and Ride	10	2	1746	827	0.012	10	87	0.0	0.0	4.405	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1176	1570	0.414	652	292	1.3	0.8	4.201	A
2 - A41 N	1013	253	414	3137	0.323	1013	1414	0.7	0.5	1.856	A
3 - Site Access	157	39	1394	1508	0.104	157	33	0.2	0.1	2.665	A
4 - A41 S	1240	310	292	2944	0.421	1241	1258	1.1	0.8	2.269	A
5 - Park and Ride	8	2	1461	971	0.009	8	73	0.0	0.0	3.740	A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.37	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	26	4 - A41 S

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
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	621	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	234	100.000
4 - A41 S		ONE HOUR	✓	1802	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	34	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	41	175	0	14	4
	4 - A41 S	468	1204	20	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	4	0
	3 - Site Access	0	0	0	7	0
	4 - A41 S	2	5	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.52	5.81	1.1	A	570	855
2 - A41 N	0.58	2.83	1.4	A	1509	2264
3 - Site Access	0.25	4.72	0.3	A	215	322
4 - A41 S	0.74	5.22	2.8	A	1654	2480
5 - Park and Ride	0.02	7.78	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1104	1613	0.290	466	576	0.0	0.4	3.166	A
2 - A41 N	1238	310	293	3234	0.383	1236	1277	0.0	0.6	1.860	A
3 - Site Access	176	44	1487	1451	0.121	176	41	0.0	0.1	2.832	A
4 - A41 S	1357	339	424	2846	0.477	1353	1239	0.0	0.9	2.497	A
5 - Park and Ride	6	2	1674	864	0.007	6	103	0.0	0.0	4.197	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1320	1485	0.376	557	689	0.4	0.6	3.916	A
2 - A41 N	1479	370	350	3188	0.464	1478	1527	0.6	0.9	2.174	A
3 - Site Access	210	53	1779	1271	0.165	210	49	0.1	0.2	3.406	A
4 - A41 S	1620	405	507	2784	0.582	1618	1482	0.9	1.4	3.199	A
5 - Park and Ride	7	2	2002	699	0.010	7	123	0.0	0.0	5.204	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1614	1311	0.521	682	843	0.6	1.1	5.757	A
2 - A41 N	1811	453	428	3126	0.579	1809	1868	0.9	1.4	2.820	A
3 - Site Access	258	64	2177	1025	0.251	257	60	0.2	0.3	4.701	A
4 - A41 S	1984	496	620	2700	0.735	1978	1814	1.4	2.8	5.142	A
5 - Park and Ride	9	2	2448	475	0.019	9	150	0.0	0.0	7.729	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1618	1309	0.522	684	844	1.1	1.1	5.814	A
2 - A41 N	1811	453	429	3125	0.580	1811	1873	1.4	1.4	2.831	A
3 - Site Access	258	64	2180	1023	0.252	258	61	0.3	0.3	4.718	A
4 - A41 S	1984	496	621	2699	0.735	1984	1817	2.8	2.8	5.224	A
5 - Park and Ride	9	2	2454	472	0.019	9	151	0.0	0.0	7.779	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1326	1482	0.377	560	691	1.1	0.6	3.953	A
2 - A41 N	1479	370	352	3187	0.464	1481	1534	1.4	0.9	2.183	A
3 - Site Access	210	53	1783	1268	0.166	211	50	0.3	0.2	3.418	A
4 - A41 S	1620	405	508	2783	0.582	1626	1486	2.8	1.5	3.245	A
5 - Park and Ride	7	2	2010	695	0.010	7	124	0.0	0.0	5.238	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1108	1610	0.290	468	578	0.6	0.4	3.188	A
2 - A41 N	1238	310	294	3233	0.383	1239	1283	0.9	0.6	1.866	A
3 - Site Access	176	44	1492	1448	0.122	176	41	0.2	0.1	2.842	A
4 - A41 S	1357	339	425	2845	0.477	1359	1243	1.5	1.0	2.519	A
5 - Park and Ride	6	2	1680	860	0.007	6	103	0.0	0.0	4.214	A

2031 Base + Dev , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	6.46	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	5	1 - Vendee Drive

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
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	914	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	259	100.000
4 - A41 S		ONE HOUR	✓	1690	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	82	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	32	211	0	9	7
	4 - A41 S	256	1292	54	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.83	17.77	4.8	C	839	1258
2 - A41 N	0.51	2.53	1.0	A	1234	1851
3 - Site Access	0.26	4.35	0.3	A	238	356
4 - A41 S	0.66	3.80	2.0	A	1551	2326
5 - Park and Ride	0.02	6.28	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	688	172	1223	1542	0.446	685	305	0.0	0.8	4.186	A
2 - A41 N	1013	253	481	3084	0.328	1011	1427	0.0	0.5	1.734	A
3 - Site Access	195	49	1388	1512	0.129	194	104	0.0	0.1	2.731	A
4 - A41 S	1272	318	324	2920	0.436	1269	1259	0.0	0.8	2.177	A
5 - Park and Ride	8	2	1520	941	0.009	8	73	0.0	0.0	3.860	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	822	205	1463	1401	0.587	819	365	0.8	1.4	6.167	A
2 - A41 N	1209	302	576	3008	0.402	1208	1707	0.5	0.7	1.999	A
3 - Site Access	233	58	1660	1344	0.173	233	124	0.1	0.2	3.238	A
4 - A41 S	1519	380	387	2873	0.529	1518	1506	0.8	1.1	2.654	A
5 - Park and Ride	10	2	1818	791	0.013	10	87	0.0	0.0	4.607	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1006	252	1790	1207	0.834	994	446	1.4	4.5	16.013	C
2 - A41 N	1481	370	699	2910	0.509	1479	2085	0.7	1.0	2.514	A
3 - Site Access	285	71	2028	1118	0.255	285	151	0.2	0.3	4.319	A
4 - A41 S	1861	465	474	2809	0.663	1857	1838	1.1	1.9	3.773	A
5 - Park and Ride	12	3	2225	587	0.021	12	107	0.0	0.0	6.263	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1006	252	1794	1206	0.835	1005	447	4.5	4.8	17.767	C
2 - A41 N	1481	370	706	2904	0.510	1481	2093	1.0	1.0	2.529	A
3 - Site Access	285	71	2035	1113	0.256	285	152	0.3	0.3	4.349	A
4 - A41 S	1861	465	475	2808	0.663	1861	1846	1.9	2.0	3.798	A
5 - Park and Ride	12	3	2228	585	0.021	12	107	0.0	0.0	6.284	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	822	205	1468	1398	0.588	835	366	4.8	1.4	6.542	A
2 - A41 N	1209	302	586	3000	0.403	1211	1717	1.0	0.7	2.012	A
3 - Site Access	233	58	1671	1338	0.174	233	125	0.3	0.2	3.263	A
4 - A41 S	1519	380	388	2872	0.529	1523	1516	2.0	1.1	2.672	A
5 - Park and Ride	10	2	1823	788	0.013	10	87	0.0	0.0	4.626	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	688	172	1228	1539	0.447	691	306	1.4	0.8	4.253	A
2 - A41 N	1013	253	485	3081	0.329	1013	1433	0.7	0.5	1.743	A
3 - Site Access	195	49	1394	1508	0.129	195	104	0.2	0.1	2.743	A
4 - A41 S	1272	318	325	2920	0.436	1274	1265	1.1	0.8	2.190	A
5 - Park and Ride	8	2	1525	938	0.009	8	73	0.0	0.0	3.873	A

2031 Base + Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.95	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	21	4 - A41 S

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
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	639	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	407	100.000
4 - A41 S		ONE HOUR	✓	1808	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	52	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	93	261	0	49	4
	4 - A41 S	468	1204	26	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.56	6.59	1.3	A	586	880
2 - A41 N	0.58	2.78	1.4	A	1509	2264
3 - Site Access	0.44	6.26	0.8	A	373	560
4 - A41 S	0.77	6.04	3.3	A	1659	2489
5 - Park and Ride	0.02	9.40	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	481	120	1173	1572	0.306	479	615	0.0	0.4	3.288	A
2 - A41 N	1238	310	311	3220	0.385	1236	1341	0.0	0.6	1.813	A
3 - Site Access	306	77	1487	1451	0.211	305	59	0.0	0.3	3.140	A
4 - A41 S	1361	340	527	2769	0.492	1357	1266	0.0	1.0	2.544	A
5 - Park and Ride	6	2	1781	809	0.007	6	103	0.0	0.0	4.480	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	574	144	1402	1436	0.400	574	735	0.4	0.7	4.168	A
2 - A41 N	1479	370	372	3171	0.466	1478	1604	0.6	0.9	2.125	A
3 - Site Access	366	91	1779	1271	0.288	365	71	0.3	0.4	3.971	A
4 - A41 S	1625	406	630	2692	0.604	1623	1513	1.0	1.5	3.360	A
5 - Park and Ride	7	2	2131	634	0.011	7	123	0.0	0.0	5.742	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	704	176	1714	1252	0.562	701	899	0.7	1.3	6.501	A
2 - A41 N	1811	453	454	3105	0.583	1809	1961	0.9	1.4	2.772	A
3 - Site Access	448	112	2177	1026	0.437	447	87	0.4	0.8	6.204	A
4 - A41 S	1991	498	771	2587	0.769	1984	1852	1.5	3.2	5.898	A
5 - Park and Ride	9	2	2605	396	0.022	9	150	0.0	0.0	9.296	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	704	176	1720	1249	0.563	703	902	1.3	1.3	6.595	A
2 - A41 N	1811	453	456	3104	0.584	1811	1967	1.4	1.4	2.784	A
3 - Site Access	448	112	2180	1024	0.438	448	87	0.8	0.8	6.255	A
4 - A41 S	1991	498	773	2586	0.770	1990	1855	3.2	3.3	6.039	A
5 - Park and Ride	9	2	2613	392	0.022	9	151	0.0	0.0	9.395	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	574	144	1410	1432	0.401	577	739	1.3	0.7	4.223	A
2 - A41 N	1479	370	374	3169	0.467	1481	1613	1.4	0.9	2.134	A
3 - Site Access	366	91	1783	1268	0.289	367	71	0.8	0.4	4.004	A
4 - A41 S	1625	406	633	2690	0.604	1632	1518	3.3	1.5	3.424	A
5 - Park and Ride	7	2	2142	629	0.011	7	124	0.0	0.0	5.794	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	481	120	1178	1569	0.307	482	617	0.7	0.4	3.314	A
2 - A41 N	1238	310	312	3219	0.385	1239	1348	0.9	0.6	1.819	A
3 - Site Access	306	77	1492	1448	0.212	307	60	0.4	0.3	3.158	A
4 - A41 S	1361	340	529	2767	0.492	1363	1270	1.5	1.0	2.569	A
5 - Park and Ride	6	2	1789	805	0.007	6	103	0.0	0.0	4.502	A

2031 SEPR Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.52	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	30	1 - Vendee Drive

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
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	886	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	156	100.000
4 - A41 S		ONE HOUR	✓	1209	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	42	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	9	137	0	2	8
	4 - A41 S	285	831	18	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	19	10	0
	2 - A41 N	0	0	0	12	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.62	6.38	1.7	A	813	1220
2 - A41 N	0.24	1.74	0.3	A	585	877
3 - Site Access	0.11	2.58	0.1	A	143	215
4 - A41 S	0.46	2.48	0.9	A	1109	1664
5 - Park and Ride	0.01	4.07	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	795	1795	0.372	665	311	0.0	0.6	3.385	A
2 - A41 N	480	120	453	3106	0.154	479	1006	0.0	0.2	1.483	A
3 - Site Access	117	29	885	1822	0.064	117	47	0.0	0.1	2.111	A
4 - A41 S	910	228	263	2966	0.307	908	739	0.0	0.5	1.862	A
5 - Park and Ride	8	2	1098	1153	0.007	8	74	0.0	0.0	3.144	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	951	1703	0.468	795	372	0.6	0.9	4.219	A
2 - A41 N	573	143	542	3035	0.189	572	1204	0.2	0.3	1.582	A
3 - Site Access	140	35	1059	1715	0.082	140	56	0.1	0.1	2.285	A
4 - A41 S	1087	272	314	2927	0.371	1086	885	0.5	0.6	2.083	A
5 - Park and Ride	10	2	1313	1045	0.009	10	88	0.0	0.0	3.477	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1164	1577	0.619	972	455	0.9	1.7	6.312	A
2 - A41 N	701	175	663	2938	0.239	701	1473	0.3	0.3	1.741	A
3 - Site Access	172	43	1296	1569	0.109	172	68	0.1	0.1	2.576	A
4 - A41 S	1331	333	385	2875	0.463	1330	1082	0.6	0.9	2.482	A
5 - Park and Ride	12	3	1607	897	0.014	12	108	0.0	0.0	4.068	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1165	1576	0.619	975	456	1.7	1.7	6.376	A
2 - A41 N	701	175	665	2937	0.239	701	1475	0.3	0.3	1.742	A
3 - Site Access	172	43	1298	1568	0.110	172	68	0.1	0.1	2.578	A
4 - A41 S	1331	333	385	2875	0.463	1331	1084	0.9	0.9	2.484	A
5 - Park and Ride	12	3	1609	896	0.014	12	108	0.0	0.0	4.071	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	952	1702	0.468	800	373	1.7	0.9	4.262	A
2 - A41 N	573	143	545	3033	0.189	573	1207	0.3	0.3	1.584	A
3 - Site Access	140	35	1062	1713	0.082	140	56	0.1	0.1	2.288	A
4 - A41 S	1087	272	315	2927	0.371	1088	888	0.9	0.6	2.086	A
5 - Park and Ride	10	2	1315	1044	0.009	10	88	0.0	0.0	3.480	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	797	1794	0.372	668	312	0.9	0.6	3.410	A
2 - A41 N	480	120	456	3104	0.154	480	1010	0.3	0.2	1.484	A
3 - Site Access	117	29	889	1820	0.065	118	47	0.1	0.1	2.115	A
4 - A41 S	910	228	264	2965	0.307	911	742	0.6	0.5	1.869	A
5 - Park and Ride	8	2	1101	1151	0.007	8	74	0.0	0.0	3.148	A

2031 SEPR Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.60	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	602	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	203	100.000
4 - A41 S		ONE HOUR	✓	1668	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	33	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	29	153	0	16	5
	4 - A41 S	493	1048	22	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	2	0
	3 - Site Access	0	0	0	6	0
	4 - A41 S	2	2	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	4.77	0.9	A	552	829
2 - A41 N	0.43	2.07	0.8	A	1119	1678
3 - Site Access	0.17	3.35	0.2	A	186	279
4 - A41 S	0.68	4.32	2.2	A	1531	2296
5 - Park and Ride	0.02	6.84	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	969	1692	0.268	452	625	0.0	0.4	2.928	A
2 - A41 N	918	229	305	3224	0.285	916	1115	0.0	0.4	1.585	A
3 - Site Access	153	38	1180	1641	0.093	152	42	0.0	0.1	2.430	A
4 - A41 S	1256	314	436	2836	0.443	1253	895	0.0	0.8	2.310	A
5 - Park and Ride	6	2	1588	907	0.007	6	101	0.0	0.0	3.996	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1159	1580	0.342	541	747	0.4	0.5	3.497	A
2 - A41 N	1096	274	365	3176	0.345	1095	1334	0.4	0.5	1.758	A
3 - Site Access	182	46	1411	1498	0.122	182	50	0.1	0.1	2.747	A
4 - A41 S	1499	375	522	2773	0.541	1498	1071	0.8	1.2	2.872	A
5 - Park and Ride	7	2	1899	751	0.010	7	121	0.0	0.0	4.842	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1418	1427	0.464	661	915	0.5	0.9	4.741	A
2 - A41 N	1342	336	447	3111	0.431	1341	1632	0.5	0.8	2.066	A
3 - Site Access	224	56	1727	1303	0.172	223	62	0.1	0.2	3.349	A
4 - A41 S	1837	459	639	2686	0.684	1833	1311	1.2	2.2	4.278	A
5 - Park and Ride	9	2	2323	537	0.016	9	148	0.0	0.0	6.812	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1420	1426	0.465	663	916	0.9	0.9	4.768	A
2 - A41 N	1342	336	448	3110	0.432	1342	1635	0.8	0.8	2.069	A
3 - Site Access	224	56	1729	1302	0.172	224	62	0.2	0.2	3.352	A
4 - A41 S	1837	459	640	2685	0.684	1836	1312	2.2	2.2	4.319	A
5 - Park and Ride	9	2	2327	535	0.016	9	149	0.0	0.0	6.839	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1162	1578	0.343	543	749	0.9	0.5	3.517	A
2 - A41 N	1096	274	367	3175	0.345	1097	1338	0.8	0.5	1.763	A
3 - Site Access	182	46	1413	1497	0.122	183	50	0.2	0.1	2.754	A
4 - A41 S	1499	375	523	2772	0.541	1503	1073	2.2	1.2	2.900	A
5 - Park and Ride	7	2	1905	748	0.010	7	122	0.0	0.0	4.862	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	972	1690	0.268	454	627	0.5	0.4	2.943	A
2 - A41 N	918	229	307	3223	0.285	918	1119	0.5	0.4	1.589	A
3 - Site Access	153	38	1183	1639	0.093	153	42	0.1	0.1	2.435	A
4 - A41 S	1256	314	438	2836	0.443	1257	898	1.2	0.8	2.326	A
5 - Park and Ride	6	2	1593	904	0.007	6	102	0.0	0.0	4.009	A

2031 SEPR Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	3.77	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	23	1 - Vendee Drive

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
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	937	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	207	100.000
4 - A41 S		ONE HOUR	✓	1252	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	93	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	27	162	0	10	8
	4 - A41 S	285	831	61	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.67	7.19	2.0	A	860	1290
2 - A41 N	0.25	1.67	0.3	A	585	877
3 - Site Access	0.15	2.69	0.2	A	190	285
4 - A41 S	0.49	2.46	0.9	A	1149	1723
5 - Park and Ride	0.01	4.30	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	705	176	846	1765	0.400	703	325	0.0	0.7	3.381	A
2 - A41 N	480	120	524	3050	0.157	479	1025	0.0	0.2	1.400	A
3 - Site Access	156	39	885	1822	0.086	155	117	0.0	0.1	2.160	A
4 - A41 S	943	236	295	2942	0.320	941	746	0.0	0.5	1.797	A
5 - Park and Ride	8	2	1162	1120	0.007	8	74	0.0	0.0	3.236	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	842	211	1012	1667	0.505	841	388	0.7	1.0	4.351	A
2 - A41 N	573	143	627	2968	0.193	572	1226	0.2	0.2	1.502	A
3 - Site Access	186	47	1059	1715	0.109	186	140	0.1	0.1	2.354	A
4 - A41 S	1126	281	353	2899	0.388	1125	892	0.5	0.6	2.030	A
5 - Park and Ride	10	2	1390	1006	0.010	10	88	0.0	0.0	3.612	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1032	258	1239	1533	0.673	1028	475	1.0	2.0	7.068	A
2 - A41 N	701	175	766	2856	0.246	701	1501	0.2	0.3	1.669	A
3 - Site Access	228	57	1295	1569	0.145	228	171	0.1	0.2	2.683	A
4 - A41 S	1378	345	432	2840	0.485	1377	1091	0.6	0.9	2.459	A
5 - Park and Ride	12	3	1702	849	0.014	12	108	0.0	0.0	4.299	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1032	258	1240	1532	0.673	1032	476	2.0	2.0	7.186	A
2 - A41 N	701	175	768	2854	0.246	701	1503	0.3	0.3	1.671	A
3 - Site Access	228	57	1298	1568	0.145	228	172	0.2	0.2	2.686	A
4 - A41 S	1378	345	433	2839	0.486	1378	1093	0.9	0.9	2.463	A
5 - Park and Ride	12	3	1703	849	0.014	12	108	0.0	0.0	4.302	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	842	211	1013	1666	0.506	846	389	2.0	1.0	4.413	A
2 - A41 N	573	143	630	2965	0.193	573	1229	0.3	0.2	1.504	A
3 - Site Access	186	47	1063	1713	0.109	186	141	0.2	0.1	2.358	A
4 - A41 S	1126	281	354	2898	0.388	1127	895	0.9	0.6	2.033	A
5 - Park and Ride	10	2	1392	1005	0.010	10	88	0.0	0.0	3.616	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	705	176	848	1763	0.400	707	325	1.0	0.7	3.414	A
2 - A41 N	480	120	527	3047	0.157	480	1029	0.2	0.2	1.401	A
3 - Site Access	156	39	889	1820	0.086	156	118	0.1	0.1	2.163	A
4 - A41 S	943	236	296	2941	0.320	943	749	0.6	0.5	1.804	A
5 - Park and Ride	8	2	1165	1119	0.007	8	74	0.0	0.0	3.243	A

2031 SEPR Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.01	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	27	4 - A41 S

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
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	620	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	376	100.000
4 - A41 S		ONE HOUR	✓	1674	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	51	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	81	239	0	51	5
	4 - A41 S	493	1048	28	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.50	5.27	1.0	A	569	853
2 - A41 N	0.43	2.06	0.8	A	1119	1678
3 - Site Access	0.32	4.05	0.5	A	345	518
4 - A41 S	0.72	4.94	2.5	A	1536	2304
5 - Park and Ride	0.02	8.06	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	467	117	1038	1652	0.283	465	664	0.0	0.4	3.030	A
2 - A41 N	918	229	323	3210	0.286	916	1179	0.0	0.4	1.569	A
3 - Site Access	283	71	1179	1641	0.173	282	60	0.0	0.2	2.649	A
4 - A41 S	1260	315	540	2759	0.457	1257	922	0.0	0.8	2.391	A
5 - Park and Ride	6	2	1696	853	0.007	6	101	0.0	0.0	4.252	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	557	139	1241	1532	0.364	557	794	0.4	0.6	3.691	A
2 - A41 N	1096	274	387	3159	0.347	1095	1411	0.4	0.5	1.744	A
3 - Site Access	338	85	1410	1498	0.226	338	72	0.2	0.3	3.102	A
4 - A41 S	1505	376	646	2681	0.561	1503	1102	0.8	1.3	3.054	A
5 - Park and Ride	7	2	2028	686	0.010	7	121	0.0	0.0	5.305	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	683	171	1518	1368	0.499	681	971	0.6	1.0	5.226	A
2 - A41 N	1342	336	473	3090	0.434	1341	1726	0.5	0.8	2.057	A
3 - Site Access	414	103	1727	1303	0.318	413	88	0.3	0.5	4.046	A
4 - A41 S	1843	461	791	2573	0.716	1838	1349	1.3	2.5	4.869	A
5 - Park and Ride	9	2	2481	458	0.019	9	148	0.0	0.0	8.011	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	683	171	1522	1366	0.500	683	973	1.0	1.0	5.267	A
2 - A41 N	1342	336	475	3089	0.434	1342	1730	0.8	0.8	2.060	A
3 - Site Access	414	103	1729	1302	0.318	414	88	0.5	0.5	4.053	A
4 - A41 S	1843	461	792	2572	0.717	1843	1351	2.5	2.5	4.936	A
5 - Park and Ride	9	2	2486	455	0.019	9	149	0.0	0.0	8.059	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	557	139	1246	1529	0.365	559	797	1.0	0.6	3.721	A
2 - A41 N	1096	274	389	3158	0.347	1097	1416	0.8	0.5	1.749	A
3 - Site Access	338	85	1413	1496	0.226	339	72	0.5	0.3	3.113	A
4 - A41 S	1505	376	647	2679	0.562	1510	1105	2.5	1.3	3.091	A
5 - Park and Ride	7	2	2035	682	0.011	7	122	0.0	0.0	5.337	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	467	117	1042	1649	0.283	467	666	0.6	0.4	3.047	A
2 - A41 N	918	229	325	3208	0.286	918	1184	0.5	0.4	1.574	A
3 - Site Access	283	71	1183	1639	0.173	283	60	0.3	0.2	2.656	A
4 - A41 S	1260	315	542	2758	0.457	1262	925	1.3	0.8	2.410	A
5 - Park and Ride	6	2	1702	849	0.007	6	102	0.0	0.0	4.268	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: Sc3 B1c.j9
Path: P:\19000's\19539\Technical\Junction models
Report generation date: 18/06/2019 16:42:06

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
	2026 Base							
1 - Vendee Drive	2.2	9.00	0.67	18 % [1 - Vendee Drive]	0.8	5.01	0.46	34 % [4 - A41 S]
2 - A41 N	0.9	2.44	0.46		1.1	2.46	0.51	
3 - Site Access	0.2	3.53	0.13		0.2	3.79	0.18	
4 - A41 S	1.6	3.33	0.60		2.3	4.39	0.69	
5 - Park and Ride	0.0	5.22	0.01		0.0	7.20	0.02	
	2026 Base + Dev							
1 - Vendee Drive	3.5	13.65	0.77	9 % [1 - Vendee Drive]	1.0	5.64	0.49	22 % [5 - Park and Ride]
2 - A41 N	1.0	2.67	0.48		1.1	2.39	0.52	
3 - Site Access	0.2	4.02	0.16		0.7	5.35	0.42	
4 - A41 S	1.9	3.72	0.63		2.8	5.24	0.74	
5 - Park and Ride	0.0	6.23	0.02		0.0	9.16	0.02	
	2031 Base							
1 - Vendee Drive	3.3	12.79	0.76	10 % [1 - Vendee Drive]	1.1	5.81	0.52	26 % [4 - A41 S]
2 - A41 N	1.1	2.61	0.50		1.4	2.83	0.58	
3 - Site Access	0.3	4.07	0.21		0.3	4.72	0.25	
4 - A41 S	1.9	3.75	0.64		2.8	5.22	0.74	
5 - Park and Ride	0.0	5.80	0.02		0.0	7.78	0.02	
	2031 Base + Dev							
1 - Vendee Drive	5.9	21.64	0.87	3 % [1 - Vendee Drive]	1.3	6.69	0.56	19 % [4 - A41 S]
2 - A41 N	1.1	2.62	0.52		1.4	2.77	0.58	
3 - Site Access	0.3	4.24	0.24		1.1	7.45	0.53	
4 - A41 S	2.0	3.87	0.67		3.5	6.48	0.78	
5 - Park and Ride	0.0	6.35	0.02		0.0	10.11	0.02	
	2031 SEPR Base							
1 - Vendee Drive	1.7	6.38	0.62	30 % [1 - Vendee Drive]	0.9	4.77	0.46	34 % [4 - A41 S]
2 - A41 N	0.3	1.74	0.24		0.8	2.07	0.43	
3 - Site Access	0.1	2.58	0.11		0.2	3.35	0.17	
4 - A41 S	0.9	2.48	0.46		2.2	4.32	0.68	
5 - Park and Ride	0.0	4.07	0.01		0.0	6.84	0.02	
	2031 SEPR Base + Dev							
1 - Vendee Drive	2.3	7.78	0.70	21 % [1 - Vendee Drive]	1.0	5.33	0.50	25 % [4 - A41 S]
2 - A41 N	0.3	1.71	0.25		0.8	2.05	0.43	
3 - Site Access	0.2	2.64	0.13		0.6	4.52	0.39	
4 - A41 S	1.0	2.49	0.49		2.7	5.23	0.73	
5 - Park and Ride	0.0	4.33	0.01		0.0	8.58	0.02	

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	13/06/2019
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

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.26	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	18	1 - Vendee Drive

Arms

Arms

Arm	Name	Description
1	Vendee Drive	
2	A41 N	
3	Site Access	
4	A41 S	
5	Park and Ride	

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Vendee Drive	3.75	8.20	92.0	20.0	70.0	35.0	
2 - A41 N	7.50	12.00	38.0	36.0	70.0	18.0	
3 - Site Access	3.50	10.50	32.0	20.0	70.0	22.5	
4 - A41 S	7.00	12.00	25.0	35.0	70.0	25.0	
5 - Park and Ride	3.50	8.00	14.0	15.0	70.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vendee Drive	0.590	2264
2 - A41 N	0.799	3468
3 - Site Access	0.617	2368
4 - A41 S	0.745	3161
5 - Park and Ride	0.502	1704

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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	799	100.000
2 - A41 N		ONE HOUR	✓	1232	100.000
3 - Site Access		ONE HOUR	✓	144	100.000
4 - A41 S		ONE HOUR	✓	1572	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	34	501	12
	2 - A41 N	105	63	0	1060	4
	3 - Site Access	13	126	0	1	4
	4 - A41 S	234	1265	11	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	21	10	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	3	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.67	9.00	2.2	A	733	1100
2 - A41 N	0.46	2.44	0.9	A	1131	1696
3 - Site Access	0.13	3.53	0.2	A	132	198
4 - A41 S	0.60	3.33	1.6	A	1442	2164
5 - Park and Ride	0.01	5.22	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1106	1611	0.373	599	266	0.0	0.6	3.792	A
2 - A41 N	928	232	425	3128	0.296	926	1280	0.0	0.5	1.784	A
3 - Site Access	108	27	1316	1556	0.070	108	35	0.0	0.1	2.485	A
4 - A41 S	1183	296	246	2978	0.397	1181	1178	0.0	0.7	2.149	A
5 - Park and Ride	7	2	1365	1018	0.007	7	62	0.0	0.0	3.557	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1323	1483	0.484	717	318	0.6	1.0	5.012	A
2 - A41 N	1108	277	509	3062	0.362	1107	1531	0.5	0.6	2.013	A
3 - Site Access	129	32	1574	1397	0.093	129	41	0.1	0.1	2.839	A
4 - A41 S	1413	353	295	2942	0.480	1412	1409	0.7	1.0	2.531	A
5 - Park and Ride	8	2	1633	884	0.009	8	74	0.0	0.0	4.109	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1620	1308	0.672	875	389	1.0	2.1	8.794	A
2 - A41 N	1356	339	621	2972	0.456	1355	1874	0.6	0.9	2.433	A
3 - Site Access	159	40	1926	1180	0.134	158	50	0.1	0.2	3.522	A
4 - A41 S	1731	433	361	2893	0.598	1728	1724	1.0	1.6	3.320	A
5 - Park and Ride	10	2	1999	700	0.014	10	90	0.0	0.0	5.215	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1622	1307	0.673	880	390	2.1	2.2	8.996	A
2 - A41 N	1356	339	624	2969	0.457	1356	1877	0.9	0.9	2.439	A
3 - Site Access	159	40	1930	1178	0.135	159	51	0.2	0.2	3.531	A
4 - A41 S	1731	433	361	2893	0.598	1731	1727	1.6	1.6	3.334	A
5 - Park and Ride	10	2	2002	699	0.014	10	90	0.0	0.0	5.225	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1326	1481	0.485	723	319	2.2	1.0	5.103	A
2 - A41 N	1108	277	513	3058	0.362	1109	1536	0.9	0.6	2.019	A
3 - Site Access	129	32	1580	1394	0.093	130	42	0.2	0.1	2.850	A
4 - A41 S	1413	353	295	2942	0.480	1416	1414	1.6	1.0	2.542	A
5 - Park and Ride	8	2	1637	882	0.009	8	74	0.0	0.0	4.120	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1110	1609	0.374	603	267	1.0	0.6	3.830	A
2 - A41 N	928	232	428	3126	0.297	928	1285	0.6	0.5	1.792	A
3 - Site Access	108	27	1321	1553	0.070	109	35	0.1	0.1	2.491	A
4 - A41 S	1183	296	247	2977	0.397	1185	1183	1.0	0.7	2.163	A
5 - Park and Ride	7	2	1370	1016	0.007	7	62	0.0	0.0	3.568	A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.74	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	551	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	185	100.000
4 - A41 S		ONE HOUR	✓	1735	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	29	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	40	128	0	13	4
	4 - A41 S	458	1216	19	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	5	0
	3 - Site Access	0	0	0	8	0
	4 - A41 S	2	4	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	5.01	0.8	A	506	758
2 - A41 N	0.51	2.46	1.1	A	1344	2016
3 - Site Access	0.18	3.79	0.2	A	170	255
4 - A41 S	0.69	4.39	2.3	A	1592	2388
5 - Park and Ride	0.02	7.20	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1077	1628	0.255	413	553	0.0	0.3	2.993	A
2 - A41 N	1103	276	285	3240	0.340	1101	1205	0.0	0.5	1.749	A
3 - Site Access	139	35	1337	1543	0.090	139	49	0.0	0.1	2.576	A
4 - A41 S	1306	327	370	2886	0.453	1303	1106	0.0	0.9	2.345	A
5 - Park and Ride	6	2	1624	889	0.007	6	50	0.0	0.0	4.077	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1288	1504	0.329	495	661	0.3	0.5	3.604	A
2 - A41 N	1317	329	341	3195	0.412	1316	1441	0.5	0.7	1.992	A
3 - Site Access	166	42	1599	1382	0.120	166	58	0.1	0.1	2.976	A
4 - A41 S	1560	390	443	2832	0.551	1558	1322	0.9	1.3	2.916	A
5 - Park and Ride	7	2	1942	729	0.010	7	59	0.0	0.0	4.987	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1576	1334	0.455	605	809	0.5	0.8	4.984	A
2 - A41 N	1613	403	417	3135	0.515	1612	1763	0.7	1.1	2.457	A
3 - Site Access	204	51	1958	1161	0.175	203	71	0.1	0.2	3.780	A
4 - A41 S	1910	478	542	2758	0.693	1906	1619	1.3	2.3	4.347	A
5 - Park and Ride	9	2	2376	511	0.017	9	73	0.0	0.0	7.169	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1579	1332	0.455	607	810	0.8	0.8	5.015	A
2 - A41 N	1613	403	418	3134	0.515	1613	1767	1.1	1.1	2.462	A
3 - Site Access	204	51	1960	1159	0.176	204	72	0.2	0.2	3.785	A
4 - A41 S	1910	478	543	2757	0.693	1910	1621	2.3	2.3	4.390	A
5 - Park and Ride	9	2	2380	509	0.017	9	73	0.0	0.0	7.202	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1292	1501	0.330	497	663	0.8	0.5	3.629	A
2 - A41 N	1317	329	343	3194	0.412	1318	1447	1.1	0.7	1.998	A
3 - Site Access	166	42	1602	1380	0.121	167	59	0.2	0.1	2.983	A
4 - A41 S	1560	390	444	2831	0.551	1564	1325	2.3	1.3	2.946	A
5 - Park and Ride	7	2	1948	726	0.010	7	59	0.0	0.0	5.010	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1081	1626	0.255	415	555	0.5	0.3	3.009	A
2 - A41 N	1103	276	287	3239	0.341	1104	1210	0.7	0.5	1.756	A
3 - Site Access	139	35	1341	1541	0.090	139	49	0.1	0.1	2.581	A
4 - A41 S	1306	327	371	2885	0.453	1308	1109	1.3	0.9	2.360	A
5 - Park and Ride	6	2	1630	886	0.007	6	50	0.0	0.0	4.093	A

2026 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.61	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	9	1 - Vendee Drive

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	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	873	100.000
2 - A41 N		ONE HOUR	✓	1230	100.000
3 - Site Access		ONE HOUR	✓	176	100.000
4 - A41 S		ONE HOUR	✓	1646	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	108	501	12
	2 - A41 N	105	63	0	1060	2
	3 - Site Access	22	140	0	10	4
	4 - A41 S	234	1265	85	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	10	10	10	10	10
	2 - A41 N	10	10	10	10	10
	3 - Site Access	10	10	10	10	10
	4 - A41 S	10	10	10	10	10
	5 - Park and Ride	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.77	13.65	3.5	B	801	1202
2 - A41 N	0.48	2.67	1.0	A	1129	1693
3 - Site Access	0.16	4.02	0.2	A	162	242
4 - A41 S	0.63	3.72	1.9	A	1510	2266
5 - Park and Ride	0.02	6.23	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	657	164	1172	1572	0.418	654	273	0.0	0.8	4.299	A
2 - A41 N	926	232	536	3040	0.305	924	1290	0.0	0.5	1.869	A
3 - Site Access	133	33	1314	1557	0.085	132	145	0.0	0.1	2.778	A
4 - A41 S	1239	310	262	2966	0.418	1236	1184	0.0	0.8	2.285	A
5 - Park and Ride	7	2	1438	982	0.007	7	60	0.0	0.0	4.060	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	785	196	1402	1437	0.546	783	326	0.8	1.3	6.037	A
2 - A41 N	1106	276	641	2956	0.374	1105	1544	0.5	0.7	2.140	A
3 - Site Access	158	40	1572	1398	0.113	158	174	0.1	0.1	3.192	A
4 - A41 S	1480	370	313	2928	0.505	1478	1417	0.8	1.1	2.729	A
5 - Park and Ride	8	2	1720	840	0.010	8	72	0.0	0.0	4.758	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	961	240	1716	1251	0.768	953	399	1.3	3.4	12.910	B
2 - A41 N	1354	339	781	2844	0.476	1353	1888	0.7	1.0	2.653	A
3 - Site Access	194	48	1921	1183	0.164	193	212	0.1	0.2	4.001	A
4 - A41 S	1812	453	384	2876	0.630	1809	1731	1.1	1.9	3.702	A
5 - Park and Ride	10	2	2105	647	0.015	10	88	0.0	0.0	6.216	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	961	240	1719	1250	0.769	961	400	3.4	3.5	13.649	B
2 - A41 N	1354	339	787	2839	0.477	1354	1892	1.0	1.0	2.665	A
3 - Site Access	194	48	1928	1179	0.164	194	214	0.2	0.2	4.018	A
4 - A41 S	1812	453	384	2875	0.630	1812	1737	1.9	1.9	3.724	A
5 - Park and Ride	10	2	2108	645	0.015	10	88	0.0	0.0	6.232	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	785	196	1406	1434	0.547	794	327	3.5	1.3	6.265	A
2 - A41 N	1106	276	649	2949	0.375	1107	1550	1.0	0.7	2.152	A
3 - Site Access	158	40	1581	1393	0.114	159	176	0.2	0.1	3.209	A
4 - A41 S	1480	370	314	2927	0.505	1483	1425	1.9	1.1	2.745	A
5 - Park and Ride	8	2	1725	838	0.010	8	72	0.0	0.0	4.772	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	657	164	1176	1570	0.419	659	274	1.3	0.8	4.360	A
2 - A41 N	926	232	540	3037	0.305	927	1296	0.7	0.5	1.876	A
3 - Site Access	133	33	1320	1554	0.085	133	146	0.1	0.1	2.786	A
4 - A41 S	1239	310	263	2966	0.418	1241	1190	1.1	0.8	2.297	A
5 - Park and Ride	7	2	1443	979	0.007	7	60	0.0	0.0	4.071	A

2026 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.32	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	22	5 - Park and Ride

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	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	559	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	442	100.000
4 - A41 S		ONE HOUR	✓	1743	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	37	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	112	241	0	85	4
	4 - A41 S	458	1216	27	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.49	5.64	1.0	A	513	769
2 - A41 N	0.52	2.39	1.1	A	1344	2016
3 - Site Access	0.42	5.35	0.7	A	406	608
4 - A41 S	0.74	5.24	2.8	A	1599	2399
5 - Park and Ride	0.02	9.16	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	421	105	1167	1575	0.267	419	607	0.0	0.4	3.111	A
2 - A41 N	1103	276	297	3231	0.341	1101	1290	0.0	0.5	1.688	A
3 - Site Access	333	83	1337	1543	0.216	332	61	0.0	0.3	2.968	A
4 - A41 S	1312	328	509	2782	0.472	1309	1160	0.0	0.9	2.436	A
5 - Park and Ride	6	2	1768	816	0.007	6	50	0.0	0.0	4.443	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	503	126	1396	1440	0.349	502	726	0.4	0.5	3.835	A
2 - A41 N	1317	329	356	3184	0.414	1316	1543	0.5	0.7	1.926	A
3 - Site Access	397	99	1599	1382	0.288	397	73	0.3	0.4	3.652	A
4 - A41 S	1567	392	609	2708	0.579	1565	1387	0.9	1.4	3.144	A
5 - Park and Ride	7	2	2115	642	0.011	7	59	0.0	0.0	5.670	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	615	154	1707	1256	0.490	614	888	0.5	0.9	5.588	A
2 - A41 N	1613	403	435	3121	0.517	1612	1886	0.7	1.1	2.383	A
3 - Site Access	487	122	1957	1161	0.419	485	89	0.4	0.7	5.320	A
4 - A41 S	1919	480	745	2607	0.736	1914	1698	1.4	2.7	5.153	A
5 - Park and Ride	9	2	2586	405	0.022	9	72	0.0	0.0	9.081	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	615	154	1712	1254	0.491	615	890	0.9	1.0	5.640	A
2 - A41 N	1613	403	436	3120	0.517	1613	1891	1.1	1.1	2.388	A
3 - Site Access	487	122	1960	1159	0.420	487	89	0.7	0.7	5.351	A
4 - A41 S	1919	480	746	2606	0.737	1919	1700	2.7	2.8	5.240	A
5 - Park and Ride	9	2	2593	402	0.022	9	73	0.0	0.0	9.158	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	503	126	1403	1436	0.350	504	728	1.0	0.5	3.870	A
2 - A41 N	1317	329	357	3183	0.414	1318	1550	1.1	0.7	1.933	A
3 - Site Access	397	99	1603	1380	0.288	399	73	0.7	0.4	3.676	A
4 - A41 S	1567	392	611	2707	0.579	1572	1390	2.8	1.4	3.191	A
5 - Park and Ride	7	2	2124	637	0.011	7	60	0.0	0.0	5.711	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	421	105	1172	1572	0.268	422	609	0.5	0.4	3.130	A
2 - A41 N	1103	276	299	3229	0.342	1104	1295	0.7	0.5	1.693	A
3 - Site Access	333	83	1341	1541	0.216	333	61	0.4	0.3	2.981	A
4 - A41 S	1312	328	511	2781	0.472	1314	1163	1.4	0.9	2.459	A
5 - Park and Ride	6	2	1775	812	0.007	6	50	0.0	0.0	4.463	A

2031 Base , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.31	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	10	1 - Vendee Drive

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
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	863	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	208	100.000
4 - A41 S		ONE HOUR	✓	1647	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	31	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	14	186	0	1	7
	4 - A41 S	256	1292	11	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	26	11	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.76	12.79	3.3	B	792	1188
2 - A41 N	0.50	2.61	1.1	A	1234	1851
3 - Site Access	0.21	4.07	0.3	A	191	286
4 - A41 S	0.64	3.75	1.9	A	1511	2267
5 - Park and Ride	0.02	5.80	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1172	1572	0.413	647	291	0.0	0.7	4.145	A
2 - A41 N	1013	253	411	3140	0.322	1011	1408	0.0	0.5	1.847	A
3 - Site Access	157	39	1388	1512	0.104	156	33	0.0	0.1	2.655	A
4 - A41 S	1240	310	291	2944	0.421	1237	1253	0.0	0.8	2.258	A
5 - Park and Ride	8	2	1455	973	0.009	8	73	0.0	0.0	3.729	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1402	1437	0.540	774	349	0.7	1.2	5.789	A
2 - A41 N	1209	302	491	3075	0.393	1208	1684	0.5	0.7	2.107	A
3 - Site Access	187	47	1660	1344	0.139	187	39	0.1	0.2	3.110	A
4 - A41 S	1481	370	349	2902	0.510	1479	1499	0.8	1.1	2.712	A
5 - Park and Ride	10	2	1741	830	0.012	10	87	0.0	0.0	4.389	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1716	1251	0.759	942	427	1.2	3.2	12.157	B
2 - A41 N	1481	370	599	2990	0.495	1479	2060	0.7	1.1	2.604	A
3 - Site Access	229	57	2030	1116	0.205	229	48	0.2	0.3	4.054	A
4 - A41 S	1813	453	427	2844	0.638	1810	1832	1.1	1.9	3.726	A
5 - Park and Ride	12	3	2130	634	0.019	12	107	0.0	0.0	5.786	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1719	1250	0.760	950	427	3.2	3.3	12.788	B
2 - A41 N	1481	370	603	2986	0.496	1481	2065	1.1	1.1	2.615	A
3 - Site Access	229	57	2036	1113	0.206	229	48	0.3	0.3	4.074	A
4 - A41 S	1813	453	427	2843	0.638	1813	1837	1.9	1.9	3.748	A
5 - Park and Ride	12	3	2134	632	0.019	12	107	0.0	0.0	5.802	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1406	1434	0.541	784	349	3.3	1.3	5.990	A
2 - A41 N	1209	302	498	3071	0.394	1211	1692	1.1	0.7	2.120	A
3 - Site Access	187	47	1668	1339	0.140	187	40	0.3	0.2	3.128	A
4 - A41 S	1481	370	349	2901	0.510	1484	1506	1.9	1.1	2.729	A
5 - Park and Ride	10	2	1746	827	0.012	10	87	0.0	0.0	4.405	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1176	1570	0.414	652	292	1.3	0.8	4.201	A
2 - A41 N	1013	253	414	3137	0.323	1013	1414	0.7	0.5	1.856	A
3 - Site Access	157	39	1394	1508	0.104	157	33	0.2	0.1	2.665	A
4 - A41 S	1240	310	292	2944	0.421	1241	1258	1.1	0.8	2.269	A
5 - Park and Ride	8	2	1461	971	0.009	8	73	0.0	0.0	3.740	A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.37	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	26	4 - A41 S

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
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	621	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	234	100.000
4 - A41 S		ONE HOUR	✓	1802	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	34	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	41	175	0	14	4
	4 - A41 S	468	1204	20	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	4	0
	3 - Site Access	0	0	0	7	0
	4 - A41 S	2	5	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.52	5.81	1.1	A	570	855
2 - A41 N	0.58	2.83	1.4	A	1509	2264
3 - Site Access	0.25	4.72	0.3	A	215	322
4 - A41 S	0.74	5.22	2.8	A	1654	2480
5 - Park and Ride	0.02	7.78	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1104	1613	0.290	466	576	0.0	0.4	3.166	A
2 - A41 N	1238	310	293	3234	0.383	1236	1277	0.0	0.6	1.860	A
3 - Site Access	176	44	1487	1451	0.121	176	41	0.0	0.1	2.832	A
4 - A41 S	1357	339	424	2846	0.477	1353	1239	0.0	0.9	2.497	A
5 - Park and Ride	6	2	1674	864	0.007	6	103	0.0	0.0	4.197	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1320	1485	0.376	557	689	0.4	0.6	3.916	A
2 - A41 N	1479	370	350	3188	0.464	1478	1527	0.6	0.9	2.174	A
3 - Site Access	210	53	1779	1271	0.165	210	49	0.1	0.2	3.406	A
4 - A41 S	1620	405	507	2784	0.582	1618	1482	0.9	1.4	3.199	A
5 - Park and Ride	7	2	2002	699	0.010	7	123	0.0	0.0	5.204	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1614	1311	0.521	682	843	0.6	1.1	5.757	A
2 - A41 N	1811	453	428	3126	0.579	1809	1868	0.9	1.4	2.820	A
3 - Site Access	258	64	2177	1025	0.251	257	60	0.2	0.3	4.701	A
4 - A41 S	1984	496	620	2700	0.735	1978	1814	1.4	2.8	5.142	A
5 - Park and Ride	9	2	2448	475	0.019	9	150	0.0	0.0	7.729	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1618	1309	0.522	684	844	1.1	1.1	5.814	A
2 - A41 N	1811	453	429	3125	0.580	1811	1873	1.4	1.4	2.831	A
3 - Site Access	258	64	2180	1023	0.252	258	61	0.3	0.3	4.718	A
4 - A41 S	1984	496	621	2699	0.735	1984	1817	2.8	2.8	5.224	A
5 - Park and Ride	9	2	2454	472	0.019	9	151	0.0	0.0	7.779	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1326	1482	0.377	560	691	1.1	0.6	3.953	A
2 - A41 N	1479	370	352	3187	0.464	1481	1534	1.4	0.9	2.183	A
3 - Site Access	210	53	1783	1268	0.166	211	50	0.3	0.2	3.418	A
4 - A41 S	1620	405	508	2783	0.582	1626	1486	2.8	1.5	3.245	A
5 - Park and Ride	7	2	2010	695	0.010	7	124	0.0	0.0	5.238	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1108	1610	0.290	468	578	0.6	0.4	3.188	A
2 - A41 N	1238	310	294	3233	0.383	1239	1283	0.9	0.6	1.866	A
3 - Site Access	176	44	1492	1448	0.122	176	41	0.2	0.1	2.842	A
4 - A41 S	1357	339	425	2845	0.477	1359	1243	1.5	1.0	2.519	A
5 - Park and Ride	6	2	1680	860	0.007	6	103	0.0	0.0	4.214	A

2031 Base + Dev , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	7.42	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	3	1 - Vendee Drive

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
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	937	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	240	100.000
4 - A41 S		ONE HOUR	✓	1721	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	105	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	23	200	0	10	7
	4 - A41 S	256	1292	85	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.87	21.64	5.9	C	860	1290
2 - A41 N	0.52	2.62	1.1	A	1234	1851
3 - Site Access	0.24	4.24	0.3	A	220	330
4 - A41 S	0.67	3.87	2.0	A	1579	2369
5 - Park and Ride	0.02	6.35	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	705	176	1238	1533	0.460	702	298	0.0	0.8	4.315	A
2 - A41 N	1013	253	522	3051	0.332	1011	1419	0.0	0.5	1.762	A
3 - Site Access	181	45	1388	1512	0.120	180	144	0.0	0.1	2.701	A
4 - A41 S	1296	324	309	2932	0.442	1293	1260	0.0	0.8	2.193	A
5 - Park and Ride	8	2	1528	937	0.009	8	73	0.0	0.0	3.877	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	842	211	1481	1390	0.606	840	357	0.8	1.5	6.511	A
2 - A41 N	1209	302	624	2970	0.407	1208	1697	0.5	0.7	2.042	A
3 - Site Access	216	54	1660	1344	0.161	216	172	0.1	0.2	3.189	A
4 - A41 S	1547	387	369	2887	0.536	1546	1506	0.8	1.1	2.682	A
5 - Park and Ride	10	2	1828	786	0.013	10	87	0.0	0.0	4.637	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1032	258	1812	1194	0.864	1016	436	1.5	5.5	18.714	C
2 - A41 N	1481	370	756	2864	0.517	1479	2072	0.7	1.1	2.597	A
3 - Site Access	264	66	2026	1119	0.236	264	209	0.2	0.3	4.210	A
4 - A41 S	1895	474	452	2825	0.671	1891	1838	1.1	2.0	3.842	A
5 - Park and Ride	12	3	2237	581	0.021	12	107	0.0	0.0	6.330	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1032	258	1816	1193	0.865	1030	437	5.5	5.9	21.639	C
2 - A41 N	1481	370	765	2857	0.518	1481	2080	1.1	1.1	2.615	A
3 - Site Access	264	66	2035	1113	0.237	264	211	0.3	0.3	4.241	A
4 - A41 S	1895	474	453	2825	0.671	1895	1847	2.0	2.0	3.872	A
5 - Park and Ride	12	3	2241	579	0.021	12	107	0.0	0.0	6.351	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	842	211	1486	1387	0.607	860	358	5.9	1.6	7.038	A
2 - A41 N	1209	302	637	2959	0.409	1211	1708	1.1	0.7	2.060	A
3 - Site Access	216	54	1673	1336	0.161	216	175	0.3	0.2	3.217	A
4 - A41 S	1547	387	370	2886	0.536	1551	1519	2.0	1.2	2.704	A
5 - Park and Ride	10	2	1833	783	0.013	10	87	0.0	0.0	4.656	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	705	176	1243	1530	0.461	708	299	1.6	0.9	4.394	A
2 - A41 N	1013	253	526	3048	0.332	1013	1425	0.7	0.5	1.771	A
3 - Site Access	181	45	1394	1508	0.120	181	145	0.2	0.1	2.714	A
4 - A41 S	1296	324	310	2931	0.442	1297	1265	1.2	0.8	2.205	A
5 - Park and Ride	8	2	1534	934	0.009	8	73	0.0	0.0	3.890	A

2031 Base + Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	5.29	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	19	4 - A41 S

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
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	629	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	491	100.000
4 - A41 S		ONE HOUR	✓	1810	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	42	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	113	288	0	86	4
	4 - A41 S	468	1204	28	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.56	6.69	1.3	A	577	866
2 - A41 N	0.58	2.77	1.4	A	1509	2264
3 - Site Access	0.53	7.45	1.1	A	451	676
4 - A41 S	0.78	6.48	3.5	A	1661	2491
5 - Park and Ride	0.02	10.11	0.0	B	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	474	118	1194	1559	0.304	472	630	0.0	0.4	3.304	A
2 - A41 N	1238	310	305	3225	0.384	1236	1361	0.0	0.6	1.808	A
3 - Site Access	370	92	1487	1451	0.255	368	53	0.0	0.3	3.321	A
4 - A41 S	1363	341	562	2743	0.497	1359	1293	0.0	1.0	2.593	A
5 - Park and Ride	6	2	1818	791	0.008	6	103	0.0	0.0	4.585	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	565	141	1428	1421	0.398	565	753	0.4	0.7	4.198	A
2 - A41 N	1479	370	364	3177	0.465	1478	1628	0.6	0.9	2.118	A
3 - Site Access	441	110	1779	1271	0.347	441	64	0.3	0.5	4.331	A
4 - A41 S	1627	407	672	2661	0.612	1625	1547	1.0	1.6	3.468	A
5 - Park and Ride	7	2	2174	612	0.012	7	123	0.0	0.0	5.951	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	693	173	1745	1234	0.561	690	921	0.7	1.3	6.589	A
2 - A41 N	1811	453	445	3112	0.582	1809	1990	0.9	1.4	2.757	A
3 - Site Access	541	135	2177	1026	0.527	538	78	0.5	1.1	7.356	A
4 - A41 S	1993	498	822	2549	0.782	1985	1893	1.6	3.5	6.297	A
5 - Park and Ride	9	2	2657	369	0.024	9	150	0.0	0.0	9.979	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	693	173	1752	1230	0.563	692	924	1.3	1.3	6.690	A
2 - A41 N	1811	453	447	3111	0.582	1811	1997	1.4	1.4	2.769	A
3 - Site Access	541	135	2180	1024	0.528	541	78	1.1	1.1	7.453	A
4 - A41 S	1993	498	825	2547	0.782	1993	1896	3.5	3.5	6.479	A
5 - Park and Ride	9	2	2666	365	0.024	9	151	0.0	0.0	10.110	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	565	141	1437	1416	0.399	568	757	1.3	0.7	4.258	A
2 - A41 N	1479	370	367	3175	0.466	1481	1638	1.4	0.9	2.126	A
3 - Site Access	441	110	1783	1268	0.348	444	64	1.1	0.5	4.379	A
4 - A41 S	1627	407	676	2658	0.612	1635	1551	3.5	1.6	3.542	A
5 - Park and Ride	7	2	2187	606	0.012	7	124	0.0	0.0	6.014	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	474	118	1200	1556	0.304	474	633	0.7	0.4	3.331	A
2 - A41 N	1238	310	306	3223	0.384	1239	1368	0.9	0.6	1.817	A
3 - Site Access	370	92	1492	1448	0.255	370	54	0.5	0.3	3.343	A
4 - A41 S	1363	341	565	2741	0.497	1365	1298	1.6	1.0	2.620	A
5 - Park and Ride	6	2	1826	787	0.008	6	103	0.0	0.0	4.612	A

2031 SEPR Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.52	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	30	1 - Vendee Drive

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
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	886	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	156	100.000
4 - A41 S		ONE HOUR	✓	1209	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	42	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	9	137	0	2	8
	4 - A41 S	285	831	18	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	19	10	0
	2 - A41 N	0	0	0	12	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.62	6.38	1.7	A	813	1220
2 - A41 N	0.24	1.74	0.3	A	585	877
3 - Site Access	0.11	2.58	0.1	A	143	215
4 - A41 S	0.46	2.48	0.9	A	1109	1664
5 - Park and Ride	0.01	4.07	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	795	1795	0.372	665	311	0.0	0.6	3.385	A
2 - A41 N	480	120	453	3106	0.154	479	1006	0.0	0.2	1.483	A
3 - Site Access	117	29	885	1822	0.064	117	47	0.0	0.1	2.111	A
4 - A41 S	910	228	263	2966	0.307	908	739	0.0	0.5	1.862	A
5 - Park and Ride	8	2	1098	1153	0.007	8	74	0.0	0.0	3.144	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	951	1703	0.468	795	372	0.6	0.9	4.219	A
2 - A41 N	573	143	542	3035	0.189	572	1204	0.2	0.3	1.582	A
3 - Site Access	140	35	1059	1715	0.082	140	56	0.1	0.1	2.285	A
4 - A41 S	1087	272	314	2927	0.371	1086	885	0.5	0.6	2.083	A
5 - Park and Ride	10	2	1313	1045	0.009	10	88	0.0	0.0	3.477	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1164	1577	0.619	972	455	0.9	1.7	6.312	A
2 - A41 N	701	175	663	2938	0.239	701	1473	0.3	0.3	1.741	A
3 - Site Access	172	43	1296	1569	0.109	172	68	0.1	0.1	2.576	A
4 - A41 S	1331	333	385	2875	0.463	1330	1082	0.6	0.9	2.482	A
5 - Park and Ride	12	3	1607	897	0.014	12	108	0.0	0.0	4.068	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1165	1576	0.619	975	456	1.7	1.7	6.376	A
2 - A41 N	701	175	665	2937	0.239	701	1475	0.3	0.3	1.742	A
3 - Site Access	172	43	1298	1568	0.110	172	68	0.1	0.1	2.578	A
4 - A41 S	1331	333	385	2875	0.463	1331	1084	0.9	0.9	2.484	A
5 - Park and Ride	12	3	1609	896	0.014	12	108	0.0	0.0	4.071	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	952	1702	0.468	800	373	1.7	0.9	4.262	A
2 - A41 N	573	143	545	3033	0.189	573	1207	0.3	0.3	1.584	A
3 - Site Access	140	35	1062	1713	0.082	140	56	0.1	0.1	2.288	A
4 - A41 S	1087	272	315	2927	0.371	1088	888	0.9	0.6	2.086	A
5 - Park and Ride	10	2	1315	1044	0.009	10	88	0.0	0.0	3.480	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	797	1794	0.372	668	312	0.9	0.6	3.410	A
2 - A41 N	480	120	456	3104	0.154	480	1010	0.3	0.2	1.484	A
3 - Site Access	117	29	889	1820	0.065	118	47	0.1	0.1	2.115	A
4 - A41 S	910	228	264	2965	0.307	911	742	0.6	0.5	1.869	A
5 - Park and Ride	8	2	1101	1151	0.007	8	74	0.0	0.0	3.148	A

2031 SEPR Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.60	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	602	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	203	100.000
4 - A41 S		ONE HOUR	✓	1668	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	33	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	29	153	0	16	5
	4 - A41 S	493	1048	22	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	2	0
	3 - Site Access	0	0	0	6	0
	4 - A41 S	2	2	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	4.77	0.9	A	552	829
2 - A41 N	0.43	2.07	0.8	A	1119	1678
3 - Site Access	0.17	3.35	0.2	A	186	279
4 - A41 S	0.68	4.32	2.2	A	1531	2296
5 - Park and Ride	0.02	6.84	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	969	1692	0.268	452	625	0.0	0.4	2.928	A
2 - A41 N	918	229	305	3224	0.285	916	1115	0.0	0.4	1.585	A
3 - Site Access	153	38	1180	1641	0.093	152	42	0.0	0.1	2.430	A
4 - A41 S	1256	314	436	2836	0.443	1253	895	0.0	0.8	2.310	A
5 - Park and Ride	6	2	1588	907	0.007	6	101	0.0	0.0	3.996	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1159	1580	0.342	541	747	0.4	0.5	3.497	A
2 - A41 N	1096	274	365	3176	0.345	1095	1334	0.4	0.5	1.758	A
3 - Site Access	182	46	1411	1498	0.122	182	50	0.1	0.1	2.747	A
4 - A41 S	1499	375	522	2773	0.541	1498	1071	0.8	1.2	2.872	A
5 - Park and Ride	7	2	1899	751	0.010	7	121	0.0	0.0	4.842	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1418	1427	0.464	661	915	0.5	0.9	4.741	A
2 - A41 N	1342	336	447	3111	0.431	1341	1632	0.5	0.8	2.066	A
3 - Site Access	224	56	1727	1303	0.172	223	62	0.1	0.2	3.349	A
4 - A41 S	1837	459	639	2686	0.684	1833	1311	1.2	2.2	4.278	A
5 - Park and Ride	9	2	2323	537	0.016	9	148	0.0	0.0	6.812	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1420	1426	0.465	663	916	0.9	0.9	4.768	A
2 - A41 N	1342	336	448	3110	0.432	1342	1635	0.8	0.8	2.069	A
3 - Site Access	224	56	1729	1302	0.172	224	62	0.2	0.2	3.352	A
4 - A41 S	1837	459	640	2685	0.684	1836	1312	2.2	2.2	4.319	A
5 - Park and Ride	9	2	2327	535	0.016	9	149	0.0	0.0	6.839	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1162	1578	0.343	543	749	0.9	0.5	3.517	A
2 - A41 N	1096	274	367	3175	0.345	1097	1338	0.8	0.5	1.763	A
3 - Site Access	182	46	1413	1497	0.122	183	50	0.2	0.1	2.754	A
4 - A41 S	1499	375	523	2772	0.541	1503	1073	2.2	1.2	2.900	A
5 - Park and Ride	7	2	1905	748	0.010	7	122	0.0	0.0	4.862	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	972	1690	0.268	454	627	0.5	0.4	2.943	A
2 - A41 N	918	229	307	3223	0.285	918	1119	0.5	0.4	1.589	A
3 - Site Access	153	38	1183	1639	0.093	153	42	0.1	0.1	2.435	A
4 - A41 S	1256	314	438	2836	0.443	1257	898	1.2	0.8	2.326	A
5 - Park and Ride	6	2	1593	904	0.007	6	102	0.0	0.0	4.009	A

2031 SEPR Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	3.99	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	21	1 - Vendee Drive

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
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	960	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	188	100.000
4 - A41 S		ONE HOUR	✓	1283	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	116	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	18	151	0	11	8
	4 - A41 S	285	831	92	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.70	7.78	2.3	A	881	1321
2 - A41 N	0.25	1.71	0.3	A	585	877
3 - Site Access	0.13	2.64	0.2	A	173	259
4 - A41 S	0.49	2.49	1.0	A	1177	1766
5 - Park and Ride	0.01	4.33	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	723	181	861	1756	0.412	720	318	0.0	0.7	3.467	A
2 - A41 N	480	120	564	3017	0.159	479	1017	0.0	0.2	1.417	A
3 - Site Access	142	35	885	1822	0.078	141	158	0.0	0.1	2.141	A
4 - A41 S	966	241	280	2953	0.327	964	746	0.0	0.5	1.808	A
5 - Park and Ride	8	2	1171	1116	0.007	8	74	0.0	0.0	3.248	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	863	216	1030	1656	0.521	861	380	0.7	1.1	4.521	A
2 - A41 N	573	143	675	2929	0.196	572	1216	0.2	0.2	1.527	A
3 - Site Access	169	42	1059	1715	0.099	169	189	0.1	0.1	2.328	A
4 - A41 S	1153	288	335	2912	0.396	1153	893	0.5	0.7	2.046	A
5 - Park and Ride	10	2	1400	1001	0.010	10	88	0.0	0.0	3.630	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1057	264	1261	1520	0.695	1052	465	1.1	2.2	7.624	A
2 - A41 N	701	175	825	2809	0.250	701	1488	0.2	0.3	1.707	A
3 - Site Access	207	52	1295	1569	0.132	207	231	0.1	0.2	2.642	A
4 - A41 S	1413	353	410	2856	0.495	1411	1092	0.7	1.0	2.489	A
5 - Park and Ride	12	3	1714	843	0.014	12	108	0.0	0.0	4.330	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1057	264	1262	1519	0.696	1057	466	2.2	2.3	7.778	A
2 - A41 N	701	175	828	2807	0.250	701	1491	0.3	0.3	1.709	A
3 - Site Access	207	52	1298	1568	0.132	207	231	0.2	0.2	2.645	A
4 - A41 S	1413	353	411	2856	0.495	1413	1094	1.0	1.0	2.494	A
5 - Park and Ride	12	3	1715	843	0.014	12	108	0.0	0.0	4.334	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	863	216	1031	1655	0.521	868	381	2.3	1.1	4.598	A
2 - A41 N	573	143	679	2925	0.196	573	1220	0.3	0.2	1.532	A
3 - Site Access	169	42	1063	1713	0.099	169	189	0.2	0.1	2.334	A
4 - A41 S	1153	288	336	2912	0.396	1155	896	1.0	0.7	2.050	A
5 - Park and Ride	10	2	1402	1000	0.010	10	88	0.0	0.0	3.635	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	723	181	863	1754	0.412	724	319	1.1	0.7	3.502	A
2 - A41 N	480	120	567	3015	0.159	480	1020	0.2	0.2	1.419	A
3 - Site Access	142	35	889	1820	0.078	142	158	0.1	0.1	2.146	A
4 - A41 S	966	241	281	2952	0.327	967	749	0.7	0.5	1.812	A
5 - Park and Ride	8	2	1174	1115	0.007	8	74	0.0	0.0	3.255	A

2031 SEPR Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.19	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	25	4 - A41 S

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
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	610	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	460	100.000
4 - A41 S		ONE HOUR	✓	1676	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	41	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	101	266	0	88	5
	4 - A41 S	493	1048	30	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.50	5.33	1.0	A	560	840
2 - A41 N	0.43	2.05	0.8	A	1119	1678
3 - Site Access	0.39	4.52	0.6	A	422	633
4 - A41 S	0.73	5.23	2.7	A	1538	2307
5 - Park and Ride	0.02	8.58	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	459	115	1059	1639	0.280	458	679	0.0	0.4	3.044	A
2 - A41 N	918	229	317	3214	0.286	916	1200	0.0	0.4	1.566	A
3 - Site Access	346	87	1179	1641	0.211	345	54	0.0	0.3	2.776	A
4 - A41 S	1262	315	575	2733	0.462	1258	949	0.0	0.9	2.436	A
5 - Park and Ride	6	2	1732	834	0.007	6	101	0.0	0.0	4.346	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	548	137	1267	1516	0.362	548	812	0.4	0.6	3.715	A
2 - A41 N	1096	274	380	3165	0.346	1095	1435	0.4	0.5	1.739	A
3 - Site Access	414	103	1410	1498	0.276	413	65	0.3	0.4	3.315	A
4 - A41 S	1507	377	688	2649	0.569	1505	1135	0.9	1.3	3.140	A
5 - Park and Ride	7	2	2072	664	0.011	7	121	0.0	0.0	5.483	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	672	168	1550	1350	0.498	670	993	0.6	1.0	5.285	A
2 - A41 N	1342	336	465	3097	0.433	1341	1755	0.5	0.8	2.049	A
3 - Site Access	506	127	1727	1303	0.389	505	79	0.4	0.6	4.508	A
4 - A41 S	1845	461	842	2534	0.728	1840	1390	1.3	2.6	5.146	A
5 - Park and Ride	9	2	2534	431	0.020	9	148	0.0	0.0	8.519	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	672	168	1553	1347	0.499	672	995	1.0	1.0	5.328	A
2 - A41 N	1342	336	466	3096	0.434	1342	1759	0.8	0.8	2.052	A
3 - Site Access	506	127	1729	1302	0.389	506	79	0.6	0.6	4.525	A
4 - A41 S	1845	461	843	2534	0.728	1845	1392	2.6	2.7	5.228	A
5 - Park and Ride	9	2	2540	428	0.021	9	149	0.0	0.0	8.579	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	548	137	1273	1513	0.362	550	815	1.0	0.6	3.744	A
2 - A41 N	1096	274	381	3163	0.346	1097	1441	0.8	0.5	1.744	A
3 - Site Access	414	103	1413	1496	0.276	415	65	0.6	0.4	3.329	A
4 - A41 S	1507	377	690	2648	0.569	1512	1138	2.7	1.3	3.183	A
5 - Park and Ride	7	2	2080	659	0.011	7	122	0.0	0.0	5.521	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	459	115	1064	1636	0.281	460	681	0.6	0.4	3.064	A
2 - A41 N	918	229	319	3213	0.286	918	1205	0.5	0.4	1.568	A
3 - Site Access	346	87	1183	1639	0.211	347	54	0.4	0.3	2.789	A
4 - A41 S	1262	315	577	2732	0.462	1264	952	1.3	0.9	2.456	A
5 - Park and Ride	6	2	1739	831	0.007	6	102	0.0	0.0	4.366	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

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

Filename: Sc 4 B1b.j9
Path: P:\19000's\19539\Technical\Junction models
Report generation date: 13/06/2019 16:03:18

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Res Cap	Q (PCU)	Delay (s)	RFC	Res Cap
	2026 Base							
1 - Vendee Drive	2.2	9.00	0.67	18 % [1 - Vendee Drive]	0.8	5.01	0.46	34 % [4 - A41 S]
2 - A41 N	0.9	2.44	0.46		1.1	2.46	0.51	
3 - Site Access	0.2	3.53	0.13		0.2	3.79	0.18	
4 - A41 S	1.6	3.33	0.60		2.3	4.39	0.69	
5 - Park and Ride	0.0	5.22	0.01		0.0	7.20	0.02	
	2026 Base + Dev							
1 - Vendee Drive	3.7	14.14	0.78	9 % [1 - Vendee Drive]	1.0	5.72	0.50	24 % [5 - Park and Ride]
2 - A41 N	1.0	2.66	0.48		1.1	2.42	0.52	
3 - Site Access	0.3	4.14	0.19		0.6	4.83	0.36	
4 - A41 S	1.9	3.77	0.63		2.7	5.02	0.73	
5 - Park and Ride	0.0	6.34	0.02		0.0	8.71	0.02	
	2031 Base							
1 - Vendee Drive	3.3	12.79	0.76	10 % [1 - Vendee Drive]	1.1	5.81	0.52	26 % [4 - A41 S]
2 - A41 N	1.1	2.61	0.50		1.4	2.83	0.58	
3 - Site Access	0.3	4.07	0.21		0.3	4.72	0.25	
4 - A41 S	1.9	3.75	0.64		2.8	5.22	0.74	
5 - Park and Ride	0.0	5.80	0.02		0.0	7.78	0.02	
	2031 Base + Dev							
1 - Vendee Drive	6.3	22.95	0.87	3 % [1 - Vendee Drive]	1.3	6.80	0.57	20 % [4 - A41 S]
2 - A41 N	1.1	2.61	0.52		1.4	2.81	0.59	
3 - Site Access	0.4	4.39	0.26		0.8	6.48	0.46	
4 - A41 S	2.0	3.93	0.67		3.4	6.15	0.77	
5 - Park and Ride	0.0	6.47	0.02		0.0	9.56	0.02	
	2031 SEPR Base							
1 - Vendee Drive	1.7	6.38	0.62	30 % [1 - Vendee Drive]	0.9	4.77	0.46	34 % [4 - A41 S]
2 - A41 N	0.3	1.74	0.24		0.8	2.07	0.43	
3 - Site Access	0.1	2.58	0.11		0.2	3.35	0.17	
4 - A41 S	0.9	2.48	0.46		2.2	4.32	0.68	
5 - Park and Ride	0.0	4.07	0.01		0.0	6.84	0.02	
	2031 SEPR Base + Dev							
1 - Vendee Drive	2.3	7.95	0.70	20 % [1 - Vendee Drive]	1.0	5.39	0.51	27 % [4 - A41 S]
2 - A41 N	0.3	1.71	0.25		0.8	2.08	0.44	
3 - Site Access	0.2	2.70	0.15		0.5	4.15	0.33	
4 - A41 S	1.0	2.52	0.50		2.6	5.01	0.72	
5 - Park and Ride	0.0	4.39	0.01		0.0	8.18	0.02	

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	13/06/2019
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

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 SEPR Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.26	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	18	1 - Vendee Drive

Arms

Arms

Arm	Name	Description
1	Vendee Drive	
2	A41 N	
3	Site Access	
4	A41 S	
5	Park and Ride	

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Vendee Drive	3.75	8.20	92.0	20.0	70.0	35.0	
2 - A41 N	7.50	12.00	38.0	36.0	70.0	18.0	
3 - Site Access	3.50	10.50	32.0	20.0	70.0	22.5	
4 - A41 S	7.00	12.00	25.0	35.0	70.0	25.0	
5 - Park and Ride	3.50	8.00	14.0	15.0	70.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vendee Drive	0.590	2264
2 - A41 N	0.799	3468
3 - Site Access	0.617	2368
4 - A41 S	0.745	3161
5 - Park and Ride	0.502	1704

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)	Run automatically
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	799	100.000
2 - A41 N		ONE HOUR	✓	1232	100.000
3 - Site Access		ONE HOUR	✓	144	100.000
4 - A41 S		ONE HOUR	✓	1572	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	34	501	12
	2 - A41 N	105	63	0	1060	4
	3 - Site Access	13	126	0	1	4
	4 - A41 S	234	1265	11	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	21	10	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	3	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.67	9.00	2.2	A	733	1100
2 - A41 N	0.46	2.44	0.9	A	1131	1696
3 - Site Access	0.13	3.53	0.2	A	132	198
4 - A41 S	0.60	3.33	1.6	A	1442	2164
5 - Park and Ride	0.01	5.22	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1106	1611	0.373	599	266	0.0	0.6	3.792	A
2 - A41 N	928	232	425	3128	0.296	926	1280	0.0	0.5	1.784	A
3 - Site Access	108	27	1316	1556	0.070	108	35	0.0	0.1	2.485	A
4 - A41 S	1183	296	246	2978	0.397	1181	1178	0.0	0.7	2.149	A
5 - Park and Ride	7	2	1365	1018	0.007	7	62	0.0	0.0	3.557	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1323	1483	0.484	717	318	0.6	1.0	5.012	A
2 - A41 N	1108	277	509	3062	0.362	1107	1531	0.5	0.6	2.013	A
3 - Site Access	129	32	1574	1397	0.093	129	41	0.1	0.1	2.839	A
4 - A41 S	1413	353	295	2942	0.480	1412	1409	0.7	1.0	2.531	A
5 - Park and Ride	8	2	1633	884	0.009	8	74	0.0	0.0	4.109	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1620	1308	0.672	875	389	1.0	2.1	8.794	A
2 - A41 N	1356	339	621	2972	0.456	1355	1874	0.6	0.9	2.433	A
3 - Site Access	159	40	1926	1180	0.134	158	50	0.1	0.2	3.522	A
4 - A41 S	1731	433	361	2893	0.598	1728	1724	1.0	1.6	3.320	A
5 - Park and Ride	10	2	1999	700	0.014	10	90	0.0	0.0	5.215	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	880	220	1622	1307	0.673	880	390	2.1	2.2	8.996	A
2 - A41 N	1356	339	624	2969	0.457	1356	1877	0.9	0.9	2.439	A
3 - Site Access	159	40	1930	1178	0.135	159	51	0.2	0.2	3.531	A
4 - A41 S	1731	433	361	2893	0.598	1731	1727	1.6	1.6	3.334	A
5 - Park and Ride	10	2	2002	699	0.014	10	90	0.0	0.0	5.225	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	718	180	1326	1481	0.485	723	319	2.2	1.0	5.103	A
2 - A41 N	1108	277	513	3058	0.362	1109	1536	0.9	0.6	2.019	A
3 - Site Access	129	32	1580	1394	0.093	130	42	0.2	0.1	2.850	A
4 - A41 S	1413	353	295	2942	0.480	1416	1414	1.6	1.0	2.542	A
5 - Park and Ride	8	2	1637	882	0.009	8	74	0.0	0.0	4.120	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	602	150	1110	1609	0.374	603	267	1.0	0.6	3.830	A
2 - A41 N	928	232	428	3126	0.297	928	1285	0.6	0.5	1.792	A
3 - Site Access	108	27	1321	1553	0.070	109	35	0.1	0.1	2.491	A
4 - A41 S	1183	296	247	2977	0.397	1185	1183	1.0	0.7	2.163	A
5 - Park and Ride	7	2	1370	1016	0.007	7	62	0.0	0.0	3.568	A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.74	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	551	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	185	100.000
4 - A41 S		ONE HOUR	✓	1735	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	29	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	40	128	0	13	4
	4 - A41 S	458	1216	19	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	5	0
	3 - Site Access	0	0	0	8	0
	4 - A41 S	2	4	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	5.01	0.8	A	506	758
2 - A41 N	0.51	2.46	1.1	A	1344	2016
3 - Site Access	0.18	3.79	0.2	A	170	255
4 - A41 S	0.69	4.39	2.3	A	1592	2388
5 - Park and Ride	0.02	7.20	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1077	1628	0.255	413	553	0.0	0.3	2.993	A
2 - A41 N	1103	276	285	3240	0.340	1101	1205	0.0	0.5	1.749	A
3 - Site Access	139	35	1337	1543	0.090	139	49	0.0	0.1	2.576	A
4 - A41 S	1306	327	370	2886	0.453	1303	1106	0.0	0.9	2.345	A
5 - Park and Ride	6	2	1624	889	0.007	6	50	0.0	0.0	4.077	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1288	1504	0.329	495	661	0.3	0.5	3.604	A
2 - A41 N	1317	329	341	3195	0.412	1316	1441	0.5	0.7	1.992	A
3 - Site Access	166	42	1599	1382	0.120	166	58	0.1	0.1	2.976	A
4 - A41 S	1560	390	443	2832	0.551	1558	1322	0.9	1.3	2.916	A
5 - Park and Ride	7	2	1942	729	0.010	7	59	0.0	0.0	4.987	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1576	1334	0.455	605	809	0.5	0.8	4.984	A
2 - A41 N	1613	403	417	3135	0.515	1612	1763	0.7	1.1	2.457	A
3 - Site Access	204	51	1958	1161	0.175	203	71	0.1	0.2	3.780	A
4 - A41 S	1910	478	542	2758	0.693	1906	1619	1.3	2.3	4.347	A
5 - Park and Ride	9	2	2376	511	0.017	9	73	0.0	0.0	7.169	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	607	152	1579	1332	0.455	607	810	0.8	0.8	5.015	A
2 - A41 N	1613	403	418	3134	0.515	1613	1767	1.1	1.1	2.462	A
3 - Site Access	204	51	1960	1159	0.176	204	72	0.2	0.2	3.785	A
4 - A41 S	1910	478	543	2757	0.693	1910	1621	2.3	2.3	4.390	A
5 - Park and Ride	9	2	2380	509	0.017	9	73	0.0	0.0	7.202	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	495	124	1292	1501	0.330	497	663	0.8	0.5	3.629	A
2 - A41 N	1317	329	343	3194	0.412	1318	1447	1.1	0.7	1.998	A
3 - Site Access	166	42	1602	1380	0.121	167	59	0.2	0.1	2.983	A
4 - A41 S	1560	390	444	2831	0.551	1564	1325	2.3	1.3	2.946	A
5 - Park and Ride	7	2	1948	726	0.010	7	59	0.0	0.0	5.010	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	415	104	1081	1626	0.255	415	555	0.5	0.3	3.009	A
2 - A41 N	1103	276	287	3239	0.341	1104	1210	0.7	0.5	1.756	A
3 - Site Access	139	35	1341	1541	0.090	139	49	0.1	0.1	2.581	A
4 - A41 S	1306	327	371	2885	0.453	1308	1109	1.3	0.9	2.360	A
5 - Park and Ride	6	2	1630	886	0.007	6	50	0.0	0.0	4.093	A

2026 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.75	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	9	1 - Vendee Drive

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	2026 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	877	100.000
2 - A41 N		ONE HOUR	✓	1230	100.000
3 - Site Access		ONE HOUR	✓	203	100.000
4 - A41 S		ONE HOUR	✓	1640	100.000
5 - Park and Ride		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	251	112	501	12
	2 - A41 N	105	63	0	1060	2
	3 - Site Access	32	155	0	12	4
	4 - A41 S	234	1265	79	0	62
	5 - Park and Ride	1	0	1	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	10	10	10	10	10
	2 - A41 N	10	10	10	10	10
	3 - Site Access	10	10	10	10	10
	4 - A41 S	10	10	10	10	10
	5 - Park and Ride	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.78	14.14	3.7	B	805	1207
2 - A41 N	0.48	2.66	1.0	A	1129	1693
3 - Site Access	0.19	4.14	0.3	A	186	279
4 - A41 S	0.63	3.77	1.9	A	1505	2257
5 - Park and Ride	0.02	6.34	0.0	A	8	12

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	660	165	1179	1568	0.421	657	280	0.0	0.8	4.332	A
2 - A41 N	926	232	534	3041	0.304	924	1302	0.0	0.5	1.868	A
3 - Site Access	153	38	1314	1557	0.098	152	144	0.0	0.1	2.818	A
4 - A41 S	1235	309	281	2952	0.418	1232	1186	0.0	0.8	2.297	A
5 - Park and Ride	7	2	1452	975	0.007	7	60	0.0	0.0	4.090	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	788	197	1410	1432	0.551	786	335	0.8	1.3	6.113	A
2 - A41 N	1106	276	639	2957	0.374	1105	1557	0.5	0.7	2.138	A
3 - Site Access	182	46	1572	1398	0.131	182	172	0.1	0.2	3.255	A
4 - A41 S	1474	369	336	2911	0.506	1473	1419	0.8	1.1	2.750	A
5 - Park and Ride	8	2	1737	832	0.010	8	72	0.0	0.0	4.807	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	966	241	1726	1246	0.775	957	410	1.3	3.6	13.317	B
2 - A41 N	1354	339	778	2846	0.476	1353	1904	0.7	1.0	2.649	A
3 - Site Access	224	56	1921	1183	0.189	223	210	0.2	0.3	4.124	A
4 - A41 S	1806	451	411	2855	0.632	1803	1733	1.1	1.9	3.751	A
5 - Park and Ride	10	2	2126	636	0.016	10	88	0.0	0.0	6.320	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	966	241	1729	1244	0.776	965	411	3.6	3.7	14.141	B
2 - A41 N	1354	339	785	2841	0.477	1354	1909	1.0	1.0	2.662	A
3 - Site Access	224	56	1928	1179	0.190	224	211	0.3	0.3	4.143	A
4 - A41 S	1806	451	412	2855	0.632	1806	1739	1.9	1.9	3.773	A
5 - Park and Ride	10	2	2129	635	0.016	10	88	0.0	0.0	6.337	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	788	197	1414	1429	0.552	798	336	3.7	1.4	6.359	A
2 - A41 N	1106	276	648	2951	0.375	1107	1564	1.0	0.7	2.150	A
3 - Site Access	182	46	1581	1393	0.131	183	174	0.3	0.2	3.274	A
4 - A41 S	1474	369	337	2911	0.507	1477	1427	1.9	1.1	2.770	A
5 - Park and Ride	8	2	1742	829	0.010	8	72	0.0	0.0	4.824	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	660	165	1183	1566	0.422	663	281	1.4	0.8	4.395	A
2 - A41 N	926	232	538	3038	0.305	927	1307	0.7	0.5	1.875	A
3 - Site Access	153	38	1320	1554	0.098	153	145	0.2	0.1	2.828	A
4 - A41 S	1235	309	282	2952	0.418	1236	1191	1.1	0.8	2.311	A
5 - Park and Ride	7	2	1458	972	0.007	7	60	0.0	0.0	4.101	A

2026 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.20	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	24	5 - Park and Ride

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	2026 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	579	100.000
2 - A41 N		ONE HOUR	✓	1465	100.000
3 - Site Access		ONE HOUR	✓	376	100.000
4 - A41 S		ONE HOUR	✓	1746	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	196	57	303	22
	2 - A41 N	234	64	16	1151	0
	3 - Site Access	96	217	0	59	4
	4 - A41 S	458	1216	30	2	40
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.50	5.72	1.0	A	531	797
2 - A41 N	0.52	2.42	1.1	A	1344	2016
3 - Site Access	0.36	4.83	0.6	A	345	518
4 - A41 S	0.73	5.02	2.7	A	1602	2403
5 - Park and Ride	0.02	8.71	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	436	109	1152	1584	0.275	434	595	0.0	0.4	3.126	A
2 - A41 N	1103	276	314	3217	0.343	1101	1272	0.0	0.5	1.699	A
3 - Site Access	283	71	1337	1543	0.183	282	78	0.0	0.2	2.853	A
4 - A41 S	1314	329	479	2805	0.469	1311	1140	0.0	0.9	2.405	A
5 - Park and Ride	6	2	1741	830	0.007	6	50	0.0	0.0	4.368	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	521	130	1377	1451	0.359	520	711	0.4	0.6	3.863	A
2 - A41 N	1317	329	376	3168	0.416	1316	1521	0.5	0.7	1.943	A
3 - Site Access	338	85	1599	1382	0.245	338	93	0.2	0.3	3.447	A
4 - A41 S	1570	392	573	2735	0.574	1568	1364	0.9	1.3	3.079	A
5 - Park and Ride	7	2	2082	659	0.011	7	59	0.0	0.0	5.525	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	637	159	1685	1270	0.502	636	870	0.6	1.0	5.661	A
2 - A41 N	1613	403	460	3101	0.520	1612	1860	0.7	1.1	2.415	A
3 - Site Access	414	103	1957	1161	0.357	413	114	0.3	0.5	4.808	A
4 - A41 S	1922	481	701	2639	0.728	1917	1669	1.3	2.6	4.950	A
5 - Park and Ride	9	2	2546	425	0.021	9	72	0.0	0.0	8.642	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	637	159	1689	1267	0.503	637	872	1.0	1.0	5.715	A
2 - A41 N	1613	403	461	3100	0.520	1613	1865	1.1	1.1	2.421	A
3 - Site Access	414	103	1960	1159	0.357	414	115	0.5	0.6	4.829	A
4 - A41 S	1922	481	702	2638	0.729	1922	1671	2.6	2.7	5.025	A
5 - Park and Ride	9	2	2552	422	0.021	9	73	0.0	0.0	8.705	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	521	130	1383	1448	0.360	522	714	1.0	0.6	3.897	A
2 - A41 N	1317	329	378	3166	0.416	1318	1528	1.1	0.7	1.949	A
3 - Site Access	338	85	1603	1380	0.245	339	94	0.6	0.3	3.461	A
4 - A41 S	1570	392	575	2734	0.574	1575	1367	2.7	1.4	3.119	A
5 - Park and Ride	7	2	2090	654	0.011	7	60	0.0	0.0	5.562	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	436	109	1156	1581	0.276	437	597	0.6	0.4	3.145	A
2 - A41 N	1103	276	316	3216	0.343	1104	1277	0.7	0.5	1.707	A
3 - Site Access	283	71	1341	1541	0.184	283	78	0.3	0.2	2.865	A
4 - A41 S	1314	329	481	2803	0.469	1316	1144	1.4	0.9	2.425	A
5 - Park and Ride	6	2	1747	827	0.007	6	50	0.0	0.0	4.387	A

2031 Base , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.31	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	10	1 - Vendee Drive

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
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	863	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	208	100.000
4 - A41 S		ONE HOUR	✓	1647	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	31	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	14	186	0	1	7
	4 - A41 S	256	1292	11	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	26	11	0
	2 - A41 N	0	0	0	11	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.76	12.79	3.3	B	792	1188
2 - A41 N	0.50	2.61	1.1	A	1234	1851
3 - Site Access	0.21	4.07	0.3	A	191	286
4 - A41 S	0.64	3.75	1.9	A	1511	2267
5 - Park and Ride	0.02	5.80	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1172	1572	0.413	647	291	0.0	0.7	4.145	A
2 - A41 N	1013	253	411	3140	0.322	1011	1408	0.0	0.5	1.847	A
3 - Site Access	157	39	1388	1512	0.104	156	33	0.0	0.1	2.655	A
4 - A41 S	1240	310	291	2944	0.421	1237	1253	0.0	0.8	2.258	A
5 - Park and Ride	8	2	1455	973	0.009	8	73	0.0	0.0	3.729	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1402	1437	0.540	774	349	0.7	1.2	5.789	A
2 - A41 N	1209	302	491	3075	0.393	1208	1684	0.5	0.7	2.107	A
3 - Site Access	187	47	1660	1344	0.139	187	39	0.1	0.2	3.110	A
4 - A41 S	1481	370	349	2902	0.510	1479	1499	0.8	1.1	2.712	A
5 - Park and Ride	10	2	1741	830	0.012	10	87	0.0	0.0	4.389	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1716	1251	0.759	942	427	1.2	3.2	12.157	B
2 - A41 N	1481	370	599	2990	0.495	1479	2060	0.7	1.1	2.604	A
3 - Site Access	229	57	2030	1116	0.205	229	48	0.2	0.3	4.054	A
4 - A41 S	1813	453	427	2844	0.638	1810	1832	1.1	1.9	3.726	A
5 - Park and Ride	12	3	2130	634	0.019	12	107	0.0	0.0	5.786	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	950	238	1719	1250	0.760	950	427	3.2	3.3	12.788	B
2 - A41 N	1481	370	603	2986	0.496	1481	2065	1.1	1.1	2.615	A
3 - Site Access	229	57	2036	1113	0.206	229	48	0.3	0.3	4.074	A
4 - A41 S	1813	453	427	2843	0.638	1813	1837	1.9	1.9	3.748	A
5 - Park and Ride	12	3	2134	632	0.019	12	107	0.0	0.0	5.802	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	776	194	1406	1434	0.541	784	349	3.3	1.3	5.990	A
2 - A41 N	1209	302	498	3071	0.394	1211	1692	1.1	0.7	2.120	A
3 - Site Access	187	47	1668	1339	0.140	187	40	0.3	0.2	3.128	A
4 - A41 S	1481	370	349	2901	0.510	1484	1506	1.9	1.1	2.729	A
5 - Park and Ride	10	2	1746	827	0.012	10	87	0.0	0.0	4.405	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	650	162	1176	1570	0.414	652	292	1.3	0.8	4.201	A
2 - A41 N	1013	253	414	3137	0.323	1013	1414	0.7	0.5	1.856	A
3 - Site Access	157	39	1394	1508	0.104	157	33	0.2	0.1	2.665	A
4 - A41 S	1240	310	292	2944	0.421	1241	1258	1.1	0.8	2.269	A
5 - Park and Ride	8	2	1461	971	0.009	8	73	0.0	0.0	3.740	A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.37	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	26	4 - A41 S

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
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	621	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	234	100.000
4 - A41 S		ONE HOUR	✓	1802	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	34	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	41	175	0	14	4
	4 - A41 S	468	1204	20	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	4	0
	3 - Site Access	0	0	0	7	0
	4 - A41 S	2	5	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.52	5.81	1.1	A	570	855
2 - A41 N	0.58	2.83	1.4	A	1509	2264
3 - Site Access	0.25	4.72	0.3	A	215	322
4 - A41 S	0.74	5.22	2.8	A	1654	2480
5 - Park and Ride	0.02	7.78	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1104	1613	0.290	466	576	0.0	0.4	3.166	A
2 - A41 N	1238	310	293	3234	0.383	1236	1277	0.0	0.6	1.860	A
3 - Site Access	176	44	1487	1451	0.121	176	41	0.0	0.1	2.832	A
4 - A41 S	1357	339	424	2846	0.477	1353	1239	0.0	0.9	2.497	A
5 - Park and Ride	6	2	1674	864	0.007	6	103	0.0	0.0	4.197	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1320	1485	0.376	557	689	0.4	0.6	3.916	A
2 - A41 N	1479	370	350	3188	0.464	1478	1527	0.6	0.9	2.174	A
3 - Site Access	210	53	1779	1271	0.165	210	49	0.1	0.2	3.406	A
4 - A41 S	1620	405	507	2784	0.582	1618	1482	0.9	1.4	3.199	A
5 - Park and Ride	7	2	2002	699	0.010	7	123	0.0	0.0	5.204	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1614	1311	0.521	682	843	0.6	1.1	5.757	A
2 - A41 N	1811	453	428	3126	0.579	1809	1868	0.9	1.4	2.820	A
3 - Site Access	258	64	2177	1025	0.251	257	60	0.2	0.3	4.701	A
4 - A41 S	1984	496	620	2700	0.735	1978	1814	1.4	2.8	5.142	A
5 - Park and Ride	9	2	2448	475	0.019	9	150	0.0	0.0	7.729	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	684	171	1618	1309	0.522	684	844	1.1	1.1	5.814	A
2 - A41 N	1811	453	429	3125	0.580	1811	1873	1.4	1.4	2.831	A
3 - Site Access	258	64	2180	1023	0.252	258	61	0.3	0.3	4.718	A
4 - A41 S	1984	496	621	2699	0.735	1984	1817	2.8	2.8	5.224	A
5 - Park and Ride	9	2	2454	472	0.019	9	151	0.0	0.0	7.779	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	558	140	1326	1482	0.377	560	691	1.1	0.6	3.953	A
2 - A41 N	1479	370	352	3187	0.464	1481	1534	1.4	0.9	2.183	A
3 - Site Access	210	53	1783	1268	0.166	211	50	0.3	0.2	3.418	A
4 - A41 S	1620	405	508	2783	0.582	1626	1486	2.8	1.5	3.245	A
5 - Park and Ride	7	2	2010	695	0.010	7	124	0.0	0.0	5.238	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	468	117	1108	1610	0.290	468	578	0.6	0.4	3.188	A
2 - A41 N	1238	310	294	3233	0.383	1239	1283	0.9	0.6	1.866	A
3 - Site Access	176	44	1492	1448	0.122	176	41	0.2	0.1	2.842	A
4 - A41 S	1357	339	425	2845	0.477	1359	1243	1.5	1.0	2.519	A
5 - Park and Ride	6	2	1680	860	0.007	6	103	0.0	0.0	4.214	A

2031 Base + Dev , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	7.73	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	3	1 - Vendee Drive

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
D7	2031 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	941	100.000
2 - A41 N		ONE HOUR	✓	1345	100.000
3 - Site Access		ONE HOUR	✓	267	100.000
4 - A41 S		ONE HOUR	✓	1715	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	335	109	497	0
	2 - A41 N	116	63	0	1164	2
	3 - Site Access	33	215	0	12	7
	4 - A41 S	256	1292	79	0	88
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.87	22.95	6.3	C	863	1295
2 - A41 N	0.52	2.61	1.1	A	1234	1851
3 - Site Access	0.26	4.39	0.4	A	245	368
4 - A41 S	0.67	3.93	2.0	A	1574	2361
5 - Park and Ride	0.02	6.47	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	708	177	1245	1529	0.463	705	306	0.0	0.9	4.351	A
2 - A41 N	1013	253	520	3053	0.332	1011	1430	0.0	0.5	1.761	A
3 - Site Access	201	50	1388	1512	0.133	200	142	0.0	0.2	2.743	A
4 - A41 S	1291	323	327	2918	0.443	1288	1261	0.0	0.8	2.206	A
5 - Park and Ride	8	2	1543	929	0.009	8	73	0.0	0.0	3.907	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	846	211	1489	1385	0.611	843	366	0.9	1.5	6.610	A
2 - A41 N	1209	302	622	2971	0.407	1208	1710	0.5	0.7	2.041	A
3 - Site Access	240	60	1660	1344	0.179	240	170	0.2	0.2	3.259	A
4 - A41 S	1542	385	392	2870	0.537	1540	1508	0.8	1.2	2.705	A
5 - Park and Ride	10	2	1845	778	0.013	10	87	0.0	0.0	4.688	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1036	259	1822	1189	0.872	1019	447	1.5	5.8	19.570	C
2 - A41 N	1481	370	753	2867	0.517	1479	2088	0.7	1.1	2.593	A
3 - Site Access	294	73	2025	1119	0.263	293	207	0.2	0.4	4.358	A
4 - A41 S	1888	472	479	2805	0.673	1885	1839	1.2	2.0	3.899	A
5 - Park and Ride	12	3	2257	570	0.021	12	107	0.0	0.0	6.448	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1036	259	1825	1187	0.873	1034	448	5.8	6.3	22.946	C
2 - A41 N	1481	370	763	2859	0.518	1481	2097	1.1	1.1	2.612	A
3 - Site Access	294	73	2035	1113	0.264	294	209	0.4	0.4	4.394	A
4 - A41 S	1888	472	480	2804	0.673	1888	1849	2.0	2.0	3.930	A
5 - Park and Ride	12	3	2261	568	0.021	12	107	0.0	0.0	6.471	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	846	211	1494	1382	0.612	865	367	6.3	1.6	7.195	A
2 - A41 N	1209	302	636	2960	0.408	1211	1722	1.1	0.7	2.059	A
3 - Site Access	240	60	1674	1336	0.180	241	173	0.4	0.2	3.290	A
4 - A41 S	1542	385	393	2869	0.537	1545	1521	2.0	1.2	2.728	A
5 - Park and Ride	10	2	1851	775	0.013	10	87	0.0	0.0	4.708	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	708	177	1250	1526	0.464	711	307	1.6	0.9	4.432	A
2 - A41 N	1013	253	524	3049	0.332	1013	1437	0.7	0.5	1.768	A
3 - Site Access	201	50	1394	1508	0.133	201	143	0.2	0.2	2.754	A
4 - A41 S	1291	323	329	2917	0.443	1293	1267	1.2	0.8	2.219	A
5 - Park and Ride	8	2	1548	927	0.009	8	73	0.0	0.0	3.921	A

2031 Base + Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	5.07	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	20	4 - A41 S

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
D8	2031 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	649	100.000
2 - A41 N		ONE HOUR	✓	1645	100.000
3 - Site Access		ONE HOUR	✓	425	100.000
4 - A41 S		ONE HOUR	✓	1813	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	257	62	305	24
	2 - A41 N	254	64	0	1326	1
	3 - Site Access	97	264	0	60	4
	4 - A41 S	468	1204	31	2	108
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.57	6.80	1.3	A	596	893
2 - A41 N	0.59	2.81	1.4	A	1509	2264
3 - Site Access	0.46	6.48	0.8	A	390	585
4 - A41 S	0.77	6.15	3.4	A	1664	2495
5 - Park and Ride	0.02	9.56	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	489	122	1179	1568	0.312	487	618	0.0	0.5	3.322	A
2 - A41 N	1238	310	322	3211	0.386	1236	1344	0.0	0.6	1.821	A
3 - Site Access	320	80	1487	1451	0.221	319	71	0.0	0.3	3.177	A
4 - A41 S	1365	341	532	2765	0.494	1361	1274	0.0	1.0	2.556	A
5 - Park and Ride	6	2	1790	805	0.007	6	103	0.0	0.0	4.505	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	583	146	1409	1432	0.407	583	739	0.5	0.7	4.233	A
2 - A41 N	1479	370	385	3160	0.468	1478	1607	0.6	0.9	2.138	A
3 - Site Access	382	96	1778	1271	0.301	381	84	0.3	0.4	4.044	A
4 - A41 S	1630	407	637	2687	0.606	1628	1523	1.0	1.5	3.389	A
5 - Park and Ride	7	2	2141	629	0.011	7	123	0.0	0.0	5.792	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	715	179	1723	1247	0.573	712	904	0.7	1.3	6.692	A
2 - A41 N	1811	453	471	3092	0.586	1809	1964	0.9	1.4	2.801	A
3 - Site Access	468	117	2177	1026	0.456	466	103	0.4	0.8	6.419	A
4 - A41 S	1996	499	779	2582	0.773	1989	1864	1.5	3.3	6.003	A
5 - Park and Ride	9	2	2617	389	0.023	9	150	0.0	0.0	9.455	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	715	179	1728	1244	0.574	714	906	1.3	1.3	6.797	A
2 - A41 N	1811	453	472	3091	0.586	1811	1971	1.4	1.4	2.812	A
3 - Site Access	468	117	2180	1024	0.457	468	103	0.8	0.8	6.479	A
4 - A41 S	1996	499	781	2580	0.774	1996	1867	3.3	3.4	6.155	A
5 - Park and Ride	9	2	2626	385	0.023	9	151	0.0	0.0	9.561	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	583	146	1417	1427	0.409	586	742	1.3	0.7	4.290	A
2 - A41 N	1479	370	387	3159	0.468	1481	1616	1.4	0.9	2.148	A
3 - Site Access	382	96	1783	1268	0.301	384	85	0.8	0.4	4.077	A
4 - A41 S	1630	407	639	2685	0.607	1637	1528	3.4	1.6	3.456	A
5 - Park and Ride	7	2	2153	623	0.012	7	124	0.0	0.0	5.848	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	489	122	1184	1565	0.312	490	620	0.7	0.5	3.348	A
2 - A41 N	1238	310	324	3210	0.386	1239	1350	0.9	0.6	1.827	A
3 - Site Access	320	80	1492	1448	0.221	321	71	0.4	0.3	3.194	A
4 - A41 S	1365	341	535	2763	0.494	1367	1278	1.6	1.0	2.584	A
5 - Park and Ride	6	2	1798	801	0.008	6	103	0.0	0.0	4.530	A

2031 SEPR Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.52	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	30	1 - Vendee Drive

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
D9	2031 SEPR Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	886	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	156	100.000
4 - A41 S		ONE HOUR	✓	1209	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	42	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	9	137	0	2	8
	4 - A41 S	285	831	18	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	19	10	0
	2 - A41 N	0	0	0	12	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	2	9	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.62	6.38	1.7	A	813	1220
2 - A41 N	0.24	1.74	0.3	A	585	877
3 - Site Access	0.11	2.58	0.1	A	143	215
4 - A41 S	0.46	2.48	0.9	A	1109	1664
5 - Park and Ride	0.01	4.07	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	795	1795	0.372	665	311	0.0	0.6	3.385	A
2 - A41 N	480	120	453	3106	0.154	479	1006	0.0	0.2	1.483	A
3 - Site Access	117	29	885	1822	0.064	117	47	0.0	0.1	2.111	A
4 - A41 S	910	228	263	2966	0.307	908	739	0.0	0.5	1.862	A
5 - Park and Ride	8	2	1098	1153	0.007	8	74	0.0	0.0	3.144	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	951	1703	0.468	795	372	0.6	0.9	4.219	A
2 - A41 N	573	143	542	3035	0.189	572	1204	0.2	0.3	1.582	A
3 - Site Access	140	35	1059	1715	0.082	140	56	0.1	0.1	2.285	A
4 - A41 S	1087	272	314	2927	0.371	1086	885	0.5	0.6	2.083	A
5 - Park and Ride	10	2	1313	1045	0.009	10	88	0.0	0.0	3.477	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1164	1577	0.619	972	455	0.9	1.7	6.312	A
2 - A41 N	701	175	663	2938	0.239	701	1473	0.3	0.3	1.741	A
3 - Site Access	172	43	1296	1569	0.109	172	68	0.1	0.1	2.576	A
4 - A41 S	1331	333	385	2875	0.463	1330	1082	0.6	0.9	2.482	A
5 - Park and Ride	12	3	1607	897	0.014	12	108	0.0	0.0	4.068	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	976	244	1165	1576	0.619	975	456	1.7	1.7	6.376	A
2 - A41 N	701	175	665	2937	0.239	701	1475	0.3	0.3	1.742	A
3 - Site Access	172	43	1298	1568	0.110	172	68	0.1	0.1	2.578	A
4 - A41 S	1331	333	385	2875	0.463	1331	1084	0.9	0.9	2.484	A
5 - Park and Ride	12	3	1609	896	0.014	12	108	0.0	0.0	4.071	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	796	199	952	1702	0.468	800	373	1.7	0.9	4.262	A
2 - A41 N	573	143	545	3033	0.189	573	1207	0.3	0.3	1.584	A
3 - Site Access	140	35	1062	1713	0.082	140	56	0.1	0.1	2.288	A
4 - A41 S	1087	272	315	2927	0.371	1088	888	0.9	0.6	2.086	A
5 - Park and Ride	10	2	1315	1044	0.009	10	88	0.0	0.0	3.480	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	667	167	797	1794	0.372	668	312	0.9	0.6	3.410	A
2 - A41 N	480	120	456	3104	0.154	480	1010	0.3	0.2	1.484	A
3 - Site Access	117	29	889	1820	0.065	118	47	0.1	0.1	2.115	A
4 - A41 S	910	228	264	2965	0.307	911	742	0.6	0.5	1.869	A
5 - Park and Ride	8	2	1101	1151	0.007	8	74	0.0	0.0	3.148	A

2031 SEPR Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.60	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	34	4 - A41 S

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
D10	2031 SEPR Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	602	100.000
2 - A41 N		ONE HOUR	✓	1219	100.000
3 - Site Access		ONE HOUR	✓	203	100.000
4 - A41 S		ONE HOUR	✓	1668	100.000
5 - Park and Ride		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	1	221	33	323	24
	2 - A41 N	306	62	0	850	1
	3 - Site Access	29	153	0	16	5
	4 - A41 S	493	1048	22	0	105
	5 - Park and Ride	3	1	1	3	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	2	0
	2 - A41 N	1	0	0	2	0
	3 - Site Access	0	0	0	6	0
	4 - A41 S	2	2	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.46	4.77	0.9	A	552	829
2 - A41 N	0.43	2.07	0.8	A	1119	1678
3 - Site Access	0.17	3.35	0.2	A	186	279
4 - A41 S	0.68	4.32	2.2	A	1531	2296
5 - Park and Ride	0.02	6.84	0.0	A	7	11

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	969	1692	0.268	452	625	0.0	0.4	2.928	A
2 - A41 N	918	229	305	3224	0.285	916	1115	0.0	0.4	1.585	A
3 - Site Access	153	38	1180	1641	0.093	152	42	0.0	0.1	2.430	A
4 - A41 S	1256	314	436	2836	0.443	1253	895	0.0	0.8	2.310	A
5 - Park and Ride	6	2	1588	907	0.007	6	101	0.0	0.0	3.996	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1159	1580	0.342	541	747	0.4	0.5	3.497	A
2 - A41 N	1096	274	365	3176	0.345	1095	1334	0.4	0.5	1.758	A
3 - Site Access	182	46	1411	1498	0.122	182	50	0.1	0.1	2.747	A
4 - A41 S	1499	375	522	2773	0.541	1498	1071	0.8	1.2	2.872	A
5 - Park and Ride	7	2	1899	751	0.010	7	121	0.0	0.0	4.842	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1418	1427	0.464	661	915	0.5	0.9	4.741	A
2 - A41 N	1342	336	447	3111	0.431	1341	1632	0.5	0.8	2.066	A
3 - Site Access	224	56	1727	1303	0.172	223	62	0.1	0.2	3.349	A
4 - A41 S	1837	459	639	2686	0.684	1833	1311	1.2	2.2	4.278	A
5 - Park and Ride	9	2	2323	537	0.016	9	148	0.0	0.0	6.812	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	663	166	1420	1426	0.465	663	916	0.9	0.9	4.768	A
2 - A41 N	1342	336	448	3110	0.432	1342	1635	0.8	0.8	2.069	A
3 - Site Access	224	56	1729	1302	0.172	224	62	0.2	0.2	3.352	A
4 - A41 S	1837	459	640	2685	0.684	1836	1312	2.2	2.2	4.319	A
5 - Park and Ride	9	2	2327	535	0.016	9	149	0.0	0.0	6.839	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	541	135	1162	1578	0.343	543	749	0.9	0.5	3.517	A
2 - A41 N	1096	274	367	3175	0.345	1097	1338	0.8	0.5	1.763	A
3 - Site Access	182	46	1413	1497	0.122	183	50	0.2	0.1	2.754	A
4 - A41 S	1499	375	523	2772	0.541	1503	1073	2.2	1.2	2.900	A
5 - Park and Ride	7	2	1905	748	0.010	7	122	0.0	0.0	4.862	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	453	113	972	1690	0.268	454	627	0.5	0.4	2.943	A
2 - A41 N	918	229	307	3223	0.285	918	1119	0.5	0.4	1.589	A
3 - Site Access	153	38	1183	1639	0.093	153	42	0.1	0.1	2.435	A
4 - A41 S	1256	314	438	2836	0.443	1257	898	1.2	0.8	2.326	A
5 - Park and Ride	6	2	1593	904	0.007	6	102	0.0	0.0	4.009	A

2031 SEPR Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Vendee Drive - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A41 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Site Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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, 5	4.06	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	20	1 - Vendee Drive

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
D11	2031 SEPR Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Vendee Drive		ONE HOUR	✓	964	100.000
2 - A41 N		ONE HOUR	✓	637	100.000
3 - Site Access		ONE HOUR	✓	215	100.000
4 - A41 S		ONE HOUR	✓	1277	100.000
5 - Park and Ride		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	309	120	522	13
	2 - A41 N	118	63	0	454	2
	3 - Site Access	28	166	0	13	8
	4 - A41 S	285	831	86	0	75
	5 - Park and Ride	2	0	2	7	0

Vehicle Mix

HV %s

		To				
		1 - Vendee Drive	2 - A41 N	3 - Site Access	4 - A41 S	5 - Park and Ride
From	1 - Vendee Drive	0	0	0	0	0
	2 - A41 N	0	0	0	0	0
	3 - Site Access	0	0	0	0	0
	4 - A41 S	0	0	0	0	0
	5 - Park and Ride	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Vendee Drive	0.70	7.95	2.3	A	885	1327
2 - A41 N	0.25	1.71	0.3	A	585	877
3 - Site Access	0.15	2.70	0.2	A	197	296
4 - A41 S	0.50	2.52	1.0	A	1172	1758
5 - Park and Ride	0.01	4.39	0.0	A	10	15

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	726	181	868	1752	0.414	723	325	0.0	0.7	3.491	A
2 - A41 N	480	120	563	3019	0.159	479	1028	0.0	0.2	1.417	A
3 - Site Access	162	40	885	1822	0.089	161	156	0.0	0.1	2.167	A
4 - A41 S	961	240	299	2939	0.327	959	748	0.0	0.5	1.816	A
5 - Park and Ride	8	2	1185	1109	0.007	8	74	0.0	0.0	3.269	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	867	217	1038	1652	0.525	865	389	0.7	1.1	4.568	A
2 - A41 N	573	143	673	2930	0.195	572	1230	0.2	0.2	1.526	A
3 - Site Access	193	48	1059	1715	0.113	193	187	0.1	0.1	2.365	A
4 - A41 S	1148	287	358	2895	0.397	1147	894	0.5	0.7	2.058	A
5 - Park and Ride	10	2	1417	993	0.010	10	88	0.0	0.0	3.662	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1061	265	1271	1514	0.701	1057	476	1.1	2.3	7.789	A
2 - A41 N	701	175	822	2811	0.249	701	1505	0.2	0.3	1.705	A
3 - Site Access	237	59	1295	1569	0.151	237	228	0.1	0.2	2.700	A
4 - A41 S	1406	352	438	2835	0.496	1405	1094	0.7	1.0	2.514	A
5 - Park and Ride	12	3	1735	833	0.015	12	108	0.0	0.0	4.385	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	1061	265	1272	1513	0.701	1061	477	2.3	2.3	7.954	A
2 - A41 N	701	175	826	2809	0.250	701	1507	0.3	0.3	1.707	A
3 - Site Access	237	59	1298	1568	0.151	237	229	0.2	0.2	2.704	A
4 - A41 S	1406	352	438	2835	0.496	1406	1097	1.0	1.0	2.518	A
5 - Park and Ride	12	3	1736	832	0.015	12	108	0.0	0.0	4.389	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	867	217	1039	1651	0.525	871	390	2.3	1.1	4.649	A
2 - A41 N	573	143	678	2927	0.196	573	1233	0.3	0.2	1.528	A
3 - Site Access	193	48	1063	1713	0.113	193	188	0.2	0.1	2.371	A
4 - A41 S	1148	287	358	2895	0.397	1149	898	1.0	0.7	2.063	A
5 - Park and Ride	10	2	1419	991	0.010	10	88	0.0	0.0	3.666	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vendee Drive	726	181	870	1750	0.415	727	326	1.1	0.7	3.523	A
2 - A41 N	480	120	566	3016	0.159	480	1032	0.2	0.2	1.421	A
3 - Site Access	162	40	889	1820	0.089	162	157	0.1	0.1	2.172	A
4 - A41 S	961	240	300	2938	0.327	962	751	0.7	0.5	1.821	A
5 - Park and Ride	8	2	1188	1108	0.007	8	74	0.0	0.0	3.276	A