Junctions 11

ARCADY 11 - Roundabout Module

Filename: J26.j11
Path: \\uk-lon-fas02\projects\UNIF\Projects\BESP0016 Kent Countywide Model\KCC Model Custodian Framework\Call-off Tasks\Tonbridge & Malling and Sevenoaks LP\15 Local Modelling\July 2025 Modelling\J26 Vauxhall Roundabout
Report generation date: 30/07/2025 08:52:13

Summary of junction performance

	AM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	Base AM - 2019 - Base					
A - A26 N	A1 D1	1.5	5.02	0.59	A	13 % [5 - Pembury Rd W]
B - Pembury Rd E		0.0	0.00	0.00	A	
C - Slip off A21 WB		2.0	5.66	0.65	A	
D - Slip off A21 EB		0.8	6.83	0.43	A	
5 - Pembury Rd W		3.0	14.07	0.75	B	

	PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	Base PM - 2019 - Base					
A - A26 N	A2 D2	0.8	3.33	0.45	A	31 % [5 - Pembury Rd W]
B - Pembury Rd E		0.0	0.00	0.00	A	
C - Slip off A21 WB		0.9	3.49	0.48	A	
D - Slip off A21 EB		0.4	4.39	0.30	A	
5 - Pembury Rd W		1.5	8.07	0.59	A	

	AM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	LP High AM - 2040 - T&M LP_High					
A - A26 N	A3 D3	4.4	11.14	0.81	B	-1 % [5 - Pembury Rd W]
B - Pembury Rd E		0.0	0.00	0.00	A	
C - Slip off A21 WB		2.6	7.00	0.71	A	
D - Slip off A21 EB		1.2	9.44	0.54	A	
5 - Pembury Rd W		9.3	39.56	0.92	E	

	PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	LP High PM - 2040 - T&M LP_High					
A - A26 N	A4 D4	1.5	4.59	0.59	A	10 % [5 - Pembury Rd W]
B - Pembury Rd E		0.0	0.00	0.00	A	
C - Slip off A21 WB		1.5	4.76	0.60	A	
D - Slip off A21 EB		0.9	6.34	0.46	A	
5 - Pembury Rd W		3.2	15.66	0.77	C	

	AM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	Forecast Base AM - 2042 - Forecast Baseline					
A - A26 N	A5 D5	2.6	7.32	0.71	A	4 % [5 - Pembury Rd W]
B - Pembury Rd E		0.0	0.00	0.00	A	
C - Slip off A21 WB		2.5	6.83	0.71	A	
D - Slip off A21 EB		1.3	9.46	0.55	A	
5 - Pembury Rd W		5.2	23.58	0.84	C	

	PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	FOrecast Base PM - 2042 - Forecast Baseline					
A - A26 N	A6 D6	1.4	4.43	0.58	A	17 % [5 - Pembury Rd W]
B - Pembury Rd E		0.0	0.00	0.00	A	
C - Slip off A21 WB		1.2	3.97	0.53	A	
D - Slip off A21 EB		0.7	5.29	0.39	A	
5 - Pembury Rd W		2.3	11.53	0.70	B	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

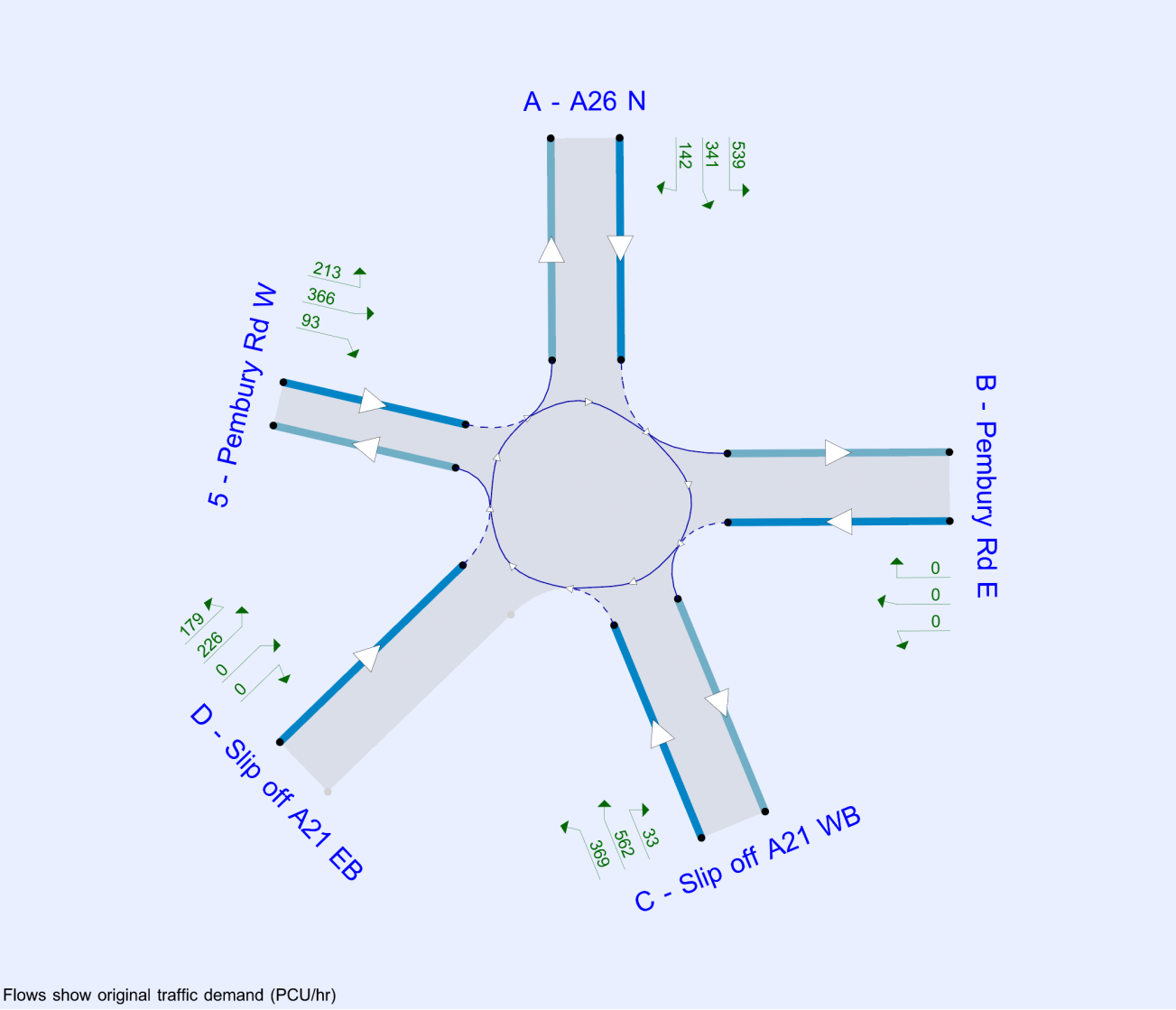
File summary

File Description

Title	
Location	
Site number	
Date	24/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JEGINTL\SIUDZIS
Description	

Units

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



Flows show original traffic demand (PCU/hr)

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019	Base	AM	ONE HOUR	08:00	09:30	15	✓
D2	2019	Base	PM	ONE HOUR	17:00	18:30	15	✓
D3	2040	T&M LP_High	AM	ONE HOUR	08:00	09:30	15	✓
D4	2040	T&M LP_High	PM	ONE HOUR	17:00	18:30	15	✓
D5	2042	Forecast Baseline	AM	ONE HOUR	08:00	09:30	15	✓
D6	2042	Forecast Baseline	PM	ONE HOUR	17:00	18:30	15	✓

Base AM - D1 - 2019 | Base | AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Base AM	✓	✓	D1	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Vauxhall RBT	Standard Roundabout		A, B, C, D, 5	7.47	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	13	5 - Pembury Rd W	7.47	A

Arms

Arms

Arm	Name	Description	No give-way line
A	A26 N		
B	Pembury Rd E		
C	Slip off A21 WB		
D	Slip off A21 EB		
5	Pembury Rd W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A26 N	4.63	9.89	16.2	45.3	50.0	15.0		
B - Pembury Rd E	4.13	4.13	0.0	12.9	50.0	23.0		
C - Slip off A21 WB	4.73	9.91	10.4	39.0	50.0	29.0		
D - Slip off A21 EB	6.51	8.97	8.3	12.9	50.0	11.0	✓	
5 - Pembury Rd W	4.07	5.82	8.8	17.0	50.0	20.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A26 N	0.756	2358
B - Pembury Rd E	0.522	1248
C - Slip off A21 WB	0.691	2094
D - Slip off A21 EB	0.761	2448
5 - Pembury Rd W	0.597	1598

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
D - Slip off A21 EB	Percentage		74.00

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019	Base	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A26 N		ONE HOUR	✓	1003	100.000
B - Pembury Rd E		ONE HOUR	✓	0	100.000
C - Slip off A21 WB		ONE HOUR	✓	1139	100.000
D - Slip off A21 EB		ONE HOUR	✓	378	100.000
5 - Pembury Rd W		ONE HOUR	✓	722	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	483	289	0	231
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	584	20	0	0	535
	D - Slip off A21 EB	213	0	0	0	165
	5 - Pembury Rd W	159	463	100	0	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	9	8	0	3
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	5	2	0	0	4
	D - Slip off A21 EB	4	0	0	0	3
	5 - Pembury Rd W	2	4	12	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A26 N	0.59	5.02	1.5	A	920	1381
B - Pembury Rd E	0.00	0.00	0.0	A	0	0
C - Slip off A21 WB	0.65	5.66	2.0	A	1045	1568
D - Slip off A21 EB	0.43	6.83	0.8	A	347	520
5 - Pembury Rd W	0.75	14.07	3.0	B	663	994

Base PM - D2 - 2019 | Base | PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Base PM	✓	✓	D2	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Vauxhall RBT	Standard Roundabout		A, B, C, D, 5	4.62	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	31	5 - Pembury Rd W	4.62	A

Arms

Arms

Arm	Name	Description	No give-way line
A	A26 N		
B	Pembury Rd E		
C	Slip off A21 WB		
D	Slip off A21 EB		
5	Pembury Rd W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A26 N	4.63	9.89	16.2	45.3	50.0	15.0		
B - Pembury Rd E	4.13	4.13	0.0	12.9	50.0	23.0		
C - Slip off A21 WB	4.73	9.91	10.4	39.0	50.0	29.0		
D - Slip off A21 EB	6.51	8.97	8.3	12.9	50.0	11.0	✓	
5 - Pembury Rd W	4.07	5.82	8.8	17.0	50.0	20.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A26 N	0.756	2358
B - Pembury Rd E	0.522	1248
C - Slip off A21 WB	0.691	2094
D - Slip off A21 EB	0.761	2448
5 - Pembury Rd W	0.597	1598

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
D - Slip off A21 EB	Percentage		73.00

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019	Base	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A26 N		ONE HOUR	✓	809	100.000
B - Pembury Rd E		ONE HOUR	✓	0	100.000
C - Slip off A21 WB		ONE HOUR	✓	868	100.000
D - Slip off A21 EB		ONE HOUR	✓	321	100.000
5 - Pembury Rd W		ONE HOUR	✓	606	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	444	250	0	115
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	518	20	0	0	330
	D - Slip off A21 EB	185	0	0	0	136
	5 - Pembury Rd W	184	351	71	0	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	1	3	0	1
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	2	0	0	0	2
	D - Slip off A21 EB	2	0	0	0	1
	5 - Pembury Rd W	2	2	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A26 N	0.45	3.33	0.8	A	742	1114
B - Pembury Rd E	0.00	0.00	0.0	A	0	0
C - Slip off A21 WB	0.48	3.49	0.9	A	796	1195
D - Slip off A21 EB	0.30	4.39	0.4	A	295	442
5 - Pembury Rd W	0.59	8.07	1.5	A	556	834

LP High AM - D3 - 2040 | T&M LP_High | AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	LP High AM	✓	✓	D3	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Vauxhall RBT	Standard Roundabout		A, B, C, D, 5	15.81	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-1	5 - Pembury Rd W	15.81	C

Arms

Arms

Arm	Name	Description	No give-way line
A	A26 N		
B	Pembury Rd E		
C	Slip off A21 WB		
D	Slip off A21 EB		
5	Pembury Rd W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A26 N	4.63	9.89	16.2	45.3	50.0	15.0		
B - Pembury Rd E	4.13	4.13	0.0	12.9	50.0	23.0		
C - Slip off A21 WB	4.73	9.91	10.4	39.0	50.0	29.0		
D - Slip off A21 EB	6.51	8.97	8.3	12.9	50.0	11.0	✓	
5 - Pembury Rd W	4.07	5.82	8.8	17.0	50.0	20.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A26 N	0.756	2358
B - Pembury Rd E	0.522	1248
C - Slip off A21 WB	0.691	2094
D - Slip off A21 EB	0.761	2448
5 - Pembury Rd W	0.597	1598

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
D - Slip off A21 EB	Percentage		73.00

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2040	T&M LP_High	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A26 N		ONE HOUR	✓	1329	100.000
B - Pembury Rd E		ONE HOUR	✓	0	100.000
C - Slip off A21 WB		ONE HOUR	✓	1214	100.000
D - Slip off A21 EB		ONE HOUR	✓	429	100.000
5 - Pembury Rd W		ONE HOUR	✓	826	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	721	321	0	287
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	653	28	0	0	533
	D - Slip off A21 EB	244	0	0	0	185
	5 - Pembury Rd W	186	510	130	0	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	7	9	0	3
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	5	2	0	0	5
	D - Slip off A21 EB	4	0	0	0	4
	5 - Pembury Rd W	2	4	11	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A26 N	0.81	11.14	4.4	B	1220	1829
B - Pembury Rd E	0.00	0.00	0.0	A	0	0
C - Slip off A21 WB	0.71	7.00	2.6	A	1114	1671
D - Slip off A21 EB	0.54	9.44	1.2	A	394	590
5 - Pembury Rd W	0.92	39.56	9.3	E	758	1137

LP High PM - D4 - 2040 | T&M LP_High | PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A4	LP High PM	✓	✓	D4	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Vauxhall RBT	Standard Roundabout		A, B, C, D, 5	7.25	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	10	5 - Pembury Rd W	7.25	A

Arms

Arms

Arm	Name	Description	No give-way line
A	A26 N		
B	Pembury Rd E		
C	Slip off A21 WB		
D	Slip off A21 EB		
5	Pembury Rd W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A26 N	4.63	9.89	16.2	45.3	50.0	15.0		
B - Pembury Rd E	4.13	4.13	0.0	12.9	50.0	23.0		
C - Slip off A21 WB	4.73	9.91	10.4	39.0	50.0	29.0		
D - Slip off A21 EB	6.51	8.97	8.3	12.9	50.0	11.0	✓	
5 - Pembury Rd W	4.07	5.82	8.8	17.0	50.0	20.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A26 N	0.756	2358
B - Pembury Rd E	0.522	1248
C - Slip off A21 WB	0.691	2094
D - Slip off A21 EB	0.761	2448
5 - Pembury Rd W	0.597	1598

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
D - Slip off A21 EB	Percentage		78.00

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2040	T&M LP_High	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A26 N		ONE HOUR	✓	1050	100.000
B - Pembury Rd E		ONE HOUR	✓	0	100.000
C - Slip off A21 WB		ONE HOUR	✓	1062	100.000
D - Slip off A21 EB		ONE HOUR	✓	457	100.000
5 - Pembury Rd W		ONE HOUR	✓	698	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	505	343	0	202
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	630	31	0	0	401
	D - Slip off A21 EB	246	0	0	0	211
	5 - Pembury Rd W	243	364	91	0	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	1	3	0	1
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	2	0	0	0	2
	D - Slip off A21 EB	3	0	0	0	1
	5 - Pembury Rd W	2	2	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A26 N	0.59	4.59	1.5	A	963	1445
B - Pembury Rd E	0.00	0.00	0.0	A	0	0
C - Slip off A21 WB	0.60	4.76	1.5	A	975	1462
D - Slip off A21 EB	0.46	6.34	0.9	A	419	629
5 - Pembury Rd W	0.77	15.66	3.2	C	640	961

Forecast Base AM - D5 - 2042 | Forecast Baseline | AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A5	Forecast Base AM	✓	✓	D5	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Vauxhall RBT	Standard Roundabout		A, B, C, D, 5	10.83	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	4	5 - Pembury Rd W	10.83	B

Arms

Arms

Arm	Name	Description	No give-way line
A	A26 N		
B	Pembury Rd E		
C	Slip off A21 WB		
D	Slip off A21 EB		
5	Pembury Rd W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A26 N	4.63	9.89	16.2	45.3	50.0	15.0		
B - Pembury Rd E	4.13	4.13	0.0	12.9	50.0	23.0		
C - Slip off A21 WB	4.73	9.91	10.4	39.0	50.0	29.0		
D - Slip off A21 EB	6.51	8.97	8.3	12.9	50.0	11.0	✓	
5 - Pembury Rd W	4.07	5.82	8.8	17.0	50.0	20.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A26 N	0.756	2358
B - Pembury Rd E	0.522	1248
C - Slip off A21 WB	0.691	2094
D - Slip off A21 EB	0.761	2448
5 - Pembury Rd W	0.597	1598

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
D - Slip off A21 EB	Percentage		73.00

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2042	Forecast Baseline	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A26 N		ONE HOUR	✓	1196	100.000
B - Pembury Rd E		ONE HOUR	✓	0	100.000
C - Slip off A21 WB		ONE HOUR	✓	1216	100.000
D - Slip off A21 EB		ONE HOUR	✓	440	100.000
5 - Pembury Rd W		ONE HOUR	✓	757	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	628	302	0	266
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	648	29	0	0	539
	D - Slip off A21 EB	250	0	0	0	190
	5 - Pembury Rd W	166	477	114	0	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	8	9	0	3
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	5	2	0	0	5
	D - Slip off A21 EB	4	0	0	0	4
	5 - Pembury Rd W	3	4	12	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A26 N	0.71	7.32	2.6	A	1097	1646
B - Pembury Rd E	0.00	0.00	0.0	A	0	0
C - Slip off A21 WB	0.71	6.83	2.5	A	1116	1674
D - Slip off A21 EB	0.55	9.46	1.3	A	404	606
5 - Pembury Rd W	0.84	23.58	5.2	C	695	1042

FOrecast Base PM - D6 - 2042 | Forecast Baseline | PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A6	FOrecast Base PM	✓	✓	D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Vauxhall RBT	Standard Roundabout		A, B, C, D, 5	5.96	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	17	5 - Pembury Rd W	5.96	A

Arms

Arms

Arm	Name	Description	No give-way line
A	A26 N		
B	Pembury Rd E		
C	Slip off A21 WB		
D	Slip off A21 EB		
5	Pembury Rd W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A26 N	4.63	9.89	16.2	45.3	50.0	15.0		
B - Pembury Rd E	4.13	4.13	0.0	12.9	50.0	23.0		
C - Slip off A21 WB	4.73	9.91	10.4	39.0	50.0	29.0		
D - Slip off A21 EB	6.51	8.97	8.3	12.9	50.0	11.0	✓	
5 - Pembury Rd W	4.07	5.82	8.8	17.0	50.0	20.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A26 N	0.756	2358
B - Pembury Rd E	0.522	1248
C - Slip off A21 WB	0.691	2094
D - Slip off A21 EB	0.761	2448
5 - Pembury Rd W	0.597	1598

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
D - Slip off A21 EB	Percentage		75.00

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2042	Forecast Baseline	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A26 N		ONE HOUR	✓	1022	100.000
B - Pembury Rd E		ONE HOUR	✓	0	100.000
C - Slip off A21 WB		ONE HOUR	✓	964	100.000
D - Slip off A21 EB		ONE HOUR	✓	405	100.000
5 - Pembury Rd W		ONE HOUR	✓	672	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	539	341	0	142
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	562	33	0	0	369
	D - Slip off A21 EB	226	0	0	0	179
	5 - Pembury Rd W	213	366	93	0	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		A - A26 N	B - Pembury Rd E	C - Slip off A21 WB	D - Slip off A21 EB	5 - Pembury Rd W
From	A - A26 N	0	1	2	0	1
	B - Pembury Rd E	0	0	0	0	0
	C - Slip off A21 WB	2	0	0	0	2
	D - Slip off A21 EB	3	0	0	0	1
	5 - Pembury Rd W	2	2	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A26 N	0.58	4.43	1.4	A	938	1407
B - Pembury Rd E	0.00	0.00	0.0	A	0	0
C - Slip off A21 WB	0.53	3.97	1.2	A	885	1327
D - Slip off A21 EB	0.39	5.29	0.7	A	372	557
5 - Pembury Rd W	0.70	11.53	2.3	B	617	925