

Junctions 11											
PICADY 11 - Priority Intersection Module											
Version: 11.1.0.2307											
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Filename: J25.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\J25 Vale Road_Sovereign Way

Report generation date: 29/07/2025 13:22:01

- »D1 - 2019 | Base | AM
- »D2 - 2019 | Base | PM
- »D3 - 2040 | T&M LP_High | AM
- »D4 - 2040 | T&M LP_High | PM
- »D5 - 2042 | Forecast Baseline | AM
- »D6 - 2042 | Forecast Baseline | PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2019 - Base											
Stream B-AC	D1	2.1	25.13	0.68	D	10 %	D2	1.9	23.94	0.66	C	11 %
Stream C-B		0.0	0.00	0.00	A	[Stream B-AC]		0.0	0.00	0.00	A	[Stream B-AC]
	2040 - T&M LP_High											
Stream B-AC	D3	1.6	23.07	0.62	C	13 %	D4	3.4	35.10	0.78	E	0 %
Stream C-B		0.0	0.00	0.00	A	[Stream B-AC]		0.0	0.00	0.00	A	[Stream B-AC]
	2042 - Forecast Baseline											
Stream B-AC	D5	1.6	23.10	0.62	C	13 %	D6	2.1	26.70	0.69	D	7 %
Stream C-B		0.0	0.00	0.00	A	[Stream B-AC]		0.0	0.00	0.00	A	[Stream B-AC]

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.

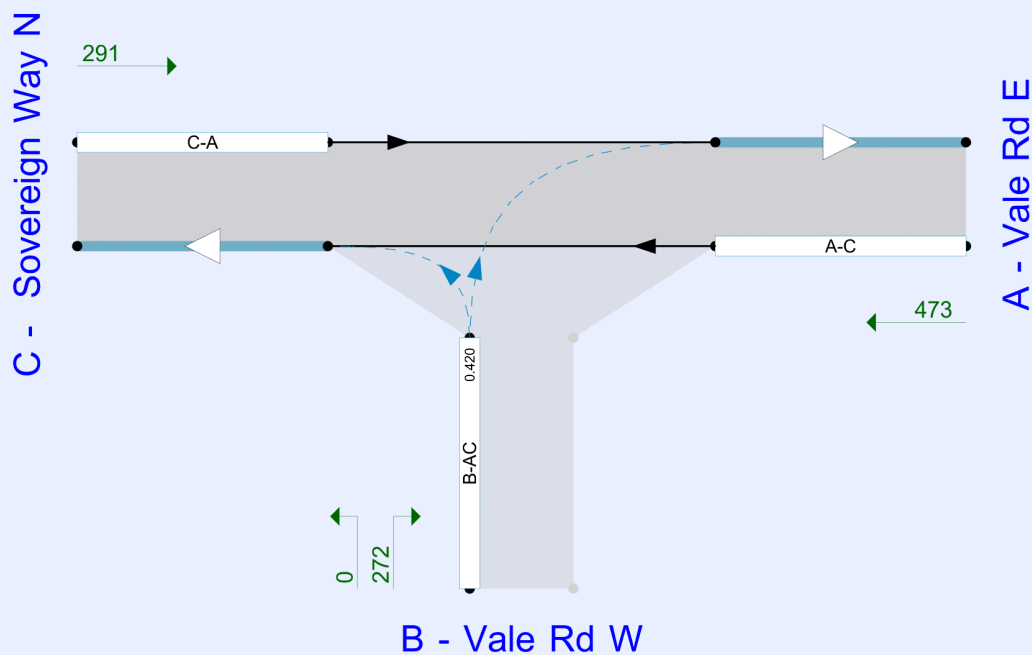
File summary

File Description

Title	
Location	
Site number	
Date	24/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JEGINTLSIUDZIS
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)
Streams (downstream end) show RFC (l)

The junction diagram reflects the last run of Junctions.

Analysis Options

PICADY short flare model	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
JUNCTIONS 11.1	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	✓

Analysis Set Details

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

D1 - 2019 | Base | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Road	T-Junction	Two-way	Entry Only	Two-way		8.11	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	10	Stream B-AC	8.11	A

Arms

Arms

Arm	Name	Description	Arm type
A	Vale Rd E		Major
B	Vale Rd W		Minor
C	Sovereign Way N		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Sovereign Way N	9.13			18.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Vale Rd W	One lane	4.59	28	64

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	600	0.090	0.228	0.143	0.325
B-C	770	0.107	0.270	-	-
C-B	584	0.196	0.196	-	-

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

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	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 - Vale Rd E		ONE HOUR	✓	492	100.000
B - Vale Rd W		ONE HOUR	✓	286	100.000
C - Sovereign Way N		ONE HOUR	✓	108	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	492
	B - Vale Rd W	286	0	0
	C - Sovereign Way N	108	0	0

Vehicle Mix

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

Heavy Vehicle %

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	2
	B - Vale Rd W	2	0	2
	C - Sovereign Way N	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.68	25.13	2.1	D	262	394
C-A					99	149
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					451	677

D2 - 2019 | Base | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Road	T-Junction	Two-way	Entry Only	Two-way		6.92	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	11	Stream B-AC	6.92	A

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 - Vale Rd E		ONE HOUR	✓	429	100.000
B - Vale Rd W		ONE HOUR	✓	274	100.000
C - Sovereign Way N		ONE HOUR	✓	245	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	429
	B - Vale Rd W	274	0	0
	C - Sovereign Way N	245	0	0

Vehicle Mix

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

Heavy Vehicle %

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	0
	B - Vale Rd W	2	0	2
	C - Sovereign Way N	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.66	23.94	1.9	C	251	377
C-A					225	337
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					394	590

D3 - 2040 | T&M LP_High | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Road	T-Junction	Two-way	Entry Only	Two-way		5.06	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	13	Stream B-AC	5.06	A

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 - Vale Rd E		ONE HOUR	✓	566	100.000
B - Vale Rd W		ONE HOUR	✓	234	100.000
C - Sovereign Way N		ONE HOUR	✓	268	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	566
	B - Vale Rd W	234	0	0
	C - Sovereign Way N	268	0	0

Vehicle Mix

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

Heavy Vehicle %

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	2
	B - Vale Rd W	2	0	2
	C - Sovereign Way N	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.62	23.07	1.6	C	215	322
C-A					246	369
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					519	779

D4 - 2040 | T&M LP_High | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Road	T-Junction	Two-way	Entry Only	Two-way		13.22	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	0	Stream B-AC	13.22	B

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 - Vale Rd E		ONE HOUR	✓	441	100.000
B - Vale Rd W		ONE HOUR	✓	336	100.000
C - Sovereign Way N		ONE HOUR	✓	115	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	441
	B - Vale Rd W	336	0	0
	C - Sovereign Way N	115	0	0

Vehicle Mix

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

Heavy Vehicle %

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	0
	B - Vale Rd W	2	0	2
	C - Sovereign Way N	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.78	35.10	3.4	E	308	462
C-A					106	158
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					405	607

D5 - 2042 | Forecast Baseline | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Road	T-Junction	Two-way	Entry Only	Two-way		5.14	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	13	Stream B-AC	5.14	A

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 - Vale Rd E		ONE HOUR	✓	577	100.000
B - Vale Rd W		ONE HOUR	✓	235	100.000
C - Sovereign Way N		ONE HOUR	✓	245	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	577
	B - Vale Rd W	235	0	0
	C - Sovereign Way N	245	0	0

Vehicle Mix

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

Heavy Vehicle %

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	2
	B - Vale Rd W	2	0	2
	C - Sovereign Way N	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.62	23.10	1.6	C	216	323
C-A					225	337
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					529	794

D6 - 2042 | Forecast Baseline | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Road	T-Junction	Two-way	Entry Only	Two-way		7.01	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	7	Stream B-AC	7.01	A

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 - Vale Rd E		ONE HOUR	✓	473	100.000
B - Vale Rd W		ONE HOUR	✓	272	100.000
C - Sovereign Way N		ONE HOUR	✓	291	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	473
	B - Vale Rd W	272	0	0
	C - Sovereign Way N	291	0	0

Vehicle Mix

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

Heavy Vehicle %

	To			
		A - Vale Rd E	B - Vale Rd W	C - Sovereign Way N
From	A - Vale Rd E	0	0	0
	B - Vale Rd W	2	0	2
	C - Sovereign Way N	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.69	26.70	2.1	D	250	374
C-A					267	401
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					434	651