Junctions 11

PICADY 11 - Priority Intersection Module

Filename: J21.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\J21 Seven Mile Lane _The St _Mereworth Road
Report generation date: 29/07/2025 11:01:15

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-ACD	D1	6.0	67.31	0.87	F	-11 % [Stream B-ACD]	D2	1.6	24.94	0.60	C	10 % [Stream B-ACD]
Stream A-BCD		0.0	0.00	0.00	A			0.0	0.00	0.00	A	
Stream D-ABC		0.1	12.70	0.05	B			0.1	13.41	0.11	B	
Stream C-ABD		0.3	7.46	0.22	A			0.1	6.95	0.12	A	
	2040 - T&M LP_High											
Stream B-ACD	D3	3.4	44.50	0.78	E	-4 % [Stream B-ACD]	D4	2.9	42.61	0.75	E	-4 % [Stream B-ACD]
Stream A-BCD		0.0	0.00	0.00	A			0.0	0.00	0.00	A	
Stream D-ABC		0.1	17.20	0.06	C			0.1	18.33	0.07	C	
Stream C-ABD		0.4	8.54	0.29	A			0.4	8.61	0.27	A	
	2042 - Forecast Baseline											
Stream B-ACD	D5	5.9	71.97	0.88	F	-11 % [Stream B-ACD]	D6	1.3	23.03	0.55	C	12 % [Stream B-ACD]
Stream A-BCD		0.0	0.00	0.00	A			0.0	0.00	0.00	A	
Stream D-ABC		0.0	15.47	0.03	C			0.1	17.39	0.06	C	
Stream C-ABD		0.4	8.57	0.29	A			0.4	8.35	0.27	A	

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.

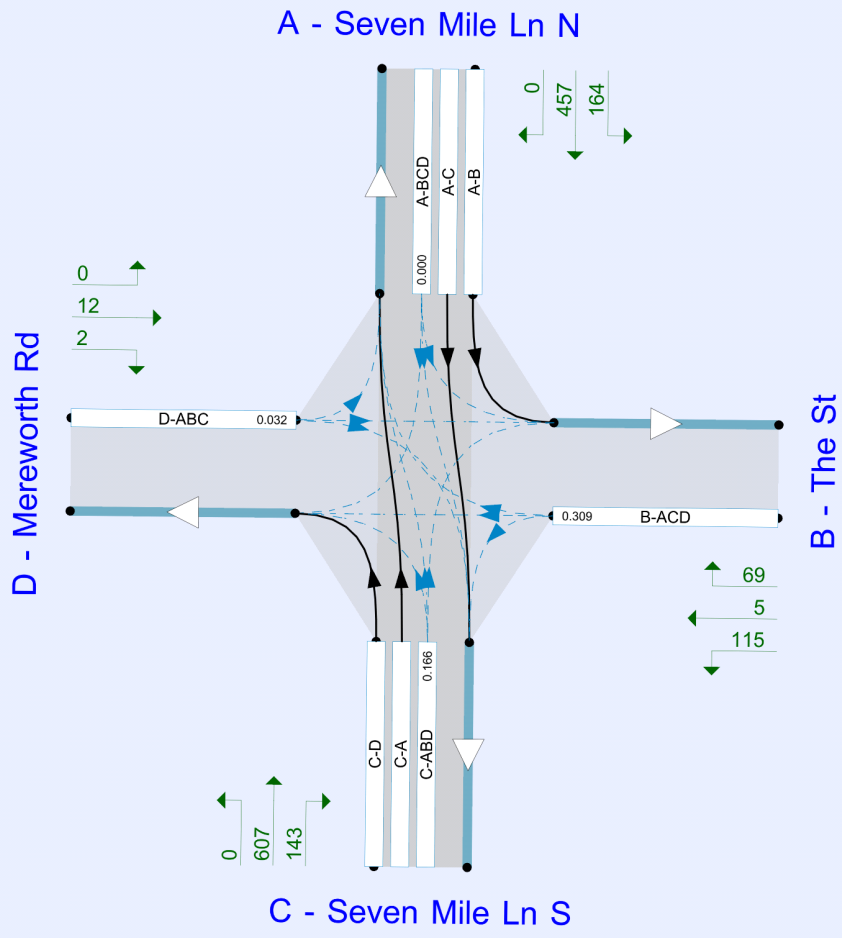
File summary

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)
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

PICADY short flare model	Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 11.1		✓	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)
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	Network flow scaling factor (%)
A1	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	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Seven Mile Ln	Crossroads	Two-way	Two-way	Two-way	Two-way		16.25	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-11	Stream B-ACD	16.25	C

Arms

Arms

Arm	Name	Description	Arm type
A	Seven Mile Ln N		Major
B	The St		Minor
C	Seven Mile Ln S		Major
D	Mereworth Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Seven Mile Ln N	7.60		✓	3.80	250.0	✓	6.30
C - Seven Mile Ln S	7.60		✓	3.40	200.0	✓	4.90

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 - The St	One lane	3.72	34	26
D - Mereworth Rd	One lane	3.50	26	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	844	-	-	-	-	-	-	0.304	0.435	0.304	-	-	-
B-A	537	0.091	0.230	0.230	-	-	-	0.145	0.329	-	0.230	0.230	0.115
B-C	686	0.098	0.247	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	537	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
B-D, offside lane	537	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
C-B	780	0.281	0.281	0.402	-	-	-	-	-	-	-	-	-
D-A	673	-	-	-	-	-	-	0.243	-	0.096	-	-	-
D-B, nearside lane	524	0.141	0.141	0.321	-	-	-	0.225	0.225	0.089	-	-	-
D-B, offside lane	524	0.141	0.141	0.321	-	-	-	0.225	0.225	0.089	-	-	-
D-C	524	-	0.141	0.321	0.112	0.225	0.225	0.225	0.225	0.089	-	-	-

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)
D1	2019	Base	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seven Mile Ln N		✓	505	100.000
B - The St		✓	313	100.000
C - Seven Mile Ln S		✓	532	100.000
D - Mereworth Rd		✓	15	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	88	417	0
	B - The St	113	0	150	50
	C - Seven Mile Ln S	408	124	0	0
	D - Mereworth Rd	0	15	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	31	16	0
	B - The St	30	0	1	6
	C - Seven Mile Ln S	12	1	0	0
	D - Mereworth Rd	0	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.87	67.31	6.0	F
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.05	12.70	0.1	B
C-ABD	0.22	7.46	0.3	A
C-D				
C-A				

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	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Seven Mile Ln	Crossroads	Two-way	Two-way	Two-way	Two-way		4.71	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	10	Stream B-ACD	4.71	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)
D2	2019	Base	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seven Mile Ln N		✓	609	100.000
B - The St		✓	216	100.000
C - Seven Mile Ln S		✓	474	100.000
D - Mereworth Rd		✓	30	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	193	416	0
	B - The St	103	0	100	13
	C - Seven Mile Ln S	407	67	0	0
	D - Mereworth Rd	0	30	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	16	8	0
	B - The St	18	0	1	8
	C - Seven Mile Ln S	6	0	0	0
	D - Mereworth Rd	0	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.60	24.94	1.6	C
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.11	13.41	0.1	B
C-ABD	0.12	6.95	0.1	A
C-D				
C-A				

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	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Seven Mile Ln	Crossroads	Two-way	Two-way	Two-way	Two-way		8.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-4	Stream B-ACD	8.00	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)
D3	2040	T&M LP_High	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seven Mile Ln N		✓	599	100.000
B - The St		✓	264	100.000
C - Seven Mile Ln S		✓	783	100.000
D - Mereworth Rd		✓	12	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	61	538	0
	B - The St	43	0	174	47
	C - Seven Mile Ln S	629	154	0	0
	D - Mereworth Rd	0	12	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	27	15	0
	B - The St	39	0	1	7
	C - Seven Mile Ln S	8	1	0	0
	D - Mereworth Rd	0	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.78	44.50	3.4	E
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.06	17.20	0.1	C
C-ABD	0.29	8.54	0.4	A
C-D				
C-A				

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	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Seven Mile Ln	Crossroads	Two-way	Two-way	Two-way	Two-way		6.77	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-4	Stream B-ACD	6.77	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)
D4	2040	T&M LP_High	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seven Mile Ln N		✓	667	100.000
B - The St		✓	234	100.000
C - Seven Mile Ln S		✓	778	100.000
D - Mereworth Rd		✓	15	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	167	500	0
	B - The St	98	0	131	5
	C - Seven Mile Ln S	636	142	0	0
	D - Mereworth Rd	0	13	2	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	14	6	0
	B - The St	12	0	0	21
	C - Seven Mile Ln S	4	0	0	0
	D - Mereworth Rd	0	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.75	42.61	2.9	E
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.07	18.33	0.1	C
C-ABD	0.27	8.61	0.4	A
C-D				
C-A				

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	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Seven Mile Ln	Crossroads	Two-way	Two-way	Two-way	Two-way		13.99	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-11	Stream B-ACD	13.99	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)
D5	2042	Forecast Baseline	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seven Mile Ln N		✓	600	100.000
B - The St		✓	288	100.000
C - Seven Mile Ln S		✓	690	100.000
D - Mereworth Rd		✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	54	546	0
	B - The St	76	0	168	44
	C - Seven Mile Ln S	534	155	0	1
	D - Mereworth Rd	0	8	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	30	14	0
	B - The St	29	0	1	7
	C - Seven Mile Ln S	10	1	0	0
	D - Mereworth Rd	0	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.88	71.97	5.9	F
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.03	15.47	0.0	C
C-ABD	0.29	8.57	0.4	A
C-D				
C-A				

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	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Seven Mile Ln	Crossroads	Two-way	Two-way	Two-way	Two-way		3.68	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	12	Stream B-ACD	3.68	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)
D6	2042	Forecast Baseline	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seven Mile Ln N		✓	621	100.000
B - The St		✓	189	100.000
C - Seven Mile Ln S		✓	750	100.000
D - Mereworth Rd		✓	14	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	164	457	0
	B - The St	69	0	115	5
	C - Seven Mile Ln S	607	143	0	0
	D - Mereworth Rd	0	12	2	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Seven Mile Ln N	B - The St	C - Seven Mile Ln S	D - Mereworth Rd
From	A - Seven Mile Ln N	0	15	7	0
	B - The St	18	0	1	22
	C - Seven Mile Ln S	4	0	0	0
	D - Mereworth Rd	0	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.55	23.03	1.3	C
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.06	17.39	0.1	C
C-ABD	0.27	8.35	0.4	A
C-D				
C-A				