

Junctions 9
PICADY 9 - Priority Intersection Module
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**Filename:** Camp Rd\_Gate 7\_Western SA.j9  
**Path:** J:\39304 Heyford Park Tranche 2\Technical\Transport\Junction Assessments\PICADY\2022 Sensitivity Test\SA 1  
**Report generation date:** 23/02/2018 14:37:27

- »2022 Sensitivity Test, AM
- »2022 Sensitivity Test, PM

**Summary of junction performance**

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
<b>2022 Sensitivity Test</b>								
Stream B-ACD	0.1	9.19	0.10	A	0.0	8.51	0.04	A
Stream A-BCD	0.3	7.64	0.26	A	0.2	7.14	0.15	A
Stream D-ABC	0.2	9.61	0.19	A	1.0	13.36	0.50	B
Stream C-ABD	0.0	5.99	0.01	A	0.0	5.33	0.01	A

*Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

**File summary**

**File Description**

<b>Title</b>	(untitled)
<b>Location</b>	
<b>Site number</b>	
<b>Date</b>	27/10/2016
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	
<b>Jobnumber</b>	
<b>Enumerator</b>	PBA\jhorwood
<b>Description</b>	

**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	Veh	Veh	perHour	s	-Min	perMin

**Analysis Options**

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				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	2022 Sensitivity Test	AM	ONE HOUR	08:00	09:30	15	✓
D2	2022 Sensitivity Test	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

# 2022 Sensitivity Test, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	3.44	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	Camp Road (E)		Major
B	Site Access		Minor
C	Camp Road (W)		Major
D	Gate 7		Minor

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Camp Road (E)	6.29				250.0	✓	6.00
C - Camp Road (W)	6.29		✓	2.80	250.0	✓	1.00

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 - Site Access	One lane	3.43	73	29
D - Gate 7	One lane	4.31	31	27

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/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
1	A-D	719	-	-	-	-	-	-	0.275	0.393	0.275	-	-	-
1	B-A	538	0.097	0.244	0.244	-	-	-	0.154	0.349	-	0.244	0.244	0.122
1	B-C	670	0.101	0.256	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	538	0.097	0.244	0.244	-	-	-	0.154	0.349	0.154	-	-	-
1	B-D, offside lane	538	0.097	0.244	0.244	-	-	-	0.154	0.349	0.154	-	-	-
1	C-B	766	0.293	0.293	0.418	-	-	-	-	-	-	-	-	-
1	D-A	725	-	-	-	-	-	-	0.277	-	0.110	-	-	-
1	D-B, nearside lane	567	0.162	0.162	0.368	-	-	-	0.258	0.258	0.102	-	-	-
1	D-B, offside lane	567	0.162	0.162	0.368	-	-	-	0.258	0.258	0.102	-	-	-
1	D-C	567	-	0.162	0.368	0.129	0.258	0.258	0.258	0.258	0.102	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Sensitivity Test	AM	ONE HOUR	08:00	09:30	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	Average Demand (Veh/hr)	Scaling Factor (%)
A - Camp Road (E)		ONE HOUR	✓	364	100.000
B - Site Access		ONE HOUR	✓	41	100.000
C - Camp Road (W)		ONE HOUR	✓	206	100.000
D - Gate 7		ONE HOUR	✓	78	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A - Camp Road (E)	B - Site Access	C - Camp Road (W)	D - Gate 7
From	A - Camp Road (E)	0	9	206	149
	B - Site Access	28	0	13	0
	C - Camp Road (W)	122	4	0	80
	D - Gate 7	56	0	22	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A - Camp Road (E)	B - Site Access	C - Camp Road (W)	D - Gate 7
From	A - Camp Road (E)	0	3	5	3
	B - Site Access	1	0	1	0
	C - Camp Road (W)	3	3	0	2
	D - Gate 7	22	0	28	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.10	9.19	0.1	A	38	56
ABCD	0.26	7.64	0.3	A	137	205
A-B					8	12
A-C					189	284
D-ABC	0.19	9.61	0.2	A	72	107
C-ABD	0.01	5.99	0.0	A	4	6
C-D					73	110
C-A					112	168

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	31	8	480	0.064	31	0.0	0.1	8.010	A
A-BCD	112	28	655	0.171	111	0.0	0.2	6.613	A
A-B	7	2			7				
A-C	155	39			155				
D-ABC	59	15	488	0.120	58	0.0	0.1	8.364	A
C-ABD	3	0.75	649	0.005	3	0.0	0.0	5.572	A
C-D	60	15			60				
C-A	92	23			92				

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	37	9	462	0.080	37	0.1	0.1	8.469	A
A-BCD	134	33	647	0.207	134	0.2	0.3	7.015	A
A-B	8	2			8				
A-C	185	46			185				
D-ABC	70	18	477	0.147	70	0.1	0.2	8.849	A
C-ABD	4	0.90	631	0.006	4	0.0	0.0	5.741	A
C-D	72	18			72				
C-A	110	27			110				

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	45	11	437	0.103	45	0.1	0.1	9.180	A
A-BCD	164	41	635	0.258	164	0.3	0.3	7.630	A
A-B	10	2			10				
A-C	227	57			227				
D-ABC	86	21	461	0.186	86	0.2	0.2	9.595	A
C-ABD	4	1	606	0.007	4	0.0	0.0	5.988	A
C-D	88	22			88				
C-A	134	34			134				

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	45	11	437	0.103	45	0.1	0.1	9.186	A
A-BCD	164	41	635	0.258	164	0.3	0.3	7.639	A
A-B	10	2			10				
A-C	227	57			227				
D-ABC	86	21	461	0.186	86	0.2	0.2	9.608	A
C-ABD	4	1	605	0.007	4	0.0	0.0	5.989	A
C-D	88	22			88				
C-A	134	34			134				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	37	9	462	0.080	37	0.1	0.1	8.480	A
A-BCD	134	33	647	0.207	134	0.3	0.3	7.032	A
A-B	8	2			8				
A-C	185	46			185				
D-ABC	70	18	477	0.147	70	0.2	0.2	8.867	A
C-ABD	4	0.90	630	0.006	4	0.0	0.0	5.744	A
C-D	72	18			72				
C-A	110	27			110				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	31	8	479	0.064	31	0.1	0.1	8.031	A
A-BCD	112	28	655	0.171	112	0.3	0.2	6.639	A
A-B	7	2			7				
A-C	155	39			155				
D-ABC	59	15	488	0.120	59	0.2	0.1	8.395	A
C-ABD	3	0.75	649	0.005	3	0.0	0.0	5.578	A
C-D	60	15			60				
C-A	92	23			92				

# 2022 Sensitivity Test, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	5.89	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## 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	2022 Sensitivity Test	PM	ONE HOUR	17:00	18:30	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	Average Demand (Veh/hr)	Scaling Factor (%)
A - Camp Road (E)		ONE HOUR	✓	210	100.000
B - Site Access		ONE HOUR	✓	16	100.000
C - Camp Road (W)		ONE HOUR	✓	218	100.000
D - Gate 7		ONE HOUR	✓	248	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A - Camp Road (E)	B - Site Access	C - Camp Road (W)	D - Gate 7
From	A - Camp Road (E)	0	21	106	83
	B - Site Access	11	0	5	0
	C - Camp Road (W)	186	9	0	23
	D - Gate 7	145	0	103	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A - Camp Road (E)	B - Site Access	C - Camp Road (W)	D - Gate 7
From	A - Camp Road (E)	0	0	2	9
	B - Site Access	1	0	1	0
	C - Camp Road (W)	2	0	0	22
	D - Gate 7	2	0	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.04	8.51	0.0	A	15	22
A-BCD	0.15	7.14	0.2	A	76	114
A-B					19	29
A-C					97	146
D-ABC	0.50	13.36	1.0	B	228	341
C-ABD	0.01	5.33	0.0	A	8	12
C-D					21	32
C-A					171	256

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	12	3	483	0.025	12	0.0	0.0	7.643	A
A-BCD	62	16	616	0.102	62	0.0	0.1	6.497	A
A-B	16	4			16				
A-C	80	20			80				
D-ABC	187	47	573	0.326	185	0.0	0.5	9.231	A
C-ABD	7	2	710	0.010	7	0.0	0.0	5.117	A
C-D	17	4			17				
C-A	140	35			140				

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	14	4	465	0.031	14	0.0	0.0	7.984	A
A-BCD	75	19	607	0.123	75	0.1	0.1	6.757	A
A-B	19	5			19				
A-C	95	24			95				
D-ABC	223	56	560	0.398	222	0.5	0.6	10.634	B
C-ABD	8	2	700	0.012	8	0.0	0.0	5.205	A
C-D	21	5			21				
C-A	167	42			167				

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	18	4	441	0.040	18	0.0	0.0	8.502	A
A-BCD	91	23	595	0.154	91	0.1	0.2	7.140	A
A-B	23	6			23				
A-C	117	29			117				
D-ABC	273	68	542	0.504	272	0.6	1.0	13.246	B
C-ABD	10	2	685	0.015	10	0.0	0.0	5.328	A
C-D	25	6			25				
C-A	205	51			205				



**17:45 - 18:00**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	18	4	441	0.040	18	0.0	0.0	8.508	A
A-BCD	91	23	595	0.154	91	0.2	0.2	7.142	A
A-B	23	6			23				
A-C	117	29			117				
D-ABC	273	68	542	0.504	273	1.0	1.0	13.363	B
C-ABD	10	2	685	0.015	10	0.0	0.0	5.329	A
C-D	25	6			25				
C-A	205	51			205				

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	14	4	465	0.031	14	0.0	0.0	7.993	A
A-BCD	75	19	607	0.123	75	0.2	0.1	6.764	A
A-B	19	5			19				
A-C	95	24			95				
D-ABC	223	56	560	0.398	224	1.0	0.7	10.766	B
C-ABD	8	2	700	0.012	8	0.0	0.0	5.208	A
C-D	21	5			21				
C-A	167	42			167				

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	12	3	482	0.025	12	0.0	0.0	7.660	A
A-BCD	62	16	616	0.102	63	0.1	0.1	6.513	A
A-B	16	4			16				
A-C	80	20			80				
D-ABC	187	47	573	0.326	187	0.7	0.5	9.360	A
C-ABD	7	2	710	0.010	7	0.0	0.0	5.119	A
C-D	17	4			17				
C-A	140	35			140				