

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
I	09.00-09.15								
I	B-AC	0.00	10.48	0.000		0.0	0.0	0.0	
I	C-A	2.75							
I	C-B	0.28	11.52	0.024		0.0	0.0	0.4	
I	A-B	0.66							
I	A-C	1.59							
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
I		MARGINAL	LANE WIDTH	MAJOR RD.	CENT RES	VIS TO LEFT	VISIBILITY		
I		CHANGE:	(.1M)	WIDTH	WIDTH	(AHEAD FOR MAJOR)	TO RIGHT		
I				(.1M)	(.1M)	(M)	(M)		
I		B-AC	0.150	0.004	0.017	0.006	0.009		
I		C-B	0.121	0.003		0.011			

WARNING THE JUNCTION MODELLED CAN CARRY HIGH-SPEED MAJOR ROAD TRAFFIC. (AG23 REF. 8.4.2(v)).

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I	
I	I	I	I	I	* DELAY *	I	* DELAY *	I	I
I	I	I	(VEH)	I	(MIN)	I	(MIN)	I	(MIN/VEH)
I	B-AC	I	0.0	I	0.0	I	0.0	I	0.00
I	C-A	I	301.7	I		I		I	
I	C-B	I	30.2	I	2.7	I	2.7	I	0.09
I	A-B	I	72.7	I		I		I	
I	A-C	I	174.1	I		I		I	
I	ALL	I	578.7	I	2.7	I	2.7	I	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

***** PICADY 4 run completed.

===== end of file =====

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
10.00-10.15								
B-AC	0.49	11.02	0.045		0.0	0.0	0.7	
C-A	1.33							
C-B	0.31	11.75	0.027		0.0	0.0	0.4	
A-B	0.18							
A-C	1.15							
EFFECT ON CAPACITY (PCU/MIN) OF MAJOR RD. CENT RES VIS TO LEFT VISIBILITY								
MARGINAL CHANGE: LANE WIDTH (.1M) WIDTH (.1M) WIDTH (.1M) (AHEAD FOR MAJOR) (M) TO RIGHT (M)								
B-AC	0.156	0.003	0.017	0.006	0.009			
C-B	0.123	0.002		0.011				

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
10.15-10.30								
B-AC	0.60	10.92	0.055		0.0	0.1	0.9	
C-A	1.63							
C-B	0.38	11.68	0.033		0.0	0.0	0.5	
A-B	0.22							
A-C	1.41							
EFFECT ON CAPACITY (PCU/MIN) OF MAJOR RD. CENT RES VIS TO LEFT VISIBILITY								
MARGINAL CHANGE: LANE WIDTH (.1M) WIDTH (.1M) WIDTH (.1M) (AHEAD FOR MAJOR) (M) TO RIGHT (M)								
B-AC	0.154	0.003	0.017	0.006	0.009			
C-B	0.122	0.002		0.011				

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
10.30-10.45								
B-AC	0.60	10.92	0.055		0.1	0.1	0.9	
C-A	1.63							
C-B	0.38	11.68	0.033		0.0	0.0	0.5	
A-B	0.22							
A-C	1.41							
EFFECT ON CAPACITY (PCU/MIN) OF MAJOR RD. CENT RES VIS TO LEFT VISIBILITY								
MARGINAL CHANGE: LANE WIDTH (.1M) WIDTH (.1M) WIDTH (.1M) (AHEAD FOR MAJOR) (M) TO RIGHT (M)								
B-AC	0.154	0.003	0.017	0.006	0.009			
C-B	0.122	0.002		0.011				

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
10.45-11.00								
B-AC	0.49	11.02	0.045		0.1	0.0	0.7	
C-A	1.33							
C-B	0.31	11.75	0.027		0.0	0.0	0.4	
A-B	0.18							
A-C	1.15							
EFFECT ON CAPACITY (PCU/MIN) OF MAJOR RD. CENT RES VIS TO LEFT VISIBILITY								
MARGINAL CHANGE: LANE WIDTH (.1M) WIDTH (.1M) WIDTH (.1M) (AHEAD FOR MAJOR) (M) TO RIGHT (M)								
B-AC	0.156	0.003	0.017	0.006	0.009			
C-B	0.123	0.002		0.011				

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 4.1 ANALYSIS PROGRAM
RELEASE 3.0 (MAR 2001)

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Run with file:- "k:\664\ Current Projects\BV6525 - F A\SiteAccess04AM-offPk.vpi" at 18:03:48 on Wednesday, 30 May

RUN TITLE

FA Byrkley Park Site Access Junction 2004 AM Off - Peak

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)
I
I
I
I
I
I
MINOR ROAD (ARM B)

ARM A IS B5234 East
ARM B IS Site Access
ARM C IS B5234 West

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I (W)	10.50 M.	I
I	CENTRAL RESERVE WIDTH	I (WCR)	0.00 M.	I
I	MAJOR ROAD RIGHT TURN - WIDTH	I (WC-B)	3.50 M.	I
I	- VISIBILITY	I (VC-B)	215.0 M.	I
I	- BLOCKS TRAFFIC	I	NO	I
I	MINOR ROAD - VISIBILITY TO LEFT	I (VB-C)	215.0 M.	I
I	- VISIBILITY TO RIGHT	I (VB-A)	215.0 M.	I
I	- LANE 1 WIDTH	I (WB-C)	3.50 M.	I
I	- LANE 2 WIDTH	I (WB-A)	0.00 M.	I

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I	
10.00-10.15									I	
B-AC	0.49	11.02	0.045		0.0	0.0	0.7		I	
C-A	1.33								I	
C-B	0.31	11.75	0.027		0.0	0.0	0.4		I	
A-B	0.18								I	
A-C	1.15								I	
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:										
MARGINAL CHANGE:	LANE WIDTH (.1M)	CAPACITY MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)	I
B-AC	0.156	0.003	0.017		0.006		0.009		I	
C-B	0.123	0.002			0.011				I	

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I	
10.15-10.30									I	
B-AC	0.60	10.92	0.055		0.0	0.1	0.9		I	
C-A	1.63								I	
C-B	0.38	11.68	0.033		0.0	0.0	0.5		I	
A-B	0.22								I	
A-C	1.41								I	
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:										
MARGINAL CHANGE:	LANE WIDTH (.1M)	CAPACITY MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)	I
B-AC	0.154	0.003	0.017		0.006		0.009		I	
C-B	0.122	0.002			0.011				I	

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I	
10.30-10.45									I	
B-AC	0.60	10.92	0.055		0.1	0.1	0.9		I	
C-A	1.63								I	
C-B	0.38	11.68	0.033		0.0	0.0	0.5		I	
A-B	0.22								I	
A-C	1.41								I	
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:										
MARGINAL CHANGE:	LANE WIDTH (.1M)	CAPACITY MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)	I
B-AC	0.154	0.003	0.017		0.006		0.009		I	
C-B	0.122	0.002			0.011				I	

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I	
10.45-11.00									I	
B-AC	0.49	11.02	0.045		0.1	0.0	0.7		I	
C-A	1.33								I	
C-B	0.31	11.75	0.027		0.0	0.0	0.4		I	
A-B	0.18								I	
A-C	1.15								I	
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:										
MARGINAL CHANGE:	LANE WIDTH (.1M)	CAPACITY MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)	I
B-AC	0.156	0.003	0.017		0.006		0.009		I	
C-B	0.123	0.002			0.011				I	

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
10.00-10.15								
B-AC	0.49	11.02	0.045		0.0	0.0	0.7	
C-A	1.33							
C-B	0.31	11.75	0.027		0.0	0.0	0.4	
A-B	0.18							
A-C	1.15							
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:								
MARGINAL CHANGE:	LANE WIDTH (.1M)	MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)			
B-AC	0.156	0.003	0.017	0.006	0.011		0.009	
C-B	0.123	0.002						

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
10.15-10.30								
B-AC	0.60	10.92	0.055		0.0	0.1	0.9	
C-A	1.63							
C-B	0.38	11.68	0.033		0.0	0.0	0.5	
A-B	0.22							
A-C	1.41							
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:								
MARGINAL CHANGE:	LANE WIDTH (.1M)	MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)			
B-AC	0.154	0.003	0.017	0.006	0.011		0.009	
C-B	0.122	0.002						

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
10.30-10.45								
B-AC	0.60	10.92	0.055		0.1	0.1	0.9	
C-A	1.63							
C-B	0.38	11.68	0.033		0.0	0.0	0.5	
A-B	0.22							
A-C	1.41							
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:								
MARGINAL CHANGE:	LANE WIDTH (.1M)	MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)			
B-AC	0.154	0.003	0.017	0.006	0.011		0.009	
C-B	0.122	0.002						

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
10.45-11.00								
B-AC	0.49	11.02	0.045		0.1	0.0	0.7	
C-A	1.33							
C-B	0.31	11.75	0.027		0.0	0.0	0.4	
A-B	0.18							
A-C	1.15							
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:								
MARGINAL CHANGE:	LANE WIDTH (.1M)	MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)			
B-AC	0.156	0.003	0.017	0.006	0.011		0.009	
C-B	0.123	0.002						

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
11.00-11.15								
B-AC	0.41	11.10	0.037		0.0	0.0	0.6	
C-A	1.11							
C-B	0.26	11.80	0.022		0.0	0.0	0.3	
A-B	0.15							
A-C	0.96							

MARGINAL CHANGE:	LANE WIDTH (.1M)	CAPACITY (PCU/MIN) MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)
B-AC	0.158	0.002	0.017	0.006	0.009
C-B	0.124	0.002		0.011	

WARNING THE JUNCTION MODELLED CAN CARRY HIGH-SPEED MAJOR ROAD TRAFFIC. (AG23 REF. 8.4.2(v)).

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
10.00	0.0
10.15	0.0
10.30	0.1
10.45	0.1
11.00	0.0
11.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
10.00	0.0
10.15	0.0
10.30	0.0
10.45	0.0
11.00	0.0
11.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN)
B-AC	45.2	30.2	4.3	4.3
C-A	122.0	81.4		
C-B	28.8	19.2	2.5	2.5
A-B	16.5	11.0		
A-C	105.6	70.4		
ALL	318.1	212.1	6.8	6.8

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

***** PICADY 4 run completed.

==== end of file =====

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 4.1 ANALYSIS PROGRAM
RELEASE 3.0 (MAR 2001)

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Run with file:- "k:\664\ Current Projects\BV6525 - F A\SiteAccess04PM.vpi" at 17:45:20 on Wednesday, 30 May 2001

RUN TITLE

FA Byrkley Park Site Access Junction 2004 PM Peak

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

```

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)
                        I
                        I
                        I
                        I
                        I
                        I
                        I
MINOR ROAD (ARM B)
    
```

ARM A IS B5234 East
ARM B IS Site Access
ARM C IS B5234 West

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I (W)	10.50 M.	I
I	CENTRAL RESERVE WIDTH	I (WCR)	0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I (WC-B)	3.50 M.	I
I	- VISIBILITY	I (VC-B)	215.0 M.	I
I	- BLOCKS TRAFFIC	I	NO	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I (VB-C)	215.0 M.	I
I	- VISIBILITY TO RIGHT	I (VB-A)	215.0 M.	I
I	- LANE 1 WIDTH	I (WB-C)	3.50 M.	I
I	- LANE 2 WIDTH	I (WB-A)	0.00 M.	I

TRAFFIC DEMAND DATA

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MINUTES.
 LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I I I	I I I	I NUMBER OF MINUTES FROM START WHEN			I RATE OF FLOW (VEH/MIN) I		
		I FLOW STARTS I	I TOP OF PEAK I	I FLOW STOPS I	I BEFORE I	I AT TOP I	I AFTER I
		I TO RISE I	I IS REACHED I	I FALLING I	I PEAK I	I OF PEAK I	I PEAK I
I	ARM A I	15.00 I	45.00 I	75.00 I	2.03 I	3.04 I	2.03 I
I	ARM B I	15.00 I	45.00 I	75.00 I	0.94 I	1.41 I	0.94 I
I	ARM C I	15.00 I	45.00 I	75.00 I	1.63 I	2.44 I	1.63 I

I I I I I	I I I I I	I TURNING PROPORTIONS			I TURNING COUNTS (VEH/HR)		
		I (PERCENTAGE OF H.V.S)			I		
		I FROM/TO I	I ARM A I	I ARM B I	I ARM C I		
I	16.45 - 18.15	I	I	I	I		
I		I ARM A I	0.000 I	0.000 I	1.000 I		
I		I	0.0 I	0.0 I	162.0 I		
I		I	(0.0) I	(10.0) I	(10.0) I		
I		I	I	I	I		
I		I ARM B I	0.707 I	0.000 I	0.293 I		
I		I	53.0 I	0.0 I	22.0 I		
I		I	(10.0) I	(0.0) I	(10.0) I		
I		I	I	I	I		
I		I ARM C I	1.000 I	0.000 I	0.000 I		
I		I	130.0 I	0.0 I	0.0 I		
I		I	(10.0) I	(10.0) I	(0.0) I		
I		I	I	I	I		

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

I I I	I I I	I I I	I I I	I I I	I I I	I I I	I I I	I I I	I I I
TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY	
	(VEH/MIN)	(VEH/MIN)	CAPACITY	FLOW	QUEUE	QUEUE	(VEH.MIN/	(VEH.MIN/	
			(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	
I	16.45-17.00								
I	B-AC	0.94	10.24	0.092	0.0	0.1	1.5		
I	C-A	1.63							
I	C-B	0.00	11.58	0.000	0.0	0.0	0.0		
I	A-B	0.00							
I	A-C	2.03							
I EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
I			MAJOR RD.	CENT RES	VIS TO LEFT	VISIBILITY			
I	MARGINAL	LANE WIDTH	WIDTH	WIDTH	(AHEAD FOR MAJOR)	TO RIGHT			
I	CHANGE:	(.1M)	(.1M)	(.1M)	(M)	(M)			
I									
I	B-AC	0.154	0.003	0.017	0.006	0.009			
I	C-B	0.121	0.003		0.011				

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.00-17.15									I
I	B-AC	1.12	10.10	0.111		0.1	0.1	1.8		I
I	C-A	1.94								I
I	C-B	0.00	11.48	0.000		0.0	0.0	0.0		I
I	A-B	0.00								I
I	A-C	2.42								I
I	EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
I	MARGINAL	LANE WIDTH	MAJOR RD.	CENT RES	VIS TO LEFT	VISIBILITY				
I	CHANGE:	(.1M)	WIDTH	WIDTH	(AHEAD FOR MAJOR)	TO RIGHT				
I			(.1M)	(.1M)	(M)	(M)				
I	B-AC	0.151	0.004	0.017	0.006	0.009				
I	C-B	0.120	0.004		0.010					

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.15-17.30									I
I	B-AC	1.37	9.91	0.138		0.1	0.2	2.3		I
I	C-A	2.38								I
I	C-B	0.00	11.34	0.000		0.0	0.0	0.0		I
I	A-B	0.00								I
I	A-C	2.96								I
I	EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
I	MARGINAL	LANE WIDTH	MAJOR RD.	CENT RES	VIS TO LEFT	VISIBILITY				
I	CHANGE:	(.1M)	WIDTH	WIDTH	(AHEAD FOR MAJOR)	TO RIGHT				
I			(.1M)	(.1M)	(M)	(M)				
I	B-AC	0.148	0.005	0.017	0.006	0.009				
I	C-B	0.119	0.004		0.010					

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.30-17.45									I
I	B-AC	1.37	9.91	0.138		0.2	0.2	2.4		I
I	C-A	2.38								I
I	C-B	0.00	11.34	0.000		0.0	0.0	0.0		I
I	A-B	0.00								I
I	A-C	2.96								I
I	EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
I	MARGINAL	LANE WIDTH	MAJOR RD.	CENT RES	VIS TO LEFT	VISIBILITY				
I	CHANGE:	(.1M)	WIDTH	WIDTH	(AHEAD FOR MAJOR)	TO RIGHT				
I			(.1M)	(.1M)	(M)	(M)				
I	B-AC	0.148	0.005	0.017	0.006	0.009				
I	C-B	0.119	0.004		0.010					

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.45-18.00									I
I	B-AC	1.12	10.10	0.111		0.2	0.1	1.9		I
I	C-A	1.94								I
I	C-B	0.00	11.48	0.000		0.0	0.0	0.0		I
I	A-B	0.00								I
I	A-C	2.42								I
I	EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
I	MARGINAL	LANE WIDTH	MAJOR RD.	CENT RES	VIS TO LEFT	VISIBILITY				
I	CHANGE:	(.1M)	WIDTH	WIDTH	(AHEAD FOR MAJOR)	TO RIGHT				
I			(.1M)	(.1M)	(M)	(M)				
I	B-AC	0.151	0.004	0.017	0.006	0.009				
I	C-B	0.120	0.004		0.010					

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
18.00-18.15								
B-AC	0.94	10.24	0.092		0.1	0.1	1.6	
C-A	1.63							
C-B	0.00	11.58	0.000		0.0	0.0	0.0	
A-B	0.00							
A-C	2.03							

EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:						
MARGINAL CHANGE:	LANE WIDTH (.1M)	MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)	
B-AC	0.154	0.003	0.017	0.006	0.009	
C-B	0.121	0.003		0.011		

WARNING THE JUNCTION MODELLED CAN CARRY HIGH-SPEED MAJOR ROAD TRAFFIC. (AG23 REF. 8.4.2(v)).

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
B-AC	102.8	68.6	11.5	0.11
C-A	178.3	118.8		
C-B	0.0	0.0	0.0	0.00
A-B	0.0	0.0		
A-C	222.1	148.1		
ALL	503.2	335.5	11.5	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

***** PICADY 4 run completed.

===== end of file =====

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 4.1 ANALYSIS PROGRAM
RELEASE 3.0 (MAR 2001)

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Run with file:- "k:\664\A) Current Projects\BV6525 - F A\SiteAccess04PM-offPk.vpi" at 18:06:17 on Wednesday, 30 May

RUN TITLE

FA Byrkley Park Site Access Junction 2004 PM Off - Peak

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)
I
I
I
I
I
I
MINOR ROAD (ARM B)

ARM A IS B5234 East
ARM B IS Site Access
ARM C IS B5234 West

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B) 215.0 M.
- BLOCKS TRAFFIC	NO
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 215.0 M.
- VISIBILITY TO RIGHT	(VB-A) 215.0 M.
- LANE 1 WIDTH	(WB-C) 3.50 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

TRAFFIC DEMAND DATA

TIME PERIOD BEGINS 13.45 AND ENDS 15.15

LENGTH OF TIME PERIOD - 90 MINUTES.
 LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
	FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.75	2.63	1.75
ARM B	15.00	45.00	75.00	0.41	0.62	0.41
ARM C	15.00	45.00	75.00	1.80	2.70	1.80

TIME	TURNING PROPORTIONS			
	FROM/TO	ARM A	ARM B	ARM C
13.45 - 15.15	ARM A	0.000	0.086	0.914
		(0.0)	(10.0)	(10.0)
	ARM B	0.364	0.000	0.636
		12.0	0.0	21.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.854	0.146	0.000
		123.0	21.0	0.0
		(10.0)	(10.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/TIME SEGMENT)
13.45-14.00								
B-AC	0.41	10.91	0.038		0.0	0.0	0.6	
C-A	1.54							
C-B	0.26	11.65	0.023		0.0	0.0	0.3	
A-B	0.15							
A-C	1.60							
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:								
MARGINAL CHANGE:	LANE WIDTH (.1M)	MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)			
B-AC	0.154	0.003	0.017	0.006	0.009			
C-B	0.122	0.003		0.011				

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
14.00-14.15								
B-AC	0.49	10.79	0.046		0.0	0.0	0.7	
C-A	1.84							
C-B	0.31	11.56	0.027		0.0	0.0	0.4	
A-B	0.18							
A-C	1.91							
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:								
MARGINAL CHANGE:	LANE WIDTH (.1M)	MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)			
B-AC	0.152	0.004	0.017	0.006	0.009			
C-B	0.121	0.003		0.011				

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
14.15-14.30								
B-AC	0.60	10.64	0.057		0.0	0.1	0.9	
C-A	2.25							
C-B	0.38	11.44	0.034		0.0	0.0	0.5	
A-B	0.22							
A-C	2.34							
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:								
MARGINAL CHANGE:	LANE WIDTH (.1M)	MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)			
B-AC	0.148	0.004	0.017	0.006	0.009			
C-B	0.120	0.004		0.010				

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
14.30-14.45								
B-AC	0.60	10.64	0.057		0.1	0.1	0.9	
C-A	2.25							
C-B	0.38	11.44	0.034		0.0	0.0	0.5	
A-B	0.22							
A-C	2.34							
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:								
MARGINAL CHANGE:	LANE WIDTH (.1M)	MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)			
B-AC	0.148	0.004	0.017	0.006	0.009			
C-B	0.120	0.004		0.010				

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
14.45-15.00								
B-AC	0.49	10.79	0.046		0.1	0.0	0.7	
C-A	1.84							
C-B	0.31	11.56	0.027		0.0	0.0	0.4	
A-B	0.18							
A-C	1.91							
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:								
MARGINAL CHANGE:	LANE WIDTH (.1M)	MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT (M)			
B-AC	0.152	0.004	0.017	0.006	0.009			
C-B	0.121	0.003		0.011				

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
15.00-15.15								
B-AC	0.41	10.91	0.038		0.0	0.0	0.6	
C-A	1.54							
C-B	0.26	11.65	0.023		0.0	0.0	0.4	
A-B	0.15							
A-C	1.60							

EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:						
MARGINAL CHANGE:	LANE WIDTH (.1M)	MAJOR RD. WIDTH (.1M)	CENT RES WIDTH (.1M)	VIS TO LEFT (AHEAD FOR MAJOR) (M)	VISIBILITY TO RIGHT	
B-AC	0.154	0.003	0.017	0.006	0.009	
C-B	0.122	0.003		0.011		

WARNING* THE JUNCTION MODELLED CAN CARRY HIGH-SPEED MAJOR ROAD TRAFFIC. (AG23 REF. 8.4.2(v)).

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
14.00	0.0
14.15	0.0
14.30	0.1
14.45	0.1
15.00	0.0
15.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
14.00	0.0
14.15	0.0
14.30	0.0
14.45	0.0
15.00	0.0
15.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	INCLUSIVE QUEUEING (VEH/H)	* QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
B-AC	45.2	30.2	4.4	0.10
C-A	168.7	112.4		
C-B	28.8	19.2	2.6	0.09
A-B	16.5	11.0		
A-C	175.5	117.0		
ALL	434.7	289.8	6.9	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
 THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

***** PICADY 4 run completed.
 ===== end of file =====

Appendix 2

Site Access PICADY – Full Junction Output 2019