

APPENDIX D
PICADY Output

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:- "C:\Users\C Smith\Documents\PICADY\Birdwell ACCESS.vpi" (drive-on-the-left) at 20:39:42 on Friday, 17 May 2

RUN INFORMATION

RUN TITLE : ALDI CUDWORTH
LOCATION : CUDWORTH
DATE : 17/04/13
CLIENT : ALDI STORES LTD
ENUMERATOR : C Smith [CSMITH-HP]
JOB NUMBER :
STATUS :
DESCRIPTION :

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 BARNSLEY ROAD W
ARM B IS SITE ACCESS
ARM C IS BARNSLEY ROAD E

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) 7.80 M.	I
I	CENTRAL RESERVE WIDTH	I	(WCR) 0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	(WC-B) 2.50 M.	I
I	- VISIBILITY	I	(VC-B) 150.00 M.	I
I	- BLOCKS TRAFFIC (SPACES)	I	YES (1)	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 51.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 27.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) 3.50 M.	I
I	- LANE 2 WIDTH	I	(WB-A) 0.00 M.	I

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For Opposing	Slope For Opposing	I
I	STREAM B-C	STREAM A-C	STREAM A-B	I
I	673.02	0.24	0.10	I

I	Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	I
I	532.77	0.23	0.09	0.14	0.32	I

I	Intercept For Slope For Opposing	Slope For Opposing I	I	
I	STREAM C-B	STREAM A-C	STREAM A-B	I
I	682.41	0.24	0.24	I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2013 PM WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	ARM	I FLOW STARTS I TOP OF PEAK I FLOW STOPS	I BEFORE I AT TOP I AFTER	I	I
I	I	I TO RISE I IS REACHED I FALLING	I PEAK I OF PEAK I PEAK	I	I
I	I	I	I	I	I
I	ARM A	I 15.00 I 45.00 I 75.00	I 11.31 I 16.97 I 11.31	I	I
I	ARM B	I 15.00 I 45.00 I 75.00	I 0.60 I 0.90 I 0.60	I	I
I	ARM C	I 15.00 I 45.00 I 75.00	I 14.71 I 22.07 I 14.71	I	I

Demand set: 2013 PM WITH DEVELOPMENT

I	I	I	TURNING PROPORTIONS						I						
I	I	I	TURNING COUNTS						I						
I	I	I	(PERCENTAGE OF H.V.S)						I						
I	I	I							I						
I	I	I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
I	I	I	16.15 - 17.45	I	I	I	I	I	I	I	I	I	I	I	I
I	I	I		I	ARM	A	I	0.000	I	0.017	I	0.983	I	I	I
I	I	I		I			I	0.0	I	15.0	I	890.0	I	I	I
I	I	I		I			I	(0.0)	I	(0.0)	I	(0.0)	I	I	I
I	I	I		I			I		I		I		I	I	I
I	I	I		I	ARM	B	I	0.333	I	0.000	I	0.667	I	I	I
I	I	I		I			I	16.0	I	0.0	I	32.0	I	I	I
I	I	I		I			I	(0.0)	I	(0.0)	I	(0.0)	I	I	I
I	I	I		I			I		I		I		I	I	I
I	I	I		I	ARM	C	I	0.976	I	0.024	I	0.000	I	I	I
I	I	I		I			I	1149.0	I	28.0	I	0.0	I	I	I
I	I	I		I			I	(0.0)	I	(0.0)	I	(0.0)	I	I	I
I	I	I		I			I		I		I		I	I	I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.60	6.32	0.095		0.00	0.10	1.5		0.17
C-AB	0.35	8.61	0.041		0.00	0.04	0.7		0.12
A-B	0.19								
A-C	11.17								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.72	5.39	0.134		0.10	0.15	2.2		0.21
C-AB	0.42	8.07	0.052		0.04	0.06	0.9		0.13
A-B	0.22								
A-C	13.33								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.88	3.87	0.228		0.15	0.29	4.1		0.33
C-AB	0.51	7.33	0.070		0.06	0.09	1.3		0.15
A-B	0.28								
A-C	16.33								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.88	3.87	0.228		0.29	0.29	4.3		0.33
C-AB	0.51	7.33	0.070		0.09	0.09	1.4		0.15
A-B	0.28								
A-C	16.33								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-AC	0.72	5.38	0.134		0.29	0.16	2.5		0.22	I
I	C-AB	0.42	8.07	0.052		0.09	0.06	0.9		0.13	I
I	A-B	0.22									I
I	A-C	13.33									I
I											I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-AC	0.60	6.32	0.095		0.16	0.11	1.7		0.18	I
I	C-AB	0.35	8.61	0.041		0.06	0.05	0.7		0.12	I
I	A-B	0.19									I
I	A-C	11.17									I
I											I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.1

QUEUE FOR STREAM C-AB	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING *	INCLUSIVE QUEUEING *
		* DELAY *	** DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	66.1	44.0	16.2
C-AB	38.5	25.7	5.9
A-B	20.6	13.8	
A-C	1225.0	816.7	
ALL	2931.8	1954.5	22.1

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted).

Intercept For	Slope For	Opposing	Slope For	Opposing
STREAM B-C	STREAM A-C	STREAM A-B	STREAM A-B	
673.02	0.24	0.10		

Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B		
532.77	0.23	0.09	0.14	0.32		

Intercept For	Slope For	Opposing	Slope For	Opposing
STREAM C-B	STREAM A-C	STREAM A-B	STREAM A-B	
682.41	0.24	0.24		

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 PM WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

NUMBER OF MINUTES FROM START WHEN					RATE OF FLOW (VEH/MIN)		
ARM	FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER	
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK	
ARM A	15.00	45.00	75.00	12.85	19.28	12.85	
ARM B	15.00	45.00	75.00	0.60	0.90	0.60	
ARM C	15.00	45.00	75.00	16.69	25.03	16.69	

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.72	4.52	0.159		0.55	0.19	3.1		0.27
C-AB	0.42	7.62	0.055		0.10	0.07	1.0		0.14
A-B	0.22								
A-C	15.18								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.60	5.68	0.106		0.19	0.12	1.9		0.20
C-AB	0.35	8.23	0.043		0.07	0.05	0.7		0.13
A-B	0.19								
A-C	12.71								

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.5
17.15	0.5
17.30	0.2
17.45	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.0

- * 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.

.SLOPES AND INTERCEPT

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

		NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
ARM		FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER
		TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM	A	15.00	45.00	75.00	10.09	15.13	10.09
ARM	B	15.00	45.00	75.00	0.80	1.20	0.80
ARM	C	15.00	45.00	75.00	12.32	18.49	12.32

Demand set: 2013 SAT WITH DEVELOPMENT

TIME	FROM/TO	I ARM	A	I ARM	B	I ARM	C
16.15 - 17.45	I ARM A	I	0.000	I	0.031	I	0.969
	I	I	0.0	I	25.0	I	782.0
	I	I (0.0)	I (0.0)	I (0.0)	I (0.0)	I	I
	I ARM B	I	0.359	I	0.000	I	0.641
	I	I	23.0	I	0.0	I	41.0
	I	I (0.0)	I (0.0)	I (0.0)	I (0.0)	I	I
	I ARM C	I	0.952	I	0.048	I	0.000
	I	I	939.0	I	47.0	I	0.0
	I	I (0.0)	I (0.0)	I (0.0)	I (0.0)	I	I
	I	I	I	I	I	I	I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 SAT WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.80	6.76	0.119		0.00	0.13	1.9		0.17
C-AB	0.59	8.91	0.066		0.00	0.08	1.1		0.12
A-B	0.31								
A-C	9.81								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.96	5.98	0.160		0.13	0.19	2.7		0.20
C-AB	0.70	8.43	0.084		0.08	0.10	1.5		0.13
A-B	0.37								
A-C	11.72								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	1.17	4.80	0.245		0.19	0.32	4.5		0.27
C-AB	0.86	7.76	0.111		0.10	0.15	2.3		0.14
A-B	0.46								
A-C	14.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	1.17	4.80	0.245		0.32	0.32	4.8		0.28
C-AB	0.86	7.76	0.111		0.15	0.15	2.3		0.15
A-B	0.46								
A-C	14.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-AC	0.96	5.98	0.160		0.32	0.19	3.0		0.20	I
I	C-AB	0.70	8.43	0.084		0.15	0.11	1.6		0.13	I
I	A-B	0.37									I
I	A-C	11.72									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-AC	0.80	6.76	0.119		0.19	0.14	2.1		0.17	I
I	C-AB	0.59	8.91	0.066		0.11	0.08	1.2		0.12	I
I	A-B	0.31									I
I	A-C	9.81									I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.1
17.00	0.2
17.15	0.2
17.30	0.1
17.45	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	QUEUEING DELAY	INCLUSIVE QUEUEING DELAY
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-AC	88.1	19.1	0.22
C-AB	64.7	10.1	0.16
A-B	34.4		
A-C	1076.4		
ALL	2556.0	29.1	0.01

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope	Opposing	Slope
STREAM B-C	STREAM A-C	STREAM A-B	
673.02	0.24	0.10	

Intercept	Slope	Opposing	Slope	Slope	Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	
532.77	0.23	0.09	0.14	0.32	

Intercept	Slope	Opposing	Slope
STREAM C-B	STREAM A-C	STREAM A-B	
682.41	0.24	0.24	

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 SAT WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN)	BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK	
ARM A	15.00	45.00	75.00	11.45	17.17	11.45	
ARM B	15.00	45.00	75.00	0.80	1.20	0.80	
ARM C	15.00	45.00	75.00	13.96	20.94	13.96	

Demand set: 2018 SAT WITH DEVELOPMENT

TIME	TURNING PROPORTIONS							
	TURNING COUNTS							
	(PERCENTAGE OF H.V.S)							
	FROM/TO	ARM	A	ARM	B	ARM	C	
16.15 - 17.45	ARM A	I	0.000	I	0.027	I	0.973	I
			0.0		25.0		891.0	
			(0.0)		(0.0)		(0.0)	
			I		I		I	
	ARM B	I	0.359	I	0.000	I	0.641	I
			23.0		0.0		41.0	
			(0.0)		(0.0)		(0.0)	
			I		I		I	
	ARM C	I	0.958	I	0.042	I	0.000	I
			1070.0		47.0		0.0	
			(0.0)		(0.0)		(0.0)	
			I		I		I	

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 SAT WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.80	6.23	0.129		0.00	0.15	2.1		0.18
C-AB	0.59	8.57	0.069		0.00	0.08	1.2		0.13
A-B	0.31								
A-C	11.18								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.96	5.30	0.181		0.15	0.22	3.1		0.23
C-AB	0.70	8.03	0.088		0.08	0.11	1.7		0.14
A-B	0.37								
A-C	13.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	1.17	3.81	0.308		0.22	0.43	6.0		0.38
C-AB	0.86	7.28	0.119		0.11	0.17	2.6		0.16
A-B	0.46								
A-C	16.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	1.17	3.81	0.308		0.43	0.44	6.5		0.38
C-AB	0.86	7.28	0.119		0.17	0.18	2.7		0.16
A-B	0.46								
A-C	16.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.96	5.30	0.181		0.44	0.22	3.6		0.23
C-AB	0.70	8.03	0.088		0.18	0.11	1.7		0.14
A-B	0.37								
A-C	13.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.80	6.23	0.129		0.22	0.15	2.3		0.18
C-AB	0.59	8.57	0.069		0.11	0.08	1.2		0.13
A-B	0.31								
A-C	11.18								

WARNING: NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.4
17.15	0.4
17.30	0.2
17.45	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.1
17.00	0.2
17.15	0.2
17.30	0.1
17.45	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL CAPACITY (VEH/H)	* QUEUEING * (MIN)	* DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * (MIN)	* DELAY * (MIN/VEH)
B-AC	88.1	58.7	23.6	0.27	23.6	0.27
C-AB	64.7	43.1	11.1	0.17	11.1	0.17
A-B	34.4	22.9				
A-C	1226.4	817.6				
ALL	2886.4	1924.2	34.7	0.01	34.7	0.01

* 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 RUN*****

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

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PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

FOR SALES AND DISTRIBUTION INFORMATION,
PROGRAM ADVICE AND MAINTENANCE CONTACT:

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 } 10.00 M.
CENTRAL RESERVE WIDTH	{ WCR } 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	{ WC-B } 2.50 M.
- VISIBILITY	{ VC-B } 250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (5)
MINOR ROAD - VISIBILITY TO LEFT	{ VB-C } 43.0 M.
- VISIBILITY TO RIGHT	{ VB-A } 57.0 M.
- LANE 1 WIDTH	{ WB-C } -
- LANE 2 WIDTH	{ WB-A } -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.70 M.
WIDTH AT 10 M FROM JUNCTION	4.40 M.
WIDTH AT 15 M FROM JUNCTION	3.70 M.
WIDTH AT 20 M FROM JUNCTION	3.00 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-C
0.00	0.00

Due to the presence of a flare, data is not available

Intercept For Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A
0.00	0.00	0.00	0.00

Due to the presence of a flare, data is not available

Intercept For Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-C
742.21	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 PM Peak

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN	RATE OF FLOW (VEH/MIN)
	FLOW STARTS	TOP OF PEAK
	TO RISE	IS REACHED
		FALLING
		PEAK
		OF PEAK
		PEAK
ARM A	15.00	45.00
ARM B	15.00	45.00
ARM C	15.00	45.00

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.22	6.69	0.034		0.05	0.04	0.5		0.15	I
I	B-A	0.82	4.35	0.189		0.47	0.24	3.8		0.29	I
I	C-AB	0.25	8.22	0.031		0.04	0.03	0.5		0.13	I
I	A-B	1.84									I
I	A-C	15.61									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.19	7.34	0.026		0.04	0.03	0.4		0.14	I
I	B-A	0.69	5.24	0.132		0.24	0.15	2.4		0.22	I
I	C-AB	0.21	8.90	0.024		0.03	0.02	0.4		0.12	I
I	A-B	1.54									I
I	A-C	13.07									I

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C	
TIME	NO. OF
SEGMENT	VEHICLES
ENDING	IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A	
TIME	NO. OF
SEGMENT	VEHICLES
ENDING	IN QUEUE
16.15	0.1
16.30	0.2
16.45	0.5
17.00	0.5
17.15	0.2
17.30	0.2

QUEUE FOR STREAM C-AB	
TIME	NO. OF
SEGMENT	VEHICLES
ENDING	IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	20.6	13.8	3.3
B-A	75.7	50.5	24.9
C-AB	23.4	15.6	3.0
A-B	169.3	112.9	
A-C	1434.2	956.2	
ALL	2840.9	1894.0	31.2

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope	For Opposing	Slope	For Opposing
STREAM B-C	STREAM A-C	STREAM A-B		
0.00	0.00	0.00		

* Due to the presence of a flare, data is not available

Intercept	Slope	For Opposing	Slope	For Opposing	Slope	For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B		
0.00	0.00	0.00	0.00	0.00		

* Due to the presence of a flare, data is not available

Intercept	Slope	For Opposing	Slope	For Opposing
STREAM C-B	STREAM A-C	STREAM A-B		
742.21	0.24	0.24		

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 PM PEAK

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
A	15.00	45.00	75.00	16.56	24.84	16.56
B	15.00	45.00	75.00	1.00	1.50	1.00
C	15.00	45.00	75.00	11.77	17.66	11.77

Demand set: 2018 PM PEAK

I		I	TURNING PROPORTIONS				I			
I		I	TURNING COUNTS				I			
I		I	(PERCENTAGE OF H.V.S.)				I			
I		I					I			
I	TIME	I	FROM/TO	I	ARM A	I	ARM B	I	ARM C	I
I	16.00 - 17.30	I		I		I		I		I
I		I	ARM A	I	0.000	I	0.106	I	0.894	I
I		I		I	0.0	I	140.0	I	1185.0	I
I		I		I	(0.0)	I	(0.0)	I	(0.0)	I
I		I		I		I		I		I
I		I	ARM B	I	0.788	I	0.000	I	0.213	I
I		I		I	63.0	I	0.0	I	17.0	I
I		I		I	(0.0)	I	(0.0)	I	(0.0)	I
I		I		I		I		I		I
I		I	ARM C	I	0.980	I	0.020	I	0.000	I
I		I		I	923.0	I	19.0	I	0.0	I
I		I		I	(0.0)	I	(0.0)	I	(0.0)	I
I		I		I		I		I		I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 PM PEAK
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.21	6.89	0.031		0.00	0.03	0.5		0.15
B-A	0.79	4.62	0.171		0.00	0.20	2.9		0.26
C-AB	0.24	8.42	0.028		0.00	0.03	0.4		0.12
A-B	1.76								
A-C	14.87								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.25	6.09	0.042		0.03	0.04	0.6		0.17
B-A	0.94	3.61	0.262		0.20	0.34	4.8		0.37
C-AB	0.28	7.65	0.037		0.03	0.04	0.6		0.14
A-B	2.10								
A-C	17.75								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.31	4.34	0.072		0.04	0.08	1.1		0.25
B-A	1.16	2.21	0.522		0.34	0.98	12.6		0.88
C-AB	0.35	6.59	0.053		0.04	0.06	0.8		0.16
A-B	2.57								
A-C	21.75								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.31	4.24	0.074		0.08	0.08	1.2		0.25
B-A	1.16	2.21	0.523		0.98	1.03	15.1		0.94
C-AB	0.35	6.59	0.053		0.06	0.06	0.8		0.16
A-B	2.57								
A-C	21.75								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.25	6.05	0.042		0.08	0.04	0.7		0.17	I
I	B-A	0.94	3.61	0.262		1.03	0.37	6.1		0.39	I
I	C-AB	0.28	7.65	0.037		0.06	0.04	0.6		0.14	I
I	A-B	2.10									I
I	A-C	17.75									I
I											I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.21	6.88	0.031		0.04	0.03	0.5		0.15	I
I	B-A	0.79	4.62	0.171		0.37	0.21	3.3		0.26	I
I	C-AB	0.24	8.42	0.028		0.04	0.03	0.4		0.12	I
I	A-B	1.76									I
I	A-C	14.87									I
I											I

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.2
16.30	0.3
16.45	1.0
17.00	1.0
17.15	0.4
17.30	0.2

QUEUE FOR STREAM C-AB	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUING 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 RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

* Due to the presence of a flare, data is not available

* Due to the presence of a flare, data is not available

(NE These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

Demand set: 2013 PM PEAK WITH DEVELOPMENT

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

		NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)										
I	ARM	I	FLOW STARTS	I	TOP OF PEAK	I	FLOW STOPS	I	BEFORE	I	AT TOP	I	AFTER	I	
I		I	TO RISE	I	IS REACHED	I	FALLING	I	PEAK	I	OF PEAK	I	PEAK	I	
I		I		I		I		I		I		I		I	
I	ARM	A	I	15.00	I	45.00	I	75.00	I	14.69	I	22.03	I	14.69	I
I	ARM	B	I	15.00	I	45.00	I	75.00	I	0.90	I	1.35	I	0.90	I
I	ARM	C	I	15.00	I	45.00	I	75.00	I	10.46	I	15.69	I	10.46	I

Demand set: 2013 PM PEAK WITH DEVELOPMENT

I		I	TURNING PROPORTIONS						I				
I		I	TURNING COUNTS						I				
I		I	(PERCENTAGE OF H.V.S)						I				
I													
I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
I	16.00 - 17.30	I		I			I			I			I
I		I	ARM	A	I	0.000	I	0.106	I	0.894	I		I
I		I			I	0.0	I	125.0	I	1050.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I
I		I	ARM	B	I	0.792	I	0.000	I	0.208	I		I
I		I			I	57.0	I	0.0	I	15.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I
I		I	ARM	C	I	0.980	I	0.020	I	0.000	I		I
I		I			I	820.0	I	17.0	I	0.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM PEAK WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.19	7.30	0.026		0.00	0.03	0.4		0.14
B-A	0.72	5.21	0.137		0.00	0.16	2.2		0.22
C-AB	0.21	8.87	0.024		0.00	0.02	0.4		0.12
A-B	1.57								
A-C	13.17								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.22	6.64	0.034		0.03	0.03	0.5		0.16
B-A	0.85	4.31	0.198		0.16	0.24	3.5		0.29
C-AB	0.25	8.19	0.031		0.02	0.03	0.5		0.13
A-B	1.87								
A-C	15.73								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.28	5.55	0.050		0.03	0.05	0.7		0.19
B-A	1.05	3.07	0.340		0.24	0.49	6.8		0.49
C-AB	0.31	7.25	0.043		0.03	0.04	0.7		0.14
A-B	2.29								
A-C	19.27								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.28	5.53	0.050		0.05	0.05	0.8		0.19
B-A	1.05	3.07	0.340		0.49	0.50	7.5		0.49
C-AB	0.31	7.25	0.043		0.04	0.04	0.7		0.14
A-B	2.29								
A-C	19.27								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.22	6.63	0.034		0.05	0.04	0.5		0.16	I
I	B-A	0.85	4.31	0.198		0.50	0.25	4.0		0.29	I
I	C-AB	0.25	8.19	0.031		0.04	0.03	0.5		0.13	I
I	A-B	1.87									I
I	A-C	15.73									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.19	7.29	0.026		0.04	0.03	0.4		0.14	I
I	B-A	0.72	5.21	0.137		0.25	0.16	2.5		0.22	I
I	C-AB	0.21	8.87	0.024		0.03	0.02	0.4		0.12	I
I	A-B	1.57									I
I	A-C	13.17									I

WARNING: NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.2
16.30	0.2
16.45	0.5
17.00	0.5
17.15	0.3
17.30	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:- "C:\Users\C Smith\Documents\PICADY\Birdwell ACCESS.vpi" (drive-on-the-left) at 20:39:42 on Friday, 17 May 2

RUN INFORMATION

RUN TITLE : ALDI CUDWORTH
LOCATION : CUDWORTH
DATE : 17/04/13
CLIENT : ALDI STORES LTD
ENUMERATOR : C Smith [CSMITH-HP]
JOB NUMBER :
STATUS :
DESCRIPTION :

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 BARNSLEY ROAD W
ARM B IS SITE ACCESS
ARM C IS BARNSLEY ROAD E

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) 7.80 M.	I
I	CENTRAL RESERVE WIDTH	I	(WCR) 0.00 M.	I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	(WC-B) 2.50 M.	I
I	- VISIBILITY	I	(VC-B) 150.00 M.	I
I	- BLOCKS TRAFFIC (SPACES)	I	YES (1)	I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 51.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 27.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) 3.50 M.	I
I	- LANE 2 WIDTH	I	(WB-A) 0.00 M.	I

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM A-C	STREAM A-B	STREAM A-B	STREAM A-B	I
I	673.02	0.24	0.10			I

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	STREAM C-B	STREAM C-B	I
I	532.77	0.23	0.09	0.14	0.32			I

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM A-C	STREAM A-B	STREAM A-B	STREAM A-B	I
I	682.41	0.24	0.24			I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2013 PM WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I		I	FLOW STARTS I TOP OF PEAK I FLOW STOPS	I	BEFORE I AT TOP I AFTER	I
I		I	TO RISE I IS REACHED I FALLING	I	PEAK I OF PEAK I PEAK	I
I		I		I		I
I	ARM A	I	15.00 I 45.00 I 75.00	I	11.31 I 16.97 I 11.31	I
I	ARM B	I	15.00 I 45.00 I 75.00	I	0.60 I 0.90 I 0.60	I
I	ARM C	I	15.00 I 45.00 I 75.00	I	14.71 I 22.07 I 14.71	I

Demand set: 2013 PM WITH DEVELOPMENT

TIME	FROM/TO	TURNING PROPORTIONS					
		TURNING COUNTS					
		(PERCENTAGE OF H.V.S)					
		ARM	A	ARM	B	ARM	C
16.15 - 17.45	ARM A	0.000	0.017	0.983			
		0.0	15.0	890.0			
		(0.0)	(0.0)	(0.0)			
	ARM B	0.333	0.000	0.667			
		16.0	0.0	32.0			
		(0.0)	(0.0)	(0.0)			
	ARM C	0.976	0.024	0.000			
		1149.0	28.0	0.0			
		(0.0)	(0.0)	(0.0)			

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.60	6.32	0.095		0.00	0.10	1.5		0.17
C-AB	0.35	8.61	0.041		0.00	0.04	0.7		0.12
A-B	0.19								
A-C	11.17								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.72	5.39	0.134		0.10	0.15	2.2		0.21
C-AB	0.42	8.07	0.052		0.04	0.06	0.9		0.13
A-B	0.22								
A-C	13.33								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.88	3.87	0.228		0.15	0.29	4.1		0.33
C-AB	0.51	7.33	0.070		0.06	0.09	1.3		0.15
A-B	0.28								
A-C	16.33								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.88	3.87	0.228		0.29	0.29	4.3		0.33
C-AB	0.51	7.33	0.070		0.09	0.09	1.4		0.15
A-B	0.28								
A-C	16.33								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-AC	0.72	5.38	0.134		0.29	0.16	2.5		0.22	I
I	C-AB	0.42	8.07	0.052		0.09	0.06	0.9		0.13	I
I	A-B	0.22									I
I	A-C	13.33									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-AC	0.60	6.32	0.095		0.16	0.11	1.7		0.18	I
I	C-AB	0.35	8.61	0.041		0.06	0.05	0.7		0.12	I
I	A-B	0.19									I
I	A-C	11.17									I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.1

QUEUE FOR STREAM C-AB	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	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	I	I	I	I	I
I	I	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
I	B-AC	I	66.1	I 44.0	I 16.2	I 0.25	I 16.2	I 0.25
I	C-AB	I	38.5	I 25.7	I 5.9	I 0.15	I 5.9	I 0.15
I	A-B	I	20.6	I 13.8	I	I	I	I
I	A-C	I	1225.0	I 816.7	I	I	I	I
I	ALL	I	2931.3	I 1954.5	I 22.1	I 0.01	I 22.1	I 0.01

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept	For Slope	For Opposing	Slope For Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM A-B	I
I	673.02		0.24	0.10	I

I	Intercept	For Slope	For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM A-B	STREAM C-A	STREAM C-B	I
I	532.77		0.23	0.09	0.14	0.32	I

I	Intercept	For Slope	For Opposing	Slope For Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM A-B	I
I	682.41		0.24	0.24	I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2018 PM WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	I	I	I FLOW STARTS I TOP OF PEAK I FLOW STOPS	I	BEFORE I AT TOP I AFTER	I
I	I	I	I TO RISE I IS REACHED I FALLING	I	PEAK I OF PEAK I PEAK	I
I	I	I	I	I	I	I
I	ARM A	I	15.00	I 45.00	I 75.00	I 12.85
I	ARM B	I	15.00	I 45.00	I 75.00	I 0.60
I	ARM C	I	15.00	I 45.00	I 75.00	I 16.69

Demand set: 2018 PM WITH DEVELOPMENT

TIME	TURNING PROPORTIONS			TURNING COUNTS			(PERCENTAGE OF H.V.S.)		
	FROM/TO	ARM	A	ARM	B	ARM	C		
16.15 - 17.45	ARM A	I	0.000	I	0.015	I	0.985	I	I
		I	0.0	I	15.0	I	1013.0	I	I
		I	(0.0)	I	(0.0)	I	(0.0)	I	I
	ARM B	I	0.333	I	0.000	I	0.667	I	I
		I	16.0	I	0.0	I	32.0	I	I
		I	(0.0)	I	(0.0)	I	(0.0)	I	I
	ARM C	I	0.979	I	0.021	I	0.000	I	I
		I	1307.0	I	28.0	I	0.0	I	I
		I	(0.0)	I	(0.0)	I	(0.0)	I	I
		I		I		I		I	I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 PM WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.60	5.68	0.106		0.00	0.12	1.7		0.20
C-AB	0.35	8.23	0.043		0.00	0.05	0.7		0.13
A-B	0.19								
A-C	12.71								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.72	4.52	0.159		0.12	0.19	2.7		0.26
C-AB	0.42	7.62	0.055		0.05	0.07	1.0		0.14
A-B	0.22								
A-C	15.18								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.88	2.44	0.361		0.19	0.53	7.1		0.62
C-AB	0.51	6.78	0.076		0.07	0.10	1.5		0.16
A-B	0.28								
A-C	18.59								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.88	2.44	0.361		0.53	0.55	8.1		0.64
C-AB	0.51	6.78	0.076		0.10	0.10	1.6		0.16
A-B	0.28								
A-C	18.59								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-AC	0.72	4.52	0.159		0.55	0.19	3.1		0.27	I
I	C-AB	0.42	7.62	0.055		0.10	0.07	1.0		0.14	I
I	A-B	0.22									I
I	A-C	15.18									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-AC	0.60	5.68	0.106		0.19	0.12	1.9		0.20	I
I	C-AB	0.35	8.23	0.043		0.07	0.05	0.7		0.13	I
I	A-B	0.19									I
I	A-C	12.71									I

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.5
17.15	0.5
17.30	0.2
17.45	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	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	I	I	I	I	I
I	I	I	(VEH)	I	(MIN)	I	(MIN)	I
I	I	I	(VEH/H)	I	(MIN/VEH)	I	(MIN/VEH)	I
I	B-AC	I	66.1	I	24.6	I	24.6	I
I	C-AB	I	38.5	I	6.5	I	6.5	I
I	A-B	I	20.6	I		I		I
I	A-C	I	1394.3	I		I		I
I	ALL	I	3318.6	I	31.1	I	31.1	I

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept	For	Slope	For	Opposing	Slope	For	Opposing	I
I	STREAM	B-C	STREAM	A-C	STREAM	A-B	STREAM	A-B	I
I		673.02		0.24		0.10			I

I	Intercept	For	Slope	For	Opposing	Slope	For	Opposing	Slope	For	Opposing	I	
I	STREAM	B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM	C-B	STREAM	C-B	I
I	532.77		0.23		0.09		0.14		0.32			I	

I	Intercept	For	Slope	For	Opposing	Slope	For	Opposing	I
I	STREAM	C-B	STREAM	A-C	STREAM	A-B	STREAM	A-B	I
I		682.41		0.24		0.24			I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	I	I	I	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2013 SAT WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	I	I	FLOW STARTS	I	BEFORE	I
I	I	I	TOP OF PEAK	I	AT TOP	I
I	I	I	IS REACHED	I	OF PEAK	I
I	I	I	FALLING	I	PEAK	I
I	I	I	I	I	I	I
I	ARM A	I	15.00	I	45.00	I
I	ARM B	I	15.00	I	45.00	I
I	ARM C	I	15.00	I	45.00	I

Demand set: 2013 SAT WITH DEVELOPMENT

I		I	TURNING PROPORTIONS						I				
I		I	TURNING COUNTS						I				
I		I	(PERCENTAGE OF H.V.S)						I				
I		I	-----										
I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
I	16.15 - 17.45	I		I			I			I			I
I		I	ARM	A	I	0.000	I	0.031	I	0.969	I		I
I		I			I	0.0	I	25.0	I	782.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I
I		I	ARM	B	I	0.359	I	0.000	I	0.641	I		I
I		I			I	23.0	I	0.0	I	41.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I
I		I	ARM	C	I	0.952	I	0.048	I	0.000	I		I
I		I			I	939.0	I	47.0	I	0.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 SAT WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.80	6.76	0.119		0.00	0.13	1.9		0.17
C-AB	0.59	5.91	0.066		0.00	0.08	1.1		0.12
A-B	0.31								
A-C	9.81								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.96	5.98	0.160		0.13	0.19	2.7		0.20
C-AB	0.70	8.43	0.084		0.08	0.10	1.5		0.13
A-B	0.37								
A-C	11.72								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	1.17	4.80	0.245		0.19	0.32	4.5		0.27
C-AB	0.86	7.76	0.111		0.10	0.15	2.3		0.14
A-B	0.46								
A-C	14.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	1.17	4.80	0.245		0.32	0.32	4.8		0.28
C-AB	0.86	7.76	0.111		0.15	0.15	2.3		0.15
A-B	0.46								
A-C	14.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-AC	0.96	5.98	0.160		0.32	0.19	3.0		0.20	I
I	C-AB	0.70	8.43	0.084		0.15	0.11	1.6		0.13	I
I	A-B	0.37									I
I	A-C	11.72									I
I											I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-AC	0.80	6.76	0.119		0.19	0.14	2.1		0.17	I
I	C-AB	0.59	8.91	0.066		0.11	0.08	1.2		0.12	I
I	A-B	0.31									I
I	A-C	9.81									I
I											I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.1
17.00	0.2
17.15	0.2
17.30	0.1
17.45	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING *	* INCLUSIVE QUEUEING *
		* DELAY *	* DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-AC	88.1	58.7	19.1
C-AB	64.7	43.1	10.1
A-B	34.4	22.9	
A-C	1076.4	717.6	
ALL	2556.0	1704.0	29.1

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For	Slope For	Opposing	Slope For
STREAM B-C	STREAM A-C	STREAM A-B	
673.02	0.24	0.10	

Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B		
532.77	0.23	0.09	0.14	0.32		

Intercept For	Slope For	Opposing	Slope For
STREAM C-B	STREAM A-C	STREAM A-B	
682.41	0.24	0.24	

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 SAT WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

		NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
ARM		FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER
		TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM	A	15.00	45.00	75.00	11.45	17.17	11.45
ARM	B	15.00	45.00	75.00	0.80	1.20	0.80
ARM	C	15.00	45.00	75.00	13.96	20.94	13.96

Demand set: 2018 SAT WITH DEVELOPMENT

I		I	TURNING PROPORTIONS						I				
I		I	TURNING COUNTS						I				
I		I	(PERCENTAGE OF H.V.S)						I				
I		I	-----						I				
I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
I	16.15 - 17.45	I		I			I			I			I
I		I	ARM	A	I	0.000	I	0.027	I	0.973	I		I
I		I			I	0.0	I	25.0	I	891.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I
I		I	ARM	B	I	0.359	I	0.000	I	0.641	I		I
I		I			I	23.0	I	0.0	I	41.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I
I		I	ARM	C	I	0.958	I	0.042	I	0.000	I		I
I		I			I	1070.0	I	47.0	I	0.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 SAT WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.80	6.23	0.129		0.00	0.15	2.1		0.18
C-AB	0.59	8.57	0.069		0.00	0.08	1.2		0.13
A-B	0.31								
A-C	11.18								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.96	5.30	0.181		0.15	0.22	3.1		0.23
C-AB	0.70	8.03	0.088		0.08	0.11	1.7		0.14
A-B	0.37								
A-C	13.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	1.17	3.81	0.308		0.22	0.43	6.0		0.38
C-AB	0.86	7.28	0.119		0.11	0.17	2.6		0.16
A-B	0.46								
A-C	16.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	1.17	3.81	0.308		0.43	0.44	6.5		0.38
C-AB	0.86	7.28	0.119		0.17	0.18	2.7		0.16
A-B	0.46								
A-C	16.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-AC	0.96	5.30	0.181		0.44	0.22	3.6		0.23	I
I	C-AB	0.70	8.03	0.088		0.18	0.11	1.7		0.14	I
I	A-B	0.37									I
I	A-C	13.35									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-AC	0.80	6.23	0.129		0.22	0.15	2.3		0.18	I
I	C-AB	0.59	8.57	0.069		0.11	0.08	1.2		0.13	I
I	A-B	0.31									I
I	A-C	11.18									I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.4
17.15	0.4
17.30	0.2
17.45	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.1
17.00	0.2
17.15	0.2
17.30	0.1
17.45	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND (VEH)	I	58.7 (VEH/H)	I	* QUEUEING * * DELAY * (MIN)	I	0.27 (MIN/VEH)	I	* INCLUSIVE QUEUEING * * DELAY * (MIN)	I	0.27 (MIN/VEH)	I
I	B-AC	I	88.1	I	58.7	I	23.6	I	0.27	I	23.6	I	0.27	I
I	C-AB	I	64.7	I	43.1	I	11.1	I	0.17	I	11.1	I	0.17	I
I	A-B	I	34.4	I	22.9	I		I		I		I		I
I	A-C	I	1226.4	I	817.6	I		I		I		I		I
I	ALL	I	2886.4	I	1924.2	I	34.7	I	0.01	I	34.7	I	0.01	I

* 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 RUN*****

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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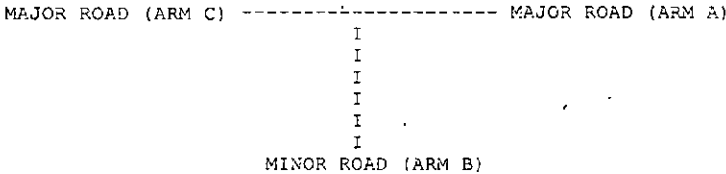
Run with file:- "C:\Users\C Smith\Documents\PICADY\THE WALK.vpi" (drive-on-the-left) at 13:03:54 on Tuesday, 30 April 2013

RUN INFORMATION

RUN TITLE : The Walk
LOCATION : Birdwell
DATE : 30/04/13
CLIENT : Aldi Stores Ltd
ENUMERATOR : C Smith [CSMITH-HP]
JOB NUMBER :
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Sheffield Road S
ARM B IS The Walk
ARM C IS Sheffield Road N

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) 10.00 M.	I
I	CENTRAL RESERVE WIDTH	I	(WCR) 0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	(WC-B) 2.50 M.	I
I	- VISIBILITY	I	(VC-B) 250.00 M.	I
I	- BLOCKS TRAFFIC (SPACES)	I	YES (5)	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 43.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 57.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) -	I
I	- LANE 2 WIDTH	I	(WB-A) -	I
I	WIDTH AT 0 M FROM JUNCTION	I	10.00 M.	I
I	WIDTH AT 5 M FROM JUNCTION	I	5.70 M.	I
I	WIDTH AT 10 M FROM JUNCTION	I	4.40 M.	I
I	WIDTH AT 15 M FROM JUNCTION	I	3.70 M.	I
I	WIDTH AT 20 M FROM JUNCTION	I	3.00 M.	I
I	- LENGTH OF FLARED SECTION	I	DERIVED: 1 PCU	I

SLOPES AND INTERCEPT

(NB: Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	0.00		0.00		0.00	I

Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM	C-B	I
I	0.00		0.00		0.00		0.00		0.00	I

Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	742.21		0.24		0.24	I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2013 PM Peak

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	I	I	FLOW STARTS	I	TOP OF PEAK	I
I	I	I	TO RISE	I	IS REACHED	I
I	I	I	I	I	FALLING	I
I	I	I	I	I	I	I
I	ARM A	I	15.00	I	45.00	I
I	ARM B	I	15.00	I	45.00	I
I	ARM C	I	15.00	I	45.00	I

Demand set: 2013 PM Peak

		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S.)			
	TIME	FROM/TO	ARM A	ARM B	ARM C
	16.00 - 17.30				
		ARM A	0.000	0.106	0.894
			0.0	123.0	1042.0
			(0.0)	(0.0)	(0.0)
		ARM B	0.786	0.000	0.214
			55.0	0.0	15.0
			(0.0)	(0.0)	(0.0)
		ARM C	0.979	0.021	0.000
			812.0	17.0	0.0
			(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM Peak
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.19	7.35	0.026		0.00	0.03	0.4		0.14
B-A	0.69	5.24	0.132		0.00	0.15	2.1		0.22
C-AB	0.21	8.90	0.024		0.00	0.02	0.4		0.12
A-B	1.54								
A-C	13.07								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.22	6.70	0.034		0.03	0.03	0.5		0.15
B-A	0.82	4.35	0.189		0.15	0.23	3.3		0.28
C-AB	0.25	8.22	0.031		0.02	0.03	0.5		0.13
A-B	1.84								
A-C	15.61								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.28	5.65	0.049		0.03	0.05	0.7		0.19
B-A	1.01	3.13	0.323		0.23	0.46	6.3		0.47
C-AB	0.31	7.29	0.043		0.03	0.04	0.7		0.14
A-B	2.26								
A-C	19.12								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.28	5.63	0.049		0.05	0.05	0.8		0.19
B-A	1.01	3.13	0.323		0.46	0.47	6.9		0.47
C-AB	0.31	7.29	0.043		0.04	0.04	0.7		0.14
A-B	2.26								
A-C	19.12								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.22	6.69	0.034		0.05	0.04	0.5		0.15	I
I	B-A	0.82	4.35	0.189		0.47	0.24	3.8		0.29	I
I	C-AB	0.25	8.22	0.031		0.04	0.03	0.5		0.13	I
I	A-B	1.84									I
I	A-C	15.61									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.19	7.34	0.026		0.04	0.03	0.4		0.14	I
I	B-A	0.69	5.24	0.132		0.24	0.15	2.4		0.22	I
I	C-AB	0.21	8.90	0.024		0.03	0.02	0.4		0.12	I
I	A-B	1.54									I
I	A-C	13.07									I

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.1
16.30	0.2
16.45	0.5
17.00	0.5
17.15	0.2
17.30	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I	
I		I		I	* DELAY *	I	* DELAY *	I	
I		I		I		I		I	
I		I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	I	
I	B-C	I	20.6	I 13.8	I 3.3	I 0.16	I 3.3	I 0.16	I
I	B-A	I	75.7	I 50.5	I 24.9	I 0.33	I 24.9	I 0.33	I
I	C-AB	I	23.4	I 15.6	I 3.0	I 0.13	I 3.0	I 0.13	I
I	A-B	I	169.3	I 112.9	I	I	I	I	I
I	A-C	I	1434.2	I 956.2	I	I	I	I	I
I	ALL	I	2840.9	I 1894.0	I 31.2	I 0.01	I 31.2	I 0.01	I

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For I STREAM B-C	Slope For STREAM A-C	Slope For Opposing STREAM A-B	I
I	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For STREAM B-A	Slope For STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	I
I	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For I STREAM C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B	I
I	742.21	0.24	0.24	I

(NB These values do not allow for any site specific corrections).

TRAFFIC DEMAND DATA

I	ARM	I	FLOW	SCALE(%)	I
I	A	I		100	I
I	B	I		100	I
I	C	I		100	I

Demand set: 2018 PM PEAK

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
		FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER
		TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
I		I	I	I	I	I	I
I	A	I 15.00	I 45.00	I 75.00	I 16.56	I 24.84	I 16.56
I	B	I 15.00	I 45.00	I 75.00	I 1.00	I 1.50	I 1.00
I	C	I 15.00	I 45.00	I 75.00	I 11.77	I 17.66	I 11.77

Demand set: 2018 PM PEAK

	I	I	TURNING PROPORTIONS				I					
	I	I	TURNING COUNTS				I					
	I	I	(PERCENTAGE OF H.V.S)				I					
TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
16.00 - 17.30	I		I			I			I			I
	I	ARM	A	I	0.000	I	0.106	I	0.894	I		I
	I			I	0.0	I	140.0	I	1185.0	I		I
	I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
	I			I		I		I		I		I
	I	ARM	B	I	0.788	I	0.000	I	0.213	I		I
	I			I	63.0	I	0.0	I	17.0	I		I
	I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
	I			I		I		I		I		I
	I	ARM	C	I	0.980	I	0.020	I	0.000	I		I
	I			I	923.0	I	19.0	I	0.0	I		I
	I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
	I			I		I		I		I		I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 PM PEAK
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.21	6.89	0.031		0.00	0.03	0.5		0.15
B-A	0.79	4.62	0.171		0.00	0.20	2.9		0.26
C-AB	0.24	8.42	0.028		0.00	0.03	0.4		0.12
A-B	1.76								
A-C	14.87								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.25	6.09	0.042		0.03	0.04	0.6		0.17
B-A	0.94	3.61	0.262		0.20	0.34	4.8		0.37
C-AB	0.28	7.65	0.037		0.03	0.04	0.6		0.14
A-B	2.10								
A-C	17.75								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.31	4.34	0.072		0.04	0.08	1.1		0.25
B-A	1.16	2.21	0.522		0.34	0.98	12.6		0.88
C-AB	0.35	6.59	0.053		0.04	0.06	0.8		0.16
A-B	2.57								
A-C	21.75								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.31	4.24	0.074		0.08	0.08	1.2		0.25
B-A	1.16	2.21	0.523		0.98	1.03	15.1		0.94
C-AB	0.35	6.59	0.053		0.06	0.06	0.8		0.16
A-B	2.57								
A-C	21.75								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.25	6.05	0.042		0.08	0.04	0.7		0.17	I
I	B-A	0.94	3.61	0.262		1.03	0.37	6.1		0.39	I
I	C-AB	0.28	7.65	0.037		0.06	0.04	0.6		0.14	I
I	A-B	2.10									I
I	A-C	17.75									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.21	6.88	0.031		0.04	0.03	0.5		0.15	I
I	B-A	0.79	4.62	0.171		0.37	0.21	3.3		0.26	I
I	C-AB	0.24	8.42	0.028		0.04	0.03	0.4		0.12	I
I	A-B	1.76									I
I	A-C	14.87									I

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.2
16.30	0.3
16.45	1.0
17.00	1.0
17.15	0.4
17.30	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	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	I	I	I	I	I
I	I	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
I	B-C	I	23.4	I 15.6	I 4.5	I 0.19	I 4.5	I 0.19
I	B-A	I	86.7	I 57.8	I 44.9	I 0.52	I 44.9	I 0.52
I	C-AB	I	26.2	I 17.4	I 3.7	I 0.14	I 3.7	I 0.14
I	A-B	I	192.7	I 128.5	I	I	I	I
I	A-C	I	1631.1	I 1087.4	I	I	I	I
I	ALL	I	3230.5	I 2153.6	I 53.1	I 0.02	I 53.1	I 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept	For Slope	For Opposing	Slope	For Opposing	I
I	STREAM	B-C	STREAM	A-C	STREAM	A-B
I	I	I	I	I	I	I
I	0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept	For Slope	For Opposing	Slope	For Opposing	Slope	For Opposing	I
I	STREAM	B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A
I	I	I	I	I	I	I	I	I
I	0.00		0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept	For Slope	For Opposing	Slope	For Opposing	I
I	STREAM	C-B	STREAM	A-C	STREAM	A-B
I	I	I	I	I	I	I
I	742.21		0.24		0.24	I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	I	I	I	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2013 PM PEAK WITH DEVELOPMENT

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	I	I	FLOW STARTS	I	TOP OF PEAK	I
I	I	I	TO RISE	I	IS REACHED	I
I	I	I	I	I	FALLING	I
I	I	I	I	I	I	I
I	ARM A	I	15.00	I	45.00	I 75.00
I	ARM B	I	15.00	I	45.00	I 75.00
I	ARM C	I	15.00	I	45.00	I 75.00

Demand set: 2013 PM PEAK WITH DEVELOPMENT

			TURNING PROPORTIONS			
			TURNING COUNTS			
			(PERCENTAGE OF H.V.S)			
	TIME	FROM/TO	ARM A	ARM B	ARM C	
	16.00 - 17.30					
		ARM A	0.000	0.106	0.894	
			0.0	125.0	1050.0	
			(0.0)	(0.0)	(0.0)	
		ARM B	0.792	0.000	0.208	
			57.0	0.0	15.0	
			(0.0)	(0.0)	(0.0)	
		ARM C	0.980	0.020	0.000	
			820.0	17.0	0.0	
			(0.0)	(0.0)	(0.0)	

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM PEAK WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.19	7.30	0.026		0.00	0.03	0.4		0.14
B-A	0.72	5.21	0.137		0.00	0.16	2.2		0.22
C-AB	0.21	8.87	0.024		0.00	0.02	0.4		0.12
A-B	1.57								
A-C	13.17								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.22	6.64	0.034		0.03	0.03	0.5		0.16
B-A	0.85	4.31	0.198		0.16	0.24	3.5		0.29
C-AB	0.25	8.19	0.031		0.02	0.03	0.5		0.13
A-B	1.87								
A-C	15.73								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.28	5.55	0.050		0.03	0.05	0.7		0.19
B-A	1.05	3.07	0.340		0.24	0.49	6.8		0.49
C-AB	0.31	7.25	0.043		0.03	0.04	0.7		0.14
A-B	2.29								
A-C	19.27								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.28	5.53	0.050		0.05	0.05	0.8		0.19
B-A	1.05	3.07	0.340		0.49	0.50	7.5		0.49
C-AB	0.31	7.25	0.043		0.04	0.04	0.7		0.14
A-B	2.29								
A-C	19.27								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.22	6.63	0.034		0.05	0.04	0.5		0.16
B-A	0.85	4.31	0.198		0.50	0.25	4.0		0.29
C-AB	0.25	8.19	0.031		0.04	0.03	0.5		0.13
A-B	1.87								
A-C	15.73								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.19	7.29	0.026		0.04	0.03	0.4		0.14
B-A	0.72	5.21	0.137		0.25	0.16	2.5		0.22
C-AB	0.21	8.87	0.024		0.03	0.02	0.4		0.12
A-B	1.57								
A-C	13.17								

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.2
16.30	0.2
16.45	0.5
17.00	0.5
17.15	0.3
17.30	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	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	I	I	I	I	I
I	I	I	(VEH)	I	(MIN)	I	(MIN)	I
I	I	I	(VEH/H)	I	(MIN/VEH)	I	(MIN/VEH)	I
I	B-C	I	20.6	I	13.8	I	3.4	I
I	B-A	I	78.5	I	52.3	I	0.16	I
I	C-AB	I	23.4	I	15.6	I	0.34	I
I	A-B	I	172.1	I	114.7	I	3.0	I
I	A-C	I	1445.2	I	963.5	I	0.13	I
I	ALL	I	2868.5	I	1912.3	I	33.0	I
I		I		I		I	0.01	I
I		I		I		I	33.0	I
I		I		I		I	0.01	I

* 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 RUN*****

 SLOPES AND INTERCEPT

(NB: Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	I
I	0.00		0.00		0.00		0.00	I
I								I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	742.21		0.24		0.24	I

(NB These values do not allow for any site specific corrections)

 TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2018 PM PEAK WITH DEVELOPMENT

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	I	I	FLOW STARTS	I	BEFORE	I
I	I	I	TOP OF PEAK	I	AT TOP	I
I	I	I	FLOW STOPS	I	OF PEAK	I
I	I	I	TO RISE	I	PEAK	I
I	I	I	IS REACHED	I	I	I
I	I	I	FALLING	I	I	I
I	ARM A	I	15.00	I	16.69	I
I	ARM B	I	15.00	I	25.03	I
I	ARM C	I	15.00	I	1.02	I
I		I	45.00	I	1.54	I
I		I	45.00	I	75.00	I
I		I	45.00	I	11.88	I
I		I	45.00	I	17.81	I
I		I	45.00	I	11.88	I

Demand set: 2018 PM PEAK WITH DEVELOPMENT

TIME	I FROM/TO	TURNING PROPORTIONS						
		TURNING COUNTS						
		(PERCENTAGE OF H.V.S)						
	I	ARM A	I	ARM B	I	ARM C	I	
16.00 - 17.30	I	I	I	I	I	I	I	
	I	ARM A	I	0.000	I	0.106	I	0.894
	I		I	0.0	I	142.0	I	1193.0
	I		I	(0.0)	I	(0.0)	I	(0.0)
	I		I		I		I	
	I	ARM B	I	0.793	I	0.000	I	0.207
	I		I	65.0	I	0.0	I	17.0
	I		I	(0.0)	I	(0.0)	I	(0.0)
	I		I		I		I	
	I	ARM C	I	0.980	I	0.020	I	0.000
	I		I	931.0	I	19.0	I	0.0
	I		I	(0.0)	I	(0.0)	I	(0.0)
	I		I		I		I	

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 PM PEAK WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.21	6.84	0.031		0.00	0.03	0.5		0.15
B-A	0.82	4.58	0.178		0.00	0.21	3.0		0.26
C-AB	0.24	8.39	0.028		0.00	0.03	0.4		0.12
A-B	1.78								
A-C	14.97								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.25	6.02	0.042		0.03	0.04	0.6		0.17
B-A	0.97	3.57	0.273		0.21	0.36	5.1		0.38
C-AB	0.28	7.62	0.037		0.03	0.04	0.6		0.14
A-B	2.13								
A-C	17.87								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.31	4.14	0.075		0.04	0.08	1.1		0.26
B-A	1.19	2.16	0.552		0.36	1.08	13.9		0.94
C-AB	0.35	6.55	0.053		0.04	0.06	0.8		0.16
A-B	2.61								
A-C	21.89								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.31	4.02	0.078		0.08	0.08	1.2		0.27
B-A	1.19	2.16	0.553		1.08	1.15	16.9		1.02
C-AB	0.35	6.55	0.053		0.06	0.06	0.8		0.16
A-B	2.61								
A-C	21.89								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.25	5.97	0.043		0.05	0.05	0.7		0.18
B-A	0.97	3.57	0.273		1.15	0.39	6.5		0.40
C-AB	0.28	7.62	0.037		0.06	0.04	0.6		0.14
A-B	2.13								
A-C	17.87								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.21	6.83	0.031		0.05	0.03	0.5		0.15
B-A	0.82	4.58	0.178		0.39	0.22	3.5		0.27
C-AB	0.24	8.39	0.028		0.04	0.03	0.4		0.12
A-B	1.78								
A-C	14.97								

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.2
16.30	0.4
16.45	1.1 *
17.00	1.2 *
17.15	0.4
17.30	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	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	I	I	I	I	I
I	I	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
I	B-C	I	23.4	I 15.6	I 4.7	I 0.20	I 4.7	I 0.20
I	B-A	I	89.5	I 59.6	I 48.9	I 0.55	I 48.9	I 0.55
I	C-AB	I	26.2	I 17.4	I 3.7	I 0.14	I 3.7	I 0.14
I	A-B	I	195.5	I 130.3	I	I	I	I
I	A-C	I	1642.1	I 1094.7	I	I	I	I
I	ALL	I	3258.0	I 2172.0	I 57.3	I 0.02	I 57.3	I 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 RUN*****

 SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept	For Slope	For Opposing	Slope	For Opposing	I
I	STREAM	B-C	STREAM	A-C	STREAM	A-B
I	I	I	I	I	I	I
I		0.00		0.00		0.00

* Due to the presence of a flare, data is not available

I	Intercept	For Slope	For Opposing	Slope	For Opposing	Slope	For Opposing	I
I	STREAM	B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A
I	I	I	I	I	I	I	I	I
I		0.00		0.00		0.00		0.00

* Due to the presence of a flare, data is not available

I	Intercept	For Slope	For Opposing	Slope	For Opposing	I
I	STREAM	C-B	STREAM	A-C	STREAM	A-B
I	I	I	I	I	I	I
I		742.21		0.24		0.24

(NB These values do not allow for any site specific corrections)

 TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	I	I	I	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2013 SAT PEAK

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	I	I	FLOW STARTS	I	TOP OF PEAK	I
I	I	I	TO RISE	I	IS REACHED	I
I	I	I	I	I	FALLING	I
I	I	I	I	I	I	I
I	I	I	I	I	I	I
I	ARM A	I	15.00	I	45.00	I 75.00
I	ARM B	I	15.00	I	45.00	I 75.00
I	ARM C	I	15.00	I	45.00	I 75.00

Demand set: 2013 SAT PEAK

TIME	FROM/TO	ARM	TURNING PROPORTIONS		
			TURNING COUNTS		
			(PERCENTAGE OF H.V.S)		
			A	B	C
16.00 - 17.30	ARM A	I	0.000	0.072	0.928
		I	0.0	69.0	891.0
		I	(0.0)	(0.0)	(0.0)
	ARM B	I	0.817	0.000	0.183
		I	76.0	0.0	17.0
		I	(0.0)	(0.0)	(0.0)
	ARM C	I	0.975	0.025	0.000
		I	713.0	18.0	0.0
		I	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 SAT PEAK
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.21	7.60	0.028		0.00	0.03	0.4		0.14
B-A	0.95	5.95	0.160		0.00	0.19	2.7		0.20
C-AB	0.23	9.51	0.024		0.00	0.02	0.4		0.11
A-B	0.87								
A-C	11.18								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.25	7.02	0.036		0.03	0.04	0.5		0.15
B-A	1.14	5.18	0.220		0.19	0.28	4.0		0.25
C-AB	0.27	8.95	0.030		0.02	0.03	0.5		0.12
A-B	1.03								
A-C	13.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.31	6.08	0.051		0.04	0.05	0.8		0.17
B-A	1.39	4.12	0.338		0.28	0.49	6.9		0.36
C-AB	0.33	8.19	0.040		0.03	0.04	0.6		0.13
A-B	1.27								
A-C	16.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.31	6.07	0.051		0.05	0.05	0.8		0.17
B-A	1.39	4.12	0.339		0.49	0.50	7.5		0.37
C-AB	0.33	8.19	0.040		0.04	0.04	0.6		0.13
A-B	1.27								
A-C	16.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.25	7.01	0.036		0.05	0.04	0.6		0.15
B-A	1.14	5.18	0.220		0.50	0.29	4.5		0.25
C-AB	0.27	8.95	0.030		0.04	0.03	0.5		0.12
A-B	1.03								
A-C	13.35								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.21	7.59	0.028		0.04	0.03	0.4		0.14
B-A	0.95	5.95	0.160		0.29	0.19	3.0		0.20
C-AB	0.23	9.51	0.024		0.03	0.02	0.4		0.11
A-B	0.87								
A-C	11.18								

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.2
16.30	0.3
16.45	0.5
17.00	0.5
17.15	0.3
17.30	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING * * DELAY *	I	* INCLUSIVE QUEUEING * * DELAY *	I
I	I	I	I	I	I	I	I	I
I	I	I	(VEH)	I	(MIN)	I	(MIN)	I
I	I	I	(VEH/H)	I	(MIN/VEH)	I	(MIN/VEH)	I
I	B-C	I	23.4	I	3.6	I	3.6	I
I	B-A	I	104.6	I	28.7	I	28.7	I
I	C-AB	I	24.8	I	2.9	I	2.9	I
I	A-B	I	95.0	I		I		I
I	A-C	I	1226.4	I		I		I
I	ALL	I	2455.5	I	35.2	I	35.2	I

* 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 RUN*****

 SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM A-C	STREAM A-B	STREAM A-B	STREAM A-B	I
I	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	STREAM C-B	STREAM C-B	I
I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM A-C	STREAM A-B	STREAM A-B	STREAM A-B	I
I	742.21	0.24	0.24	0.24	0.24	I

(NB These values do not allow for any site specific corrections)

 TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	I	I	I	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2018 SAT PEAK

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	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	I	I	I	I	I	I
I	ARM A	I	15.00	I	45.00	I
I	ARM B	I	15.00	I	45.00	I
I	ARM C	I	15.00	I	45.00	I

Demand set: 2018 SAT PEAK

TIME	FROM/TO	ARM	TURNING PROPORTIONS			ARM	C
			A	B	(PERCENTAGE OF H.V.S)		
16.00 - 17.30	ARM A	I	0.000	0.072	I	0.928	I
		I	0.0	79.0	I	1014.0	I
		I	(0.0)	(0.0)	I	(0.0)	I
	ARM B	I	0.819	0.000	I	0.181	I
		I	86.0	0.0	I	19.0	I
		I	(0.0)	(0.0)	I	(0.0)	I
	ARM C	I	0.976	0.024	I	0.000	I
		I	811.0	20.0	I	0.0	I
		I	(0.0)	(0.0)	I	(0.0)	I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15-MIN TIME SEGMENT

FOR DEMAND SET 2018 SAT PEAK
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.24	7.20	0.033		0.00	0.03	0.5		0.14
B-A	1.08	5.41	0.200		0.00	0.24	3.5		0.23
C-AB	0.25	9.11	0.028		0.00	0.03	0.4		0.11
A-B	0.99								
A-C	12.72								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.28	6.48	0.044		0.03	0.05	0.7		0.16
B-A	1.29	4.53	0.284		0.24	0.39	5.5		0.31
C-AB	0.30	8.48	0.035		0.03	0.04	0.5		0.12
A-B	1.18								
A-C	15.19								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.35	5.09	0.068		0.05	0.07	1.0		0.21
B-A	1.58	3.33	0.474		0.39	0.85	11.5		0.55
C-AB	0.37	7.61	0.048		0.04	0.05	0.8		0.14
A-B	1.45								
A-C	18.61								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.35	5.05	0.069		0.07	0.07	1.1		0.21
B-A	1.58	3.33	0.474		0.85	0.87	12.9		0.57
C-AB	0.37	7.61	0.048		0.05	0.05	0.8		0.14
A-B	1.45								
A-C	18.61								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.28	6.45	0.044		0.07	0.05	0.7		0.16	I
I	B-A	1.29	4.53	0.284		0.87	0.41	6.6		0.31	I
I	C-AB	0.30	8.48	0.035		0.05	0.04	0.6		0.12	I
I	A-B	1.18									I
I	A-C	15.19									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.24	7.19	0.033		0.05	0.03	0.5		0.14	I
I	B-A	1.08	5.41	0.200		0.41	0.25	4.0		0.23	I
I	C-AB	0.25	9.11	0.028		0.04	0.03	0.4		0.11	I
I	A-B	0.99									I
I	A-C	12.72									I

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.2
16.30	0.4
16.45	0.8
17.00	0.9
17.15	0.4
17.30	0.3

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	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	I	I	I	I	I
I	I	I	(VEH)	I	(MIN)	I	(MIN)	I
I	I	I	(VEH/H)	I	(MIN/VEH)	I	(MIN/VEH)	I
I	B-C	I	26.2	I	4.6	I	4.6	I
I	B-A	I	118.4	I	43.9	I	43.9	I
I	C-AB	I	27.5	I	3.5	I	3.5	I
I	A-B	I	108.7	I	72.5	I		I
I	A-C	I	1395.7	I	1	I		I
I	ALL	I	2792.8	I	51.9	I	51.9	I

* 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 RUN*****

 SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept	For Slope	For Opposing	Slope For Opposing	I
I	STREAM B-C	STREAM A-C	STREAM A-B	STREAM A-B	I
I	I	I	I	I	I
I	0.00	0.00	0.00		I

* Due to the presence of a flare, data is not available

I	Intercept	For Slope	For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	STREAM C-B	I
I	I	I	I	I	I	I	I
I	0.00	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept	For Slope	For Opposing	Slope For Opposing	I
I	STREAM C-B	STREAM A-C	STREAM A-B	STREAM A-B	I
I	I	I	I	I	I
I	742.21	0.24	0.24		I

(NB These values do not allow for any site specific corrections)

 TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	I	I	I	I
I	I	I	I	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2013 SAT PEAK WITH DEVELOPMENT

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	I	I	FLOW STARTS	I	BEFORE	I
I	I	I	TOP OF PEAK	I	AT TOP	I
I	I	I	FLOW STOPS	I	OF PEAK	I
I	I	I	TO RISE	I	PEAK	I
I	I	I	IS REACHED	I	I	I
I	I	I	FALLING	I	I	I
I	I	I	I	I	I	I
I	ARM A	I	15.00	I	12.21	I
I	ARM B	I	15.00	I	1.21	I
I	ARM C	I	15.00	I	9.31	I

Demand set: 2013 SAT PEAK WITH DEVELOPMENT

			TURNING PROPORTIONS						
			TURNING COUNTS						
			(PERCENTAGE OF H.V.S)						
	TIME	FROM/TO	ARM	A	ARM	B	ARM	C	
	16.00 - 17.30								
		ARM A		0.000		0.074		0.926	
				0.0		72.0		905.0	
				(0.0)		(0.0)		(0.0)	
		ARM B		0.825		0.000		0.175	
				80.0		0.0		17.0	
				(0.0)		(0.0)		(0.0)	
		ARM C		0.976		0.024		0.000	
				727.0		18.0		0.0	
				(0.0)		(0.0)		(0.0)	

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 SAT PEAK WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.21	7.52	0.028		0.00	0.03	0.4		0.14
B-A	1.00	5.89	0.170		0.00	0.20	2.9		0.20
C-AB	0.23	9.46	0.024		0.00	0.02	0.4		0.11
A-B	0.90								
A-C	11.36								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.25	6.92	0.037		0.03	0.04	0.6		0.15
B-A	1.20	5.11	0.235		0.20	0.30	4.3		0.25
C-AB	0.27	8.89	0.030		0.02	0.03	0.5		0.12
A-B	1.08								
A-C	13.56								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.31	5.92	0.053		0.04	0.05	0.8		0.16
B-A	1.47	4.03	0.364		0.30	0.55	7.7		0.39
C-AB	0.33	8.11	0.041		0.03	0.04	0.6		0.13
A-B	1.32								
A-C	16.61								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.31	5.90	0.053		0.05	0.06	0.8		0.18
B-A	1.47	4.03	0.364		0.55	0.56	8.4		0.39
C-AB	0.33	8.11	0.041		0.04	0.04	0.6		0.13
A-B	1.32								
A-C	16.61								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.25	6.91	0.037		0.06	0.04	0.6		0.15
B-A	1.20	5.11	0.235		0.56	0.31	5.0		0.26
C-AB	0.27	8.89	0.030		0.04	0.03	0.5		0.12
A-B	1.08								
A-C	13.56								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.21	7.51	0.028		0.04	0.03	0.5		0.14
B-A	1.00	5.89	0.170		0.31	0.21	3.3		0.21
C-AB	0.23	9.46	0.024		0.03	0.02	0.4		0.11
A-B	0.90								
A-C	11.36								

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.2
16.30	0.3
16.45	0.6 *
17.00	0.6 *
17.15	0.3
17.30	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	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	(VEH)	I	(MIN)	I	(MIN)	I
I	I	I	(VEH/H)	I	(MIN/VEH)	I	(MIN/VEH)	I
I	B-C	I	23.4	I	15.6	I	3.7	I
I	B-A	I	110.1	I	73.4	I	31.5	I
I	C-AB	I	24.8	I	16.5	I	2.9	I
I	A-B	I	99.1	I	66.1	I		I
I	A-C	I	1245.7	I	830.4	I		I
I	ALL	I	2503.7	I	1669.1	I	38.1	I
							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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept	For Slope	For Opposing	Slope For Opposing	I
I	STREAM B-C	STREAM A-C	STREAM A-B	STREAM A-B	I
I	0.00	0.00	0.00		I

* Due to the presence of a flare, data is not available

I	Intercept	For Slope	For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	STREAM C-B	I
I	0.00	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept	For Slope	For Opposing	Slope For Opposing	I
I	STREAM C-B	STREAM A-C	STREAM A-B	STREAM A-B	I
I	742.21	0.24	0.24		I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2018 SAT PEAK WITH DEVELOPMENT

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	I	I	FLOW STARTS	I	BEFORE	I
I	I	I	TOP OF PEAK	I	AT TOP	I
I	I	I	FLOW STOPS	I	OF PEAK	I
I	I	I	TO RISE	I	PEAK	I
I	I	I	IS REACHED	I	I	I
I	I	I	FALLING	I	I	I
I	ARM A	I	15.00	I	45.00	I
I	ARM B	I	15.00	I	45.00	I
I	ARM C	I	15.00	I	45.00	I
					75.00	
					13.88	
					20.81	
					1.36	
					2.04	
					10.57	
					15.86	

Demand set: 2018 SAT PEAK WITH DEVELOPMENT

			TURNING PROPORTIONS				
			TURNING COUNTS				
			(PERCENTAGE OF H.V.S.)				
	TIME	FROM/TO	ARM A	ARM B	ARM C		
	16.00 - 17.30						
		ARM A	0.000	0.074	0.926		
			0.0	82.0	1028.0		
			(0.0)	(0.0)	(0.0)		
		ARM B	0.826	0.000	0.174		
			90.0	0.0	19.0		
			(0.0)	(0.0)	(0.0)		
		ARM C	0.976	0.024	0.000		
			826.0	20.0	0.0		
			(0.0)	(0.0)	(0.0)		

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 SAT PEAK WITH DEVELOPMENT
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.24	7.11	0.034		0.00	0.03	0.5		0.15
B-A	1.13	5.35	0.211		0.00	0.26	3.7		0.23
C-AB	0.25	9.06	0.028		0.00	0.03	0.4		0.11
A-B	1.03								
A-C	12.90								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.28	6.36	0.045		0.03	0.05	0.7		0.16
B-A	1.35	4.46	0.302		0.26	0.42	6.0		0.32
C-AB	0.30	8.42	0.036		0.03	0.04	0.6		0.12
A-B	1.23								
A-C	15.40								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.35	4.84	0.072		0.05	0.08	1.1		0.22
B-A	1.65	3.23	0.511		0.42	0.97	13.0		0.61
C-AB	0.37	7.53	0.049		0.04	0.05	0.8		0.14
A-B	1.50								
A-C	18.86								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.35	4.77	0.073		0.08	0.08	1.2		0.23
B-A	1.65	3.23	0.511		0.97	1.00	14.9		0.63
C-AB	0.37	7.53	0.049		0.05	0.05	0.8		0.14
A-B	1.50								
A-C	18.86								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.28	6.32	0.045		0.08	0.05	0.7		0.17
B-A	1.35	4.46	0.302		1.00	0.45	7.3		0.33
C-AB	0.30	8.42	0.036		0.05	0.04	0.6		0.12
A-B	1.23								
A-C	15.40								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.24	7.10	0.034		0.05	0.04	0.5		0.15
B-A	1.13	5.35	0.211		0.45	0.27	4.3		0.24
C-AB	0.25	9.06	0.028		0.04	0.03	0.4		0.11
A-B	1.03								
A-C	12.90								

WARNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.3
16.30	0.4
16.45	1.0
17.00	1.0
17.15	0.4
17.30	0.3

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.0
17.30	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		I	I		I	I		I
I	I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	I	(MIN)	(MIN/VEH)	I
I	B-C	I	26.2	I 17.4	I	4.7	I 0.18	I	4.7	I 0.18	I
I	B-A	I	123.9	I 82.6	I	49.1	I 0.40	I	49.1	I 0.40	I
I	C-AB	I	27.5	I 18.4	I	3.5	I 0.13	I	3.5	I 0.13	I
I	A-B	I	112.9	I 75.2	I	I	I	I	I	I	I
I	A-C	I	1415.0	I 943.3	I	I	I	I	I	I	I
I	ALL	I	2842.3	I 1894.9	I	57.3	I 0.02	I	57.3	I 0.02	I

* 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 RUN*****

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:- "C:\Users\C Smith\Documents\PICADY\Rockingham Row.vpi" (drive-on-the-left) at 12:49:26 on Tuesday, 30 April

RUN INFORMATION

RUN TITLE : Birdwell
LOCATION : Rockingham Row
DATE : 30/04/13
CLIENT : Aldi Stores Ltd
ENUMERATOR : C Smith [CSMITH-HP]
JOB NUMBER :
STATUS :
DESCRIPTION :

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 Sheffield Road N
ARM B IS Rockingham Row
ARM C IS Sheffield Road S

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) 8.00 M.	I
I	CENTRAL RESERVE WIDTH	I	(WCR) 0:00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	(WC-B) 2.20 M.	I
I	- VISIBILITY	I	(VC-B) 113.00 M.	I
I	- BLOCKS TRAFFIC (SPACES)	I	YES (1)	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 28.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 34.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) -	I
I	- LANE 2 WIDTH	I	(WB-A) -	I
I	WIDTH AT 0 M FROM JUNCTION	I	10:00 M.	I
I	WIDTH AT 5 M FROM JUNCTION	I	6.00 M.	I
I	WIDTH AT 10 M FROM JUNCTION	I	4.00 M.	I
I	WIDTH AT 15 M FROM JUNCTION	I	3.00 M.	I
I	WIDTH AT 20 M FROM JUNCTION	I	3.00 M.	I
I	- LENGTH OF FLARED SECTION	I	DERIVED: 1 PCU	I

SLOPES AND INTERCEPT

(NB: Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Intercept For	Slope For	I
I	STREAM B-C	STREAM A-C	STREAM A-B	STREAM A-B	I
I	0.00	0.00	0.00		I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Intercept For	Slope For	Intercept For	Slope For	I
I	STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	STREAM C-B	I
I	0.00	0.00	0.00	0.00	0.00		I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Intercept For	Slope For	I
I	STREAM C-B	STREAM A-C	STREAM A-B	STREAM A-B	I
I	639.40	0.23	0.23		I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2013 PM Peak

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

		NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
ARM		FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER
		TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM	A	15.00	45.00	75.00	10.84	16.26	10.84
ARM	B	15.00	45.00	75.00	0.64	0.96	0.64
ARM	C	15.00	45.00	75.00	14.43	21.64	14.43

Demand set: 2013 PM Peak

I		I	TURNING PROPORTIONS						I				
I		I	TURNING COUNTS						I				
I		I	(PERCENTAGE OF H.V.S)						I				
I		I							I				
I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
I	16.00 - 17.30	I		I			I			I			I
I		I	ARM	A	I	0.000	I	0.003	I	0.997	I		I
I		I			I	0.0	I	3.0	I	864.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I
I		I	ARM	B	I	0.412	I	0.000	I	0.588	I		I
I		I			I	21.0	I	0.0	I	30.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I
I		I	ARM	C	I	0.994	I	0.006	I	0.000	I		I
I		I			I	1147.0	I	7.0	I	0.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM Peak
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.38	9.19	0.041		0.00	0.04	0.6		0.11
B-A	0.26	4.46	0.059		0.00	0.06	0.9		0.24
C-AB	0.09	8.20	0.011		0.00	0.01	0.2		0.12
A-B	0.04								
A-C	10.84								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.45	8.58	0.052		0.04	0.05	0.8		0.12
B-A	0.31	3.57	0.088		0.06	0.09	1.4		0.31
C-AB	0.10	7.72	0.014		0.01	0.01	0.2		0.13
A-B	0.04								
A-C	12.95								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.55	7.67	0.072		0.05	0.08	1.1		0.14
B-A	0.39	2.35	0.164		0.09	0.19	2.6		0.51
C-AB	0.13	7.06	0.018		0.01	0.02	0.3		0.14
A-B	0.06								
A-C	15.85								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.55	7.66	0.072		0.08	0.08	1.2		0.14
B-A	0.39	2.35	0.164		0.19	0.19	2.9		0.51
C-AB	0.13	7.06	0.018		0.02	0.02	0.3		0.14
A-B	0.06								
A-C	15.85								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.45	8.58	0.052		0.08	0.06	0.9		0.12	I
I	B-A	0.31	3.57	0.088		0.19	0.10	1.6		0.31	I
I	C-AB	0.10	7.72	0.014		0.02	0.01	0.2		0.13	I
I	A-B	0.04									I
I	A-C	12.95									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.38	9.18	0.041		0.06	0.04	0.7		0.11	I
I	B-A	0.26	4.46	0.059		0.10	0.06	1.0		0.24	I
I	C-AB	0.09	8.20	0.011		0.01	0.01	0.2		0.12	I
I	A-B	0.04									I
I	A-C	10.84									I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.1
16.30	0.1
16.45	0.2
17.00	0.2
17.15	0.1
17.30	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND		I	* QUEUEING *		I	* INCLUSIVE QUEUEING *		I
I	I	I	I		I	I		I	I		I
I	I	I	I		I	I		I	I		I
I	I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	I	(MIN)	(MIN/VEH)	I
I	B-C	I	41.3	I 27.5	I	5.2	I 0.13	I	5.2	I 0.13	I
I	B-A	I	28.9	I 19.3	I	10.3	I 0.36	I	10.3	I 0.36	I
I	C-AB	I	9.6	I 6.4	I	1.3	I 0.14	I	1.3	I 0.14	I
I	A-B	I	4.1	I 2.8	I			I			I
I	A-C	I	1189.2	I 792.8	I			I			I
I	ALL	I	2852.0	I 1901.3	I	16.9	I 0.01	I	16.9	I 0.01	I

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	0.00		0.00		0.00	I

Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM	C-B	I
I	0.00		0.00		0.00		0.00		0.00	I

Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	639.40		0.23		0.23	I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW	SCALE(%)	I
I	A	I	100		I
I	B	I	100		I
I	C	I	100		I

Demand set: 2018 PM Peak

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN			I	RATE OF FLOW (VEH/MIN)			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	I	I	I	I
I	I	I	I	I	I	I	I	I	I	I
I	ARM A	I	15.00	I 45.00	I 75.00	I	12.31	I 18.47	I 12.31	I
I	ARM B	I	15.00	I 45.00	I 75.00	I	0.73	I 1.09	I 0.73	I
I	ARM C	I	15.00	I 45.00	I 75.00	I	16.40	I 24.60	I 16.40	I

Demand set: 2018 PM Peak

TIME	TURNING PROPORTIONS		
	TURNING COUNTS		
FROM/TO	(PERCENTAGE OF H.V.S)		
ARM A	ARM B	ARM C	
16.00 - 17.30			
0.000	0.003	0.997	
0.0	3.0	982.0	
(0.0)	(0.0)	(0.0)	
0.414	0.000	0.586	
24.0	0.0	34.0	
(0.0)	(0.0)	(0.0)	
0.994	0.006	0.000	
1304.0	8.0	0.0	
(0.0)	(0.0)	(0.0)	

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 PM Peak
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.43	8.76	0.049		0.00	0.05	0.7		0.12
B-A	0.30	3.84	0.079		0.00	0.08	1.2		0.28
C-AB	0.10	7.86	0.013		0.00	0.01	0.2		0.13
A-B	0.04								
A-C	12.32								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.51	8.04	0.063		0.05	0.07	1.0		0.13
B-A	0.36	2.83	0.127		0.08	0.14	2.0		0.40
C-AB	0.12	7.32	0.016		0.01	0.02	0.3		0.14
A-B	0.04								
A-C	14.71								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.62	6.71	0.093		0.07	0.10	1.5		0.16
B-A	0.44	1.44	0.306		0.14	0.40	5.3		0.97
C-AB	0.15	6.57	0.022		0.02	0.02	0.4		0.16
A-B	0.06								
A-C	18.02								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.62	6.67	0.094		0.10	0.10	1.5		0.17
B-A	0.44	1.44	0.306		0.40	0.42	6.2		1.00
C-AB	0.15	6.57	0.022		0.02	0.02	0.4		0.16
A-B	0.06								
A-C	18.02								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.51	8.02	0.063		0.10	0.07	1.1		0.13	I
I	B-A	0.36	2.83	0.127		0.42	0.15	2.5		0.41	I
I	C-AB	0.12	7.32	0.016		0.02	0.02	0.3		0.14	I
I	A-B	0.04									I
I	A-C	14.71									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.43	8.76	0.049		0.07	0.05	0.8		0.12	I
I	B-A	0.30	3.84	0.079		0.15	0.09	1.4		0.28	I
I	C-AB	0.10	7.86	0.013		0.02	0.01	0.2		0.13	I
I	A-B	0.04									I
I	A-C	12.32									I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.1
16.30	0.1
16.45	0.4
17.00	0.4
17.15	0.2
17.30	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	46.8	31.2	6.6
B-A	33.0	22.0	18.6
C-AB	11.0	7.3	1.7
A-B	4.1	2.8	
A-C	1351.7	901.1	
ALL	3241.5	2161.0	26.8

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For	Slope For	Opposing	Slope For	Opposing
STREAM B-C	STREAM A-C	STREAM A-B	STREAM A-B	
0.00	0.00	0.00		

Due to the presence of a flare, data is not available

Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B		
0.00	0.00	0.00	0.00	0.00		

Due to the presence of a flare, data is not available

Intercept For	Slope For	Opposing	Slope For	Opposing
STREAM C-B	STREAM A-C	STREAM A-B	STREAM A-B	
639.40	0.23	0.23		

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 PM Peak With Development

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN	RATE OF FLOW (VEH/MIN)
FLOW STARTS	TOP OF PEAK	BEFORE
TO RISE	IS REACHED	PEAK
	FALLING	OF PEAK
		PEAK
A	15.00	45.00
B	15.00	45.00
C	15.00	45.00

Demand set: 2013 PM Peak With Development

TIME	TURNING PROPORTIONS		
	TURNING COUNTS		
FROM/TO	(PERCENTAGE OF H.V.S)		
	ARM A	ARM B	ARM C
16.00 - 17.30			
ARM A	0.000	0.003	0.997
	0.0	3.0	874.0
	(0.0)	(0.0)	(0.0)
ARM B	0.404	0.000	0.596
	21.0	0.0	31.0
	(0.0)	(0.0)	(0.0)
ARM C	0.993	0.007	0.000
	1158.0	8.0	0.0
	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM Peak With Development
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.39	9.17	0.042		0.00	0.04	0.6		0.11
B-A	0.26	4.39	0.060		0.00	0.06	0.9		0.24
C-AB	0.10	8.17	0.012		0.00	0.01	0.2		0.12
A-B	0.04								
A-C	10.97								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.46	8.56	0.054		0.04	0.06	0.8		0.12
B-A	0.31	3.50	0.090		0.06	0.10	1.4		0.31
C-AB	0.12	7.68	0.016		0.01	0.02	0.2		0.13
A-B	0.04								
A-C	13.10								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.57	7.63	0.075		0.06	0.08	1.2		0.14
B-A	0.39	2.27	0.170		0.10	0.20	2.7		0.53
C-AB	0.15	7.02	0.021		0.02	0.02	0.3		0.15
A-B	0.06								
A-C	16.04								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.57	7.62	0.075		0.08	0.08	1.2		0.14
B-A	0.39	2.27	0.170		0.20	0.20	3.0		0.53
C-AB	0.15	7.02	0.021		0.02	0.02	0.3		0.15
A-B	0.06								
A-C	16.04								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.46	8.55	0.054		0.08	0.06	0.9		0.12	I
I	B-A	0.31	3.50	0.090		0.20	0.10	1.6		0.32	I
I	C-AB	0.12	7.68	0.016		0.02	0.02	0.2		0.13	I
I	A-B	0.04									I
I	A-C	13.10									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.39	9.17	0.042		0.06	0.04	0.7		0.11	I
I	B-A	0.26	4.39	0.060		0.10	0.06	1.0		0.24	I
I	C-AB	0.10	8.17	0.012		0.02	0.01	0.2		0.12	I
I	A-B	0.04									I
I	A-C	10.97									I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.1
16.30	0.1
16.45	0.2
17.00	0.2
17.15	0.1
17.30	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	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	I	I	I	I	I
I	I	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
I	B-C	I	42.7	I 28.4	I 5.4	I 0.13	I 5.4	I 0.13
I	B-A	I	28.9	I 19.3	I 10.6	I 0.37	I 10.6	I 0.37
I	C-AB	I	11.0	I 7.3	I 1.6	I 0.14	I 1.6	I 0.14
I	A-B	I	4.1	I 2.8	I	I	I	I
I	A-C	I	1203.0	I 802.0	I	I	I	I
I	ALL	I	2883.6	I 1922.4	I 17.6	I 0.01	I 17.6	I 0.01

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	0.00		0.00		0.00	I

Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	I
I	0.00		0.00		0.00		0.00	I

Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	639.40		0.23		0.23	I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2018 PM Peak with Development

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

NUMBER OF MINUTES FROM START WHEN					RATE OF FLOW (VEH/MIN)		
ARM	FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER	
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK	
ARM A	15.00	45.00	75.00	12.45	18.67	12.45	
ARM B	15.00	45.00	75.00	0.74	1.11	0.74	
ARM C	15.00	45.00	75.00	16.55	24.82	16.55	

Demand set: 2018 PM Peak with Development

TIME	TURNING PROPORTIONS		
	TURNING COUNTS		
FROM/TO	(PERCENTAGE OF H.V.S)		
	ARM A	ARM B	ARM C
16.00 - 17.30			
ARM A	0.000	0.003	0.997
	0.0	3.0	993.0
	(0.0)	(0.0)	(0.0)
ARM B	0.407	0.000	0.593
	24.0	0.0	35.0
	(0.0)	(0.0)	(0.0)
ARM C	0.993	0.007	0.000
	1315.0	9.0	0.0
	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 PM Peak with Development
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.44	8.74	0.050		0.00	0.05	0.8		0.12
B-A	0.30	3.77	0.080		0.00	0.08	1.2		0.29
C-AB	0.11	7.83	0.014		0.00	0.01	0.2		0.13
A-B	0.04								
A-C	12.46								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.52	8.01	0.065		0.05	0.07	1.0		0.13
B-A	0.36	2.76	0.130		0.08	0.15	2.1		0.41
C-AB	0.13	7.28	0.019		0.01	0.02	0.3		0.14
A-B	0.04								
A-C	14.88								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.64	6.61	0.097		0.07	0.11	1.5		0.17
B-A	0.44	1.36	0.325		0.15	0.44	5.7		1.05
C-AB	0.17	6.52	0.025		0.02	0.03	0.4		0.16
A-B	0.06								
A-C	18.22								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.64	6.55	0.098		0.11	0.11	1.6		0.17
B-A	0.44	1.35	0.325		0.44	0.46	6.7		1.09
C-AB	0.17	6.52	0.025		0.03	0.03	0.4		0.16
A-B	0.06								
A-C	18.22								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.52	7.99	0.066		0.11	0.07	1.1		0.13	I
I	B-A	0.36	2.76	0.130		0.46	0.15	2.6		0.42	I
I	C-AB	0.13	7.28	0.019		0.03	0.02	0.3		0.14	I
I	A-B	0.04									I
I	A-C	14.88									I
I											I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.44	8.73	0.050		0.07	0.05	0.8		0.12	I
I	B-A	0.30	3.77	0.080		0.15	0.09	1.4		0.29	I
I	C-AB	0.11	7.83	0.014		0.02	0.02	0.2		0.13	I
I	A-B	0.04									I
I	A-C	12.46									I
I											I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1

QUEUE FOR STREAM B-A	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.1
16.30	0.1
16.45	0.4
17.00	0.5
17.15	0.2
17.30	0.1

QUEUE FOR STREAM C-AB	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	48.2	32.1	6.9
B-A	33.0	22.0	19.7
C-AB	12.4	8.3	1.9
A-B	4.1	2.8	
A-C	1366.8	911.2	
ALL	3274.5	2183.0	28.4

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-C
0.00	0.00

Due to the presence of a flare, data is not available

Intercept For Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A
0.00	0.00	0.00	0.00

Due to the presence of a flare, data is not available

Intercept For Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-B
639.40	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 sat peak

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	RATE OF FLOW (VEH/MIN) BEFORE
TO RISE	IS REACHED	AT TOP
I	I	I
A	15.00	45.00
B	15.00	45.00
C	15.00	45.00

Demand set: 2013 sat peak

I		I	TURNING PROPORTIONS						I				
I		I	TURNING COUNTS						I				
I		I	(PERCENTAGE OF H.V.S)						I				
I		I							I				
I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
I	16.00 - 17.30	I		I			I			I			I
I		I	ARM	I	A	0.000	I	0.003	I	0.997	I		I
I		I		I		0.0	I	2.0	I	787.0	I		I
I		I		I	(	0.0)	I	(	I	0.0)	I	(	I
I		I		I			I		I		I		I
I		I	ARM	I	B	0.333	I	0.000	I	0.667	I		I
I		I		I		1.0	I	0.0	I	2.0	I		I
I		I		I	(	0.0)	I	(	I	0.0)	I	(	I
I		I		I			I		I		I		I
I		I	ARM	I	C	0.995	I	0.005	I	0.000	I		I
I		I		I		942.0	I	5.0	I	0.0	I		I
I		I		I	(	0.0)	I	(	I	0.0)	I	(	I
I		I		I			I		I		I		I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 sat peak
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.03	9.17	0.003		0.00	0.00	0.0		0.11
B-A	0.01	4.94	0.003		0.00	0.00	0.0		0.20
C-AB	0.06	8.42	0.007		0.00	0.01	0.1		0.12
A-B	0.03								
A-C	9.87								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.03	8.70	0.003		0.00	0.00	0.1		0.12
B-A	0.01	4.19	0.004		0.00	0.00	0.1		0.24
C-AB	0.07	7.98	0.009		0.01	0.01	0.1		0.13
A-B	0.03								
A-C	11.79								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.04	8.04	0.005		0.00	0.00	0.1		0.12
B-A	0.02	3.15	0.006		0.00	0.01	0.1		0.32
C-AB	0.09	7.38	0.012		0.01	0.01	0.2		0.14
A-B	0.04								
A-C	14.44								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.04	8.04	0.005		0.00	0.00	0.1		0.12
B-A	0.02	3.15	0.006		0.01	0.01	0.1		0.32
C-AB	0.09	7.38	0.012		0.01	0.01	0.2		0.14
A-B	0.04								
A-C	14.44								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.03	8.70	0.003		0.00	0.00	0.1		0.12	I
I	B-A	0.01	4.19	0.004		0.01	0.00	0.1		0.24	I
I	C-AB	0.07	7.98	0.009		0.01	0.01	0.1		0.13	I
I	A-B	0.03									I
I	A-C	11.79									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.03	9.17	0.003		0.00	0.00	0.0		0.11	I
I	B-A	0.01	4.94	0.003		0.00	0.00	0.0		0.20	I
I	C-AB	0.06	8.42	0.007		0.01	0.01	0.1		0.12	I
I	A-B	0.03									I
I	A-C	9.87									I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	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	I	I	I	I	I
I	I	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
I	B-C	I	2.8	I 1.8	I 0.3	I 0.12	I 0.3	I 0.12
I	B-A	I	1.4	I 0.9	I 0.4	I 0.26	I 0.4	I 0.26
I	C-AB	I	6.9	I 4.6	I 0.9	I 0.13	I 0.9	I 0.13
I	A-B	I	2.8	I 1.8	I	I	I	I
I	A-C	I	1083.2	I 722.2	I	I	I	I
I	ALL	I	2393.6	I 1595.7	I 1.6	I 0.00	I 1.6	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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	0.00		0.00		0.00	I

Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM
I	0.00		0.00		0.00		0.00	I

Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	639.40		0.23		0.23	I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2018 sat peak

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	I	I	I FLOW STARTS I TOP OF PEAK I FLOW STOPS I BEFORE I AT TOP I AFTER	I	I	I
I	I	I	I TO RISE I IS REACHED I FALLING I PEAK I OF PEAK I PEAK	I	I	I
I	A	I	15.00	I 45.00	I 75.00	I 11.23
I	B	I	15.00	I 45.00	I 75.00	I 0.04
I	C	I	15.00	I 45.00	I 75.00	I 13.48

Demand set: 2018 sat peak

I		I	TURNING PROPORTIONS						I				
I		I	TURNING COUNTS						I				
I		I	(PERCENTAGE OF H.V.S)						I				
I		I							I				
I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
I	16.00 - 17.30	I		I			I			I			I
I		I	ARM	A	I	0.000	I	0.002	I	0.998	I		I
I		I			I	0.0	I	2.0	I	896.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I
I		I	ARM	B	I	0.333	I	0.000	I	0.667	I		I
I		I			I	1.0	I	0.0	I	2.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I
I		I	ARM	C	I	0.994	I	0.006	I	0.000	I		I
I		I			I	1072.0	I	6.0	I	0.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(0.0)	I		I
I		I			I		I		I		I		I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 sat peak
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.03	8.84	0.003		0.00	0.00	0.0		0.11
B-A	0.01	4.41	0.003		0.00	0.00	0.0		0.23
C-AB	0.08	8.11	0.009		0.00	0.01	0.1		0.12
A-B	0.03								
A-C	11.24								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.03	8.30	0.004		0.00	0.00	0.1		0.12
B-A	0.01	3.55	0.004		0.00	0.00	0.1		0.28
C-AB	0.09	7.61	0.012		0.01	0.01	0.2		0.13
A-B	0.03								
A-C	13.42								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.04	7.54	0.005		0.00	0.00	0.1		0.13
B-A	0.02	2.37	0.008		0.00	0.01	0.1		0.43
C-AB	0.11	6.93	0.016		0.01	0.02	0.3		0.15
A-B	0.04								
A-C	16.44								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.04	7.54	0.005		0.00	0.00	0.1		0.13
B-A	0.02	2.37	0.008		0.01	0.01	0.1		0.43
C-AB	0.11	6.93	0.016		0.02	0.02	0.3		0.15
A-B	0.04								
A-C	16.44								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.03	8.30	0.004		0.00	0.00	0.1		0.12	I
I	B-A	0.01	3.55	0.004		0.01	0.00	0.1		0.28	I
I	C-AB	0.09	7.61	0.012		0.02	0.01	0.2		0.13	I
I	A-B	0.03									I
I	A-C	13.42									I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.03	8.84	0.003		0.00	0.00	0.0		0.11	I
I	B-A	0.01	4.41	0.003		0.00	0.00	0.0		0.23	I
I	C-AB	0.08	8.11	0.009		0.01	0.01	0.1		0.12	I
I	A-B	0.03									I
I	A-C	11.24									I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	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	I	I	I	I	I
I	I	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
I	B-C	I	2.8	I 1.8	I 0.3	I 0.12	I 0.3	I 0.12
I	B-A	I	1.4	I 0.9	I 0.4	I 0.32	I 0.4	I 0.32
I	C-AB	I	6.3	I 5.5	I 1.2	I 0.14	I 1.2	I 0.14
I	A-B	I	2.8	I 1.8	I	I	I	I
I	A-C	I	1233.3	I 822.2	I	I	I	I
I	ALL	I	2723.9	I 1816.0	I 1.9	I 0.00	I 1.9	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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For Opposing	Slope For Opposing	I
I	STREAM B-C	STREAM A-C	STREAM A-B	I
I	0.00	0.00	0.00	I

Due to the presence of a flare, data is not available

I	Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	I
I	0.00	0.00	0.00	0.00	0.00	I

Due to the presence of a flare, data is not available

I	Intercept For	Slope For Opposing	Slope For Opposing	I
I	STREAM C-B	STREAM A-C	STREAM A-B	I
I	639.40	0.23	0.23	I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2013 sat peak with development

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	I	I	FLOW STARTS I TOP OF PEAK I FLOW STOPS I BEFORE I AT TOP I AFTER	I	I	I
I	I	I	TO RISE I IS REACHED I FALLING I PEAK I OF PEAK I PEAK	I	I	I
I	A	I	15.00	I 45.00	I 75.00	I 10.09
I	B	I	15.00	I 45.00	I 75.00	I 0.04
I	C	I	15.00	I 45.00	I 75.00	I 12.05

Demand set: 2013 sat peak with development

TIME	FROM/TO	ARM	A	ARM	B	ARM	C
16.00 - 17.30	ARM A	I	0.000	I	0.002	I	0.998
		I	0.0	I	2.0	I	805.0
		I (0.0)	I (0.0)	I (0.0)	I (0.0)	I	
	ARM B	I	0.333	I	0.000	I	0.667
		I	1.0	I	0.0	I	2.0
		I (0.0)	I (0.0)	I (0.0)	I (0.0)	I	
	ARM C	I	0.995	I	0.005	I	0.000
		I	959.0	I	5.0	I	0.0
		I (0.0)	I (0.0)	I (0.0)	I (0.0)	I	

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 sat peak with development
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.03	9.12	0.003		0.00	0.00	0.0		0.11
B-A	0.01	4.86	0.003		0.00	0.00	0.0		0.21
C-AB	0.06	8.37	0.007		0.00	0.01	0.1		0.12
A-B	0.03								
A-C	10.10								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.03	8.63	0.003		0.00	0.00	0.1		0.12
B-A	0.01	4.10	0.004		0.00	0.00	0.1		0.24
C-AB	0.07	7.92	0.009		0.01	0.01	0.1		0.13
A-B	0.03								
A-C	12.06								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.04	7.96	0.005		0.00	0.00	0.1		0.13
B-A	0.02	3.04	0.006		0.00	0.01	0.1		0.33
C-AB	0.09	7.31	0.013		0.01	0.01	0.2		0.14
A-B	0.04								
A-C	14.77								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.04	7.96	0.005		0.00	0.00	0.1		0.13
B-A	0.02	3.04	0.006		0.01	0.01	0.1		0.33
C-AB	0.09	7.31	0.013		0.01	0.01	0.2		0.14
A-B	0.04								
A-C	14.77								

I	TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY	AVERAGE DELAY	I
I		(VEH/MIN)	(VEH/MIN)	CAPACITY	FLOW	QUEUE	QUEUE	(VEH.MIN/	(VEH.MIN/	PER ARRIVING	I
I				(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.03	8.63	0.003		0.00	0.00	0.1		0.12	I
I	B-A	0.01	4.09	0.004		0.01	0.00	0.1		0.25	I
I	C-AB	0.07	7.92	0.009		0.01	0.01	0.1		0.13	I
I	A-B	0.03									I
I	A-C	12.06									I
I											I

I	TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY	AVERAGE DELAY	I
I		(VEH/MIN)	(VEH/MIN)	CAPACITY	FLOW	QUEUE	QUEUE	(VEH.MIN/	(VEH.MIN/	PER ARRIVING	I
I				(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.03	9.12	0.003		0.00	0.00	0.0		0.11	I
I	B-A	0.01	4.86	0.003		0.00	0.00	0.0		0.21	I
I	C-AB	0.06	8.37	0.007		0.01	0.01	0.1		0.12	I
I	A-B	0.03									I
I	A-C	10.10									I
I											I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C	
TIME	NO. OF
SEGMENT	VEHICLES
ENDING	IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A	
TIME	NO. OF
SEGMENT	VEHICLES
ENDING	IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUE FOR STREAM C-AB	
TIME	NO. OF
SEGMENT	VEHICLES
ENDING	IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING *	* INCLUSIVE QUEUEING *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	2.8	1.8	0.3
B-A	1.4	0.9	0.4
C-AB	6.9	4.6	0.9
A-B	2.8	1.8	0.3
A-C	1108.0	738.7	0.9
ALL	2441.8	1527.9	1.6

* 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 RUN*****

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-C
0.00	0.00

Due to the presence of a flare, data is not available

Intercept For Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A
0.00	0.00	0.00	0.00

Due to the presence of a flare, data is not available

Intercept For Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-B
639.40	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 sat peak with development

TIME PERIOD BEGINS 16.00 AND ENDS 17.30

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN	RATE OF FLOW (VEH/MIN)
FLOW STARTS	TOP OF PEAK	BEFORE
TO RISE	IS REACHED	AT TOP
I	I	I
A	15.00	45.00
B	15.00	45.00
C	15.00	45.00

Demand set: 2018 sat peak with development

		TURNING PROPORTIONS	
		TURNING COUNTS	
		(PERCENTAGE OF H.V.S)	
TIME	FROM/TO	ARM A	ARM B
16.00 - 17.30			
ARM A		0.000	0.002
		0.0	2.0
		(0.0)	(0.0)
ARM B		0.333	0.000
		1.0	0.0
		(0.0)	(0.0)
ARM C		0.995	0.005
		1089.0	6.0
		(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 sat peak with development
AND FOR TIME PERIOD 1

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	0.03	8.78	0.003		0.00	0.00	0.0		0.11
B-A	0.01	4.33	0.003		0.00	0.00	0.0		0.23
C-AB	0.08	8.06	0.009		0.00	0.01	0.1		0.13
A-B	0.03								
A-C	11.47								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	0.03	8.23	0.004		0.00	0.00	0.1		0.12
B-A	0.01	3.46	0.004		0.00	0.00	0.1		0.29
C-AB	0.09	7.55	0.012		0.01	0.01	0.2		0.13
A-B	0.03								
A-C	13.69								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	0.04	7.46	0.005		0.00	0.00	0.1		0.13
B-A	0.02	2.25	0.008		0.00	0.01	0.1		0.45
C-AB	0.11	6.85	0.016		0.01	0.02	0.3		0.15
A-B	0.04								
A-C	16.77								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.04	7.46	0.005		0.00	0.00	0.1		0.13
B-A	0.02	2.25	0.008		0.01	0.01	0.1		0.45
C-AB	0.11	6.85	0.016		0.02	0.02	0.3		0.15
A-B	0.04								
A-C	16.77								

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.03	8.23	0.004		0.00	0.00	0.1		0.12	I
I	B-A	0.01	3.46	0.004		0.01	0.00	0.1		0.29	I
I	C-AB	0.09	7.55	0.012		0.02	0.01	0.2		0.13	I
I	A-B	0.03									I
I	A-C	13.69									I
I											I

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)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	0.03	8.78	0.003		0.00	0.00	0.0		0.11	I
I	B-A	0.01	4.33	0.003		0.00	0.00	0.0		0.23	I
I	C-AB	0.08	8.06	0.009		0.01	0.01	0.1		0.13	I
I	A-B	0.03									I
I	A-C	11.47									I
I											I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUE FOR STREAM B-A	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUE FOR STREAM C-AB	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND		I	* QUEUEING *		I	* INCLUSIVE QUEUEING *		I
I		I			I	* DELAY *		I	* DELAY *		I
I		I			I			I			I
I		I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	I	(MIN)	(MIN/VEH)	I
I	B-C	I	2.8	1.8	I	0.3	0.12	I	0.3	0.12	I
I	B-A	I	1.4	0.9	I	0.5	0.33	I	0.5	0.33	I
I	C-AB	I	8.3	5.5	I	1.2	0.14	I	1.2	0.14	I
I	A-B	I	2.8	1.8	I			I			I
I	A-C	I	1258.1	838.7	I			I			I
I	ALL	I	2772.1	1848.1	I	2.0	0.00	I	2.0	0.00	I

* 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 RUN*****

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