

TIME	DEMAND (VEH/HOUR)	CAPACITY (VEH/HTN)	DEMAND/ CAPACITY	PERCENTAGE FLOW (PERCENT)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/VEH)	GEOMETRIC DELAY (VEH.MIN/VEH)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-A	0.16	9.10	0.018		0.02	0.02	0.3		0.11
C-B	0.16	9.10	0.018		0.01	0.01	0.2		0.11
C-A	2.06								
A-B	0.01								
A-C	1.90								

TIME	DEMAND (VEH/HOUR)	CAPACITY (VEH/HTN)	DEMAND/ CAPACITY	PERCENTAGE FLOW (PERCENT)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/VEH)	GEOMETRIC DELAY (VEH.MIN/VEH)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-A	0.14	9.10	0.015		0.02	0.01	0.2		0.11
C-B	0.08	9.10	0.009		0.01	0.01	0.1		0.11
C-A	1.73								
A-B	0.01								
A-C	1.63								

WARNING DO NOT ANALYSE CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-A

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	EXCLUDING DELAY	INCLUSIVE QUEUEING DELAY
1 (VEH)	1 (VEH)	1 (MIN)	1 (MIN)
B-A	15.1	10.1	1.7
C-B	8.9	5.9	1.1
C-A	189.3	126.2	
A-B	2.1	0.9	
A-C	178.9	119.3	
A-B	593.7	262.4	2.7

* 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.

***** NO OF RUNS*****

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-B
477.73	0.16

Intercept For Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM C-A	STREAM C-B
532.40	0.25	0.40	0.35

Intercept For Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-B
698.35	0.27

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

TRAFFIC DEMAND DATA

LINK	PERCENT SCALE
A	100
B	100
C	100

Demand set: 2021 Baseline PM

TIME PERIOD BEGINS 16:45 AND ENDS 18:15

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

DEMAND FLOW PROFILES ARE ESTIMATED FROM TURNING COUNT DATA

			NUMBER OF MINUTES FROM START WHEN		RATE OF FLOW (VEH/MIN)	
ARM	FLOW STARTS	10% OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	1 OF PEAK	PEAK
1	1	1	1	1	1	1
ARM A	15.00	45.00	75.00	2.76	1.54	2.56
ARM B	15.00	45.00	75.00	0.15	0.21	0.15
ARM C	15.00	45.00	75.00	1.35	2.03	1.25

Demand set: 2021 Baseline PM

			TURNING PROPORTIONS	
			TURNING COUNTS	
			(PERCENTAGE OF N.V.S.)	
TIME				
16:45-18:15				
ARM A	0.000	0.021	0.979	
	0.0	4.0	185.0	
	0.011	0.011	1.75	
ARM B	0.250	0.000	0.750	
	3.0	0.0	9.3	
	0.011	0.011	0.611	
ARM C	0.889	0.131	0.000	
	96.0	12.0	0.3	
	0.001	0.111	0.011	

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Baseline PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	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	0.15	9.87	0.015		0.00	0.02	0.2		0.18
C-AB	0.17	10.76	0.016		0.00	0.02	0.3		0.08
C-A	1.15								
A-B	0.05								
A-C	2.32								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	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	0.18	9.71	0.018		0.02	0.02	0.3		0.10
C-AB	0.21	10.84	0.019		0.02	0.02	0.3		0.09
C-A	1.41								
A-B	0.06								
A-C	2.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	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	0.22	9.54	0.023		0.02	0.02	0.3		0.11
C-AB	0.26	10.87	0.024		0.02	0.02	0.4		0.09
C-A	1.72								
A-B	0.07								
A-C	3.19								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	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	0.22	9.54	0.023		0.02	0.02	0.4		0.11
C-AB	0.26	10.87	0.024		0.02	0.02	0.5		0.09
C-A	1.72								
A-B	0.07								
A-C	3.19								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PERS/HIS)	START QUEUE (VEH)	END QUEUE (VEH)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-19.00									
B-AC	0.18	9.73	0.018		0.02	0.02	0.3		0.13
C-AB	0.21	10.40	0.019		0.03	0.02	0.3		0.09
C-A	1.41								
A-B	0.06								
A-C	2.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PERS/HIS)	START QUEUE (VEH)	END QUEUE (VEH)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	0.15	9.87	0.015		0.02	0.02	0.2		0.10
C-AB	0.17	10.76	0.016		0.02	0.02	0.3		0.09
C-A	1.19								
A-B	0.05								
A-C	2.32								

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
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	QUEUING * DELAY *	(* INCLUSIVE QUEUING * DELAY *
B-AC	16.5	1.7	1.7
C-AB	19.2	2.1	2.1
C-A	129.5		
A-B	5.5		
A-C	254.5		
ALL	425.3	3.9	3.9

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A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF RUN*****

SLOPES AND INTERCEPT

NOTE: 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
577.13	0.26
	0.10

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
512.40	0.25	0.16	0.15
			0.35

Intercept For Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-C
690.35	0.27
	0.21

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

TRAFFIC DEMAND DATA

ARM	FLOW	VEH/SEC
A	100	2
B	300	3
C	100	1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/H12)	DEMAND/ CAPACITY (SEC)	PEDESTRIAN FLOW (PEDS/H12)	START QUEUE (VEH)	END QUEUE (VEH)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY SEE ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	0.13	9.51	0.013		0.02	0.02	0.3		0.11
C-AB	0.22	11.08	0.020		0.03	0.02	0.4		0.09
C-A	1.91								
A-B	0.06								
A-C	1.10								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/H12)	DEMAND/ CAPACITY (SEC)	PEDESTRIAN FLOW (PEDS/H12)	START QUEUE (VEH)	END QUEUE (VEH)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY FOR ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	0.15	9.77	0.015		0.02	0.02	0.2		0.13
C-AB	0.18	10.95	0.016		0.02	0.02	0.3		0.09
C-A	1.63								
A-B	0.05								
A-C	2.66								

*WARNING: IS MARGINAL ANALYSIS OF CAPACITY AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

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

QUEUE FOR STREAM C-AB

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	* QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN)
B-AC	16.5	31.0	1.7
C-AB	20.2	33.5	2.2
C-A	178.0	118.7	
A-B	9.5	3.7	
A-C	284.3	189.9	
ALL	508.1	366.0	4.0

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A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

***** 3 OF RUN *****

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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 files:
"H:\Dimmingham\Current Jobs\4 - Live Jobs\Thorley Drive, Chesham\IC Calculations\Junction assessments\PICADY\Ashbourne Rd W-Thorley Rd Junction.vpd"
(drive-on-the-left) at 16:05:28 on Wednesday, 9 December 2015

RUN INFORMATION

RUN TITLE : Chesham Ashbourne Rd (W)/Thorley Dr Junction
LOCATION : Ashbourne Rd (W)/Thorley Dr Junction
DATE : 09/12/15
CLIENT : Providence Land Limited
ENGINEER : Jpollard@tsl.co.uk
JOB NUMBER :
STATUS : TIA
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) MAJOR ROAD (ARM A)

MAJOR ROAD (ARM B)

ARM A IS Ashbourne Rd East
ARM B IS Thorley Dr W
ARM C IS Ashbourne Rd West

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-A 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) 6.00 M.	I
I	CENTRAL RESERVE WIDTH	I	(RCR) 0.00 M.	I
I	MAJOR ROAD R(GB) TURN - WIDTH	I	(WC R) 2.20 M.	I
I	- VISIBILITY	I	(VC-B) 250.00 M.	I
I	- ROADWAY WIDTH (SPACES)	I	YES (0)	I
I	MINOR ROAD VISIBILITY TO LEFT	I	(VR L) 31.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VR-R) 32.0 M.	I
I	- LANE 1 WIDTH	I	(WS C) 3.50 M.	I
I	- LANE 2 WIDTH	I	(WS-B) 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	576.32	0.26	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	528.56	0.24	0.10	0.15	0.35

I	Intercept For Slope For Opposing	Slope For Opposing	I	
I	STREAM C-B	STREAM A-C	STREAM A-B	I
I	718.74	0.28	0.28	I

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

TYPE	DEPARTURE (VEH/MIN)	CAPACITY (VEH/HR)	DEPARTURE/ CAPACITY (SEC)	PROCESSING FLOOR (PRGS/MIN)	STATION QUEUE (VEHS)	FLOOR QUEUE (VEHS)	DELAY (OVER/MIN/ TIME SEGMENT)	GEOMETRIC DELAY (OVER/MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVAL VEHICLE (MIN)
LT-45-18.50									
D-AC	0.69	10.30	0.066		0.09	0.07	1.3		0.30
C-KB	0.89	12.57	0.071		0.11	0.10	1.5		0.09
C-A	2.15								
A-B	0.01								
A-C	1.00								

TIME	DEMAND (VEH/HOUR)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH-MIN/ TIME SECOND)	GEOMETRIC DELAY (VEH-HRS/ TIME SECOND)	AVERAGE DELAY PER ARRIVAL (SEC)
10.00-10.15									
A-B	0.58	10.52	0.055		0.07	0.66	0.9		0.10
C-B	0.73	12.46	0.058		0.10	0.68	1.2		0.09
C-A	1.82								
A-B	0.61								
A-C	2.51								

*WARNING: NO MARGINAL ANALYSIS OF CAPACITIES AT MAJOR ROAD BLINKING MAY OCCUR

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

QUEUE FOR STREAM C-25	
TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	QUANTILE	INCLUSIVE QUANTILE
		DELAY	DELAY
(VER)	(VER)	(MIN)	(MIN)
A-C	63.2	4.2	6.5
C-AB	83.0	5.9	9.2
C-A	196.5	13.1	19.2
A-B	2.1	0.9	1
A-C	275.2	183.5	1
ALL	619.4	11.8	15.8

- * DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
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*****END OF REPORT*****

.SLOPES AND INTERCEPT

(19) 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
576.32	0.26	0.10

Interstage For Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-B
8	528.56	0.29	0.16
			0.15
			5.35

Intercept For Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-B
210.74	0.28

 BUT these values do not allow for any site specific corrections

TRAFFIC DEMAND DATA

I	ARM	I	FLGW	SCALE(%)	I
I	A	I		100	1
I	B	I		100	1
I	C	I		100	1

Demand set: 2014 Existing AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

1	1	NUMBER OF VEHICLES FROM START WHEN	1	RATE OF FLOW (VEH/HRS)	1
1	ARM	1 FLOW STARTS 1 TOP OF PEAK 1 FLOW SLOPS 1 DEPARTS 1 AT TOP 1 AFTER	1		1
1	1	1 TO RISE 1 15 DEPARTS 1 FALLING 1 PEAK 1 OF PEAK 1 PEAK	1		1
1	1	1	1	1	1
1	ARM A	1 15.00 1 45.00 1 75.00 1 2.00 1 3.00 1 2.00	1		1
1	ARM B	1 15.00 1 45.00 1 75.00 1 0.11 1 0.11 1 0.11	1		1
1	ARM C	1 15.00 1 45.00 1 75.00 1 1.81 1 2.72 1 1.81	1		1

Demand set: 2014 Existing AM

1	1	TURNING PROPORTIONS	1
1	1	TURNING COUNTS	1
1	1	(PERCENTAGE OF R.V.S)	1
1	1		1
1	TIME	1 FROM/TO 1 ARM A 1 ARM B 1 ARM C 1	1
1	07.45 - 09.15	1 1 1 1 1	1
1	1	1 ARM A 1 0.000 1 0.000 1 1.000 1	1
1	1	1 0.0 1 0.0 1 100.0 1	1
1	1	1 (0.0) 1 (0.0) 1 (1.0) 1	1
1	1	1 1 1 1 1	1
1	1	1 ARM B 1 0.024 1 0.000 1 0.976 1	1
1	1	1 1.0 1 0.0 1 48.0 1	1
1	1	1 (0.0) 1 (0.0) 1 (0.0) 1	1
1	1	1 1 1 1 1	1
1	1	1 ARM C 1 0.876 1 0.124 1 0.000 1	1
1	1	1 121.0 1 18.0 1 0.0 1	1
1	1	1 (3.9) 1 (0.0) 1 (0.0) 1	1
1	1	1 1 1 1 1	1

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING EXPERIMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Existing AM
AND FOR TIME PERIOD 1

1	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PROPORTION 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)
1	07.45-08.00	0.51	10.43	0.048		0.00	0.05	0.1		0.10
1	B-AC	0.76	12.38	0.061		0.00	0.03	0.4		0.08
1	C-AB	1.56								
1	A-B	0.00								
1	A-C	2.01								

1	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PROPORTION 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)
1	08.00-08.15	0.61	10.52	0.058		0.05	0.06	0.9		0.10
1	B-AC	0.32	12.64	0.025		0.03	0.03	0.5		0.08
1	C-AB	1.06								
1	A-B	0.00								
1	A-C	2.40								

1	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PROPORTION 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)
1	08.15-08.30	0.75	10.37	0.073		0.05	0.08	1.1		0.13
1	B-AC	0.40	12.55	0.032		0.03	0.04	0.6		0.08
1	C-AB	2.26								
1	A-B	0.00								
1	A-C	2.93								

1	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PROPORTION 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)
1	08.30-08.45	0.75	10.37	0.073		0.08	0.08	1.2		0.13
1	B-AC	0.40	12.55	0.032		0.04	0.04	0.6		0.08
1	C-AB	2.26								
1	A-B	0.00								
1	A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PERS/MIN)	START QUEUE (PERS)	END QUEUE (PERS)	DELAY (VEH-MIN/ 1000 DEMAND)	GEOMETRIC DELAY (VEH-MIN/ 1000 DEMAND)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
A-B	0.51	10.51	0.048		0.06	0.05	0.8		0.13
C-B	0.26	12.36	0.021		0.03	0.03	0.9		0.08
C-A	1.56								
A-B	0.90								
A-C	2.01								

CUEVE FOR STREAM B-AC

QUEUE FOR STREAM C-AB

QUEUING DELAY INFORMATION Over km(h)E Pacific

- * DELAY IS THEN OCCURRING ONLY WITHIN THE TIME PERIOD
- * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUING AT 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.

*****EPI BY RUPH*****

550P25 250 15YZ8LXP8

HSR/ST rooms may be combined, in which case capacity will be adjusted

	Intercept	Slope For Opposing I	Slope For Opposing I
	STREAM C-B	STREAM A-C	STREAM A-B
I	718.74	0.28	0.26

*** These values do not allow for any site specific control limit

TH562 LC 013970 12922

T ARM (FLOW SCALE) (			
T A	1	100	(
T B	1	100	(
T C	2	100	(

Demand set: 2021 Baseline AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESIZED FROM TURNING COUNT DATA

		NUMBER OF MINUTES FROM START MIN			DATE OF FLOW (VEH/MIN)		
	ARM	FLOW STAYS	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	2.00	3.00	2.00
	ARM B	15.00	45.00	75.00	0.51	0.77	0.51
	ARM C	15.00	45.00	75.00	1.94	2.91	1.94

Demand set: 2021 Baseline AM

		TURNING PROPORTIONS						
		TURNING COUNTS						
		(PERCENTAGE OF H.V.S)						
	TIME	FROM/TO	ARM A	ARM B	ARM C			
1	07.45 - 09.15							
1		ARM A	0.000	0.000	1.000			
1			0.0	0.0	100.0			
1			0.00	0.00	4.77			
1								
1		ARM B	0.074	0.000	0.975			
1			1.0	0.0	99.0			
1			0.00	0.00	0.00			
1								
1		ARM C	0.077	0.123	0.000			
1			135.0	19.0	0.0			
1			3.00	0.60	0.00			
1								

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Baseline AM
AND FOR TIME PERIOD

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PESS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	0.51	10.63	0.048		0.00	0.05	0.7		0.10
C-AB	0.28	12.42	0.022		0.00	0.03	0.4		0.08
C-A	1.47								
A-B	0.00								
A-C	2.01								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PESS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.61	10.52	0.058		0.05	0.56	0.9		0.10
C-AB	0.34	12.52	0.027		0.03	0.03	0.5		0.08
C-A	1.98								
A-B	0.00								
A-C	2.46								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PESS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.75	10.37	0.073		0.06	0.68	1.1		0.10
C-AB	0.43	12.65	0.034		0.03	0.05	0.7		0.08
C-A	2.43								
A-B	0.00								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PESS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.75	10.37	0.073		0.08	0.68	1.2		0.10
C-AB	0.43	12.65	0.034		0.05	0.05	0.7		0.08
C-A	2.41								
A-B	0.00								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PEDES/HOUR)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-A	0.51	10.52	0.038		0.08	0.06	1.0		0.10
C-A	0.34	12.52	0.037		0.05	0.03	0.5		0.08
C-B	1.98								
A-B	0.06								
B-C	2.40								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PEDES/HOUR)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-A	0.53	10.52	0.048		0.66	0.05	0.8		0.10
C-A	0.29	12.42	0.022		0.03	0.01	0.5		0.08
C-B	1.67								
A-B	0.06								
A-C	2.03								

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

QUEUE FOR STREAM B-A

TIME SEGMENT	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUE FOR STREAM C-A

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	QUEUEING DELAY	INCLUSIVE QUEUEING DELAY
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-A	56.4	37.6	5.7
C-A	31.6	20.9	5.2
C-B	187.0	121.3	7
A-B	0.0	0.0	0
A-C	220.2	146.8	7
A-B-C	498.0	326.7	8.4

* DELAY IS THAT ACCUMULATED 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-B
676.32	0.26
	0.10

Intercept For Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM C-A	STREAM C-B
529.55	0.24	0.10	0.15
			0.35

Intercept For Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-B
715.74	0.28
	0.38

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

TRAFFIC DEMAND DATA

ARM	FLOW	SCALE
A	100	1
B	100	1
C	100	1

Demand set: 2021 Design AM

TIME PERIOD BEGIN 07.45 AND END 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESIZED FROM TURNING COUNT DATA

		NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VPH/MIN)								
I	ARM	I	FLOW STARTS	I	TOP OF PEAK	I	FLOW STOPS	I	BEFORE	I	AT TOP	I	AFTER
I		I	TO SIZE	I	IS REACHED	I	FALLING	I	PEAK	I	OF PEAK	I	PEAK
I		I		I		I		I		I		I	
I	ARM A	I	15.00	I	45.00	I	75.00	I	2.45	I	3.68	I	2.45
I	ARM B	I	15.00	I	45.00	I	75.00	I	0.51	I	0.71	I	0.51
I	ARM C	I	15.00	I	45.00	I	75.00	I	2.13	I	3.19	I	2.13

Demand set: 2021 Design AM

		TURNING PROPORTIONS				
		TURNING COUNTS				
		(PERCENTAGE OF H.V.S)				
	TIME	TURN/10	ARM A	ARM B	ARM C	
	07.45 - 09.15					
		ARM A	0.000	0.000	1.000	
			0.0	0.0	196.0	
			0.011	0.011	3.81	
		ARM B	0.024	0.000	0.976	
			1.0	0.0	49.0	
			0.011	0.011	0.03	
		ARM C	0.088	0.112	0.000	
			51.0	12.0	0.0	
			1.6	0.011	0.03	

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Design AM
AND FOR TIME PERIOD L

TIME	DEMAND (VEH/HOR)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	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)
07.45-09.00									
B-A	0.51	10.51	0.049		0.00	0.00	0.7		0.10
C-A	0.28	12.42	0.023		0.00	0.03	0.4		0.08
C-A	1.05								
A-B	0.58								
A-C	2.36								

TIME	DEMAND (VEH/HOR)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	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)
08.00-08.15									
B-A	0.41	10.38	0.039		0.00	0.06	0.9		0.10
C-A	0.35	12.52	0.028		0.03	0.04	0.5		0.08
C-A	2.78								
A-B	0.06								
A-C	2.94								

TIME	DEMAND (VEH/HOR)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	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)
08.15-08.30									
B-A	0.75	10.19	0.074		0.06	0.08	1.2		0.11
C-A	0.44	12.53	0.035		0.04	0.05	0.7		0.08
C-A	2.68								
A-B	0.06								
A-C	3.00								

TIME	DEMAND (VEH/HOR)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	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)
08.30-08.45									
B-A	0.75	10.19	0.074		0.08	0.08	1.2		0.11
C-A	0.44	12.53	0.035		0.05	0.05	0.7		0.08
C-A	2.68								
A-B	0.06								
A-C	3.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW (PEGS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	0.61	10.38	0.059		0.08	0.06	1.0		0.10
C-AB	0.35	12.52	0.028		0.05	0.04	0.5		0.08
C-A	2.26								
A-B	0.08								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW (PEGS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	0.51	10.51	0.049		0.06	0.05	0.8		0.10
C-AB	0.28	12.42	0.023		0.04	0.01	0.4		0.08
C-A	1.85								
A-B	0.00								
A-C	2.46								

*WARNINGS: NO SENSITIVE ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUE FOR STREAM C-AB

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL CAPACITY (VEH/H)	* QUEUEING * DELAY (MIN)	* INCLUSIVE QUEUEING * DELAY (MIN)
B-AC	54.4	37.6	5.8	5.8
C-AB	32.0	21.6	3.3	3.3
C-A	201.9	134.6		
A-B	0.0	0.0		
A-C	269.8	119.9		
ALL	356.2	312.1	9.1	9.1

* 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
* THERE WILL BE NO SIGNIFICANTLY DISTORTED IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

SLOPES AND INTERCEPT

NOTE: Streams may be combined, in which case capacity will be adjusted

Intercept For Slope For Opposing STREAM B-C	Slope For Opposing STREAM A-C
516.32	0.26

Intercept For Slope For Opposing STREAM B-A	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
528.56	0.24	0.10	0.35

Intercept For Slope For Opposing STREAM C-B	Slope For Opposing STREAM A-C
718.74	0.28

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

TRAFFIC DEMAND DATA

ARM	FLOW (VEH/15)
A	100
B	100
C	100

Demand set: 2021 Baseline PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FROM PROFILES ARE SYNTHESIZED FROM TURNING COUNT DATA

ARM	NUMBER OF FLOW STRIPS	MINUTES FROM START WHEN TOP OF PEAK IS REACHED	MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/HIP)	BEFORE PEAK	AFTER PEAK
1 ARM A	1	15.00	45.00	75.00	2.76	4.05
1 ARM B	1	15.00	45.00	75.00	0.61	0.92
1 ARM C	1	15.00	45.00	75.00	2.74	4.11

Demand set: 2021 Baseline PM

TIME	FROM/TO	ARM	A	B	C
16.45 - 18.15	1 ARM A	0.000	0.035	0.995	0.000
	1 ARM B	0.000	0.000	0.000	0.000
	1 ARM C	0.000	0.000	0.000	0.000

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET: 2021 Baseline PM
AND FOR TIME PERIOD: 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PEPS/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	0.61	10.47	0.059	0.00	0.00	0.00	0.9	0.10	0.09
B-C	0.75	12.51	0.064	0.00	0.00	0.00	1.3	0.09	0.09
C-A	1.95								
A-B	0.01								
A-C	2.76								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PEPS/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	0.73	10.33	0.071	0.00	0.00	0.00	1.3	0.10	0.09
B-C	0.99	12.02	0.078	0.00	0.00	0.00	1.6	0.09	0.09
C-A	2.35								
A-B	0.01								
A-C	3.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PEPS/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	0.90	10.13	0.089	0.00	0.10	0.10	1.4	0.11	0.09
B-C	1.26	12.78	0.099	0.00	0.11	0.15	2.2	0.09	0.09
C-A	2.76								
A-B	0.02								
A-C	3.95								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PEPS/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	0.90	10.13	0.089	0.00	0.10	0.10	1.5	0.11	0.09
B-C	1.26	12.78	0.099	0.00	0.15	0.25	2.2	0.09	0.09
C-A	2.76								
A-B	0.02								
A-C	3.95								

TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY	AVERAGE DELAY
(VEH/MIN)	(VEH/MIN)	CAPACITY	(REQ)	FLOW	QUEUE	QUEUE	(VEH.HR/	(VEH.MIN/	PER ARRIVING
				(PEDS/MIN)	(VEH)	(VEH)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)
17.45-18.00									
B-AC	0.73	10.33	0.071		0.10	0.08	1.2		0.10
C-AB	0.99	12.52	0.078		0.15	0.11	1.2		0.09
C-A	2.36								
A-B	0.01								
A-C	1.22								

TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY	AVERAGE DELAY
(VEH/MIN)	(VEH/MIN)	CAPACITY	(REQ)	FLOW	QUEUE	QUEUE	(VEH.HR/	(VEH.MIN/	PER ARRIVING
				(PEDS/MIN)	(VEH)	(VEH)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)
18.00-18.15									
B-AC	0.61	10.41	0.059		0.08	0.06	1.0		0.10
C-AB	0.79	12.51	0.064		0.11	0.09	1.3		0.09
C-A	1.95								
A-B	0.01								
A-C	2.70								

WARNING TO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

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

QUEUE FOR STREAM C-AB

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	EXCESSIVE DELAY	EXCESSIVE DELAY
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-AC	67.4	1.0	0.10
C-AB	91.2	10.3	0.11
C-A	219.2		
A-B	1.4		
A-C	295.9		
ALL	666.2	11.4	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * EXCESSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THERE 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
676.32	0.26
	0.10

Intercept For Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM A-A	STREAM A-C	STREAM A-B	STREAM C-A
578.56	0.24	0.10	0.15
			0.35

Intercept For Slope For Opposing	Slope For Opposing
STREAM C-B	STREAM A-B
718.74	0.28
	0.28

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

TRAFFIC DEMAND DATA

Stream	Flow	Scale (%)
A	100	1
B	100	1
C	100	1

Demand set: 2021 Design PM

TIME PERIOD BEGINNING 16.45 AND ENDING 18.15

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESIZED FROM TURNING COUNT DATA

			NUMBER OF MINUTES FROM START WHEN			DATE OF FLOW (VEH/MIN)			
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2	3	1	2	3	
I	I	I	1	2	3	1	2	3	I
			1	2</					

TIME	DEMAND (VEH/H)	CAPACITY (VEH/H)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PEGS/H)	START QUEUE (VEH)	END QUEUE (VEH)	DELAY (SEC/VEH) TIME SEGMENT	GEOMETRIC DELAY (SEC/VEH) TIME SEGMENT	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	0.71	10.24	0.007		0.10	0.08	1.2		0.11
C-AB	1.03	12.87	0.008		0.15	0.12	1.8		0.08
C-A	2.79								
A-B	0.01								
A-C	3.55								

TIME	DEMAND (VEH/H)	CAPACITY (VEH/H)	DEMAND/ CAPACITY (REQ)	PEDESTRIAN FLOW (PEGS/H)	START QUEUE (VEH)	END QUEUE (VEH)	DELAY (SEC/VEH) TIME SEGMENT	GEOMETRIC DELAY (SEC/VEH) TIME SEGMENT	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	0.61	10.24	0.006		0.08	0.06	1.0		0.10
C-AB	0.83	12.72	0.006		0.13	0.09	1.4		0.08
C-A	2.37								
A-B	0.01								
A-C	2.97								

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

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

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
B-AC	67.4	45.0	7.1	0.11	1.1	0.11																			
C-AB	94.2	69.2	11.3	0.12	11.3	0.12																			
C-A	254.8	169.8																							
A-B	1.5	0.9																							
A-C	326.2	217.5																							
ALL	746.0	497.3	18.4	0.02	38.0	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*****

*****END OF FILE*****

APPENDIX L: ARCADY Output – Ashbourne Road / Tape Street Junction

ARCADY 7

Version: 7.1.1.245 [9th June 2011]
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File: R:\Birmingham\Current Jobs\4 - Live Jobs\Thorley Drive, Cheadle\05 Calculations\Junction assessments\ARCADY\Ashbourne Rd-Tape St Mini-roundabout AM.arc7

Report generation date: 13/01/2016 16:15:01

Summary of roundabout performance

AM				
	Queue (Veh)	Delay (s)	RFC	LOS
(Default Analysis Set) - 2014 Existing				
Arm 1	4.22	66.45	0.84	F
Arm 2	8.38	51.49	0.92	F
Arm 3	8.22	51.09	0.92	F
(Default Analysis Set) - 2021 Baseline				
Arm 1	7.69	111.06	0.94	F
Arm 2	16.55	90.73	0.99	F
Arm 3	15.49	86.69	0.98	F
(Default Analysis Set) - 2021 Design				
Arm 1	17.56	206.73	1.07	F
Arm 2	19.94	106.36	1.01	F
Arm 3	18.70	100.84	1.00	F

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

2014 Existing - AM runs from 07:45:00 to 09:15:00
2021 Baseline - AM runs from 07:45:00 to 09:15:00
2021 Design - AM runs from 07:45:00 to 09:15:00

File summary

File Description

Title	(untitled)
-------	------------

Location	
Site Number	
Date	09/10/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MAYERBROWN2Kvcarreres
Description	

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	1,2,3	Mini-roundabout			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

ID	Name	Description
1	Ashbourne Road	
2	Tape Street south	
3	Tape Street north	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner korb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.00	3.25	4.10	21.38	11.80	8.80	0.00	
2	2.50	2.50	3.00	0.01	17.30	16.90	0.00	
3	2.75	2.75	3.80	8.11	11.80	9.20	0.00	

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

Arm Slope/ Intercept and Capacity

Arm Intercept Adjustments

Arm	Use Adjustment	Reason	Direct Intercept Adjustment (PCU/hr)
1	Yes	To calibrate with queue survey	-160.00
2	Yes	To calibrate with queue survey	50.00
3	Yes	To calibrate with queue survey	-85.00

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		((calculated))	((calculated))	0.556	570.242
2		((calculated))	((calculated))	0.602	825.348
3		((calculated))	((calculated))	0.531	751.937

The slope and intercept shown above include any corrections and adjustments.

A1 - (Default Analysis Set) - D1 - 2014 Existing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2014 Existing, AM	2014 Existing	AM			Yes			07:45	09:15	90	15	ONE HOUR

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
1	ONE HOUR	Yes	225.00	100.000	N/A
2	ONE HOUR	Yes	571.00	100.000	N/A
3	ONE HOUR	Yes	565.00	100.000	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To		
		1	2	3
From	1	0.000	73.000	152.000
	2	82.000	0.000	489.000
	3	143.000	422.000	0.000

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.32	0.68
	2	0.14	0.00	0.86
	3	0.25	0.75	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.014	1.039
	2	1.012	1.000	1.061
	3	1.028	1.038	1.000

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To		
		1	2	3
From	1	0.000	1.400	3.900

2	1.200	0.000	6.100
3	2.800	3.800	0.000

Results

Results Summary

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (s)	Slope	Intercept (PCU/hr)
1	0.84	66.45	4.22	F	206.46	309.70	175.91	34.08	1.95	175.97	34.09	0.556	570.242
2	0.92	51.49	8.38	F	523.96	785.94	336.65	25.70	3.74	336.75	25.71	0.602	825.348
3	0.92	51.09	8.22	F	518.45	777.68	339.32	26.18	3.77	339.44	26.19	0.531	751.937

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
1	169.39	42.35	166.25	167.02	313.15	0.00	377.73	270.37	0.448	0.00	0.79
2	429.88	107.47	424.08	367.09	112.31	0.00	716.48	674.77	0.600	0.00	1.45
3	425.36	106.34	419.27	475.49	60.90	0.00	694.56	675.87	0.612	0.00	1.52

Main results: (08:00-08:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
1	202.27	50.57	199.99	200.54	376.09	0.00	342.48	270.37	0.591	0.79	1.36
2	513.32	128.33	509.00	440.98	135.10	0.00	702.97	674.77	0.730	1.45	2.53
3	507.92	126.98	503.54	571.01	73.10	0.00	688.23	675.87	0.738	1.52	2.62

Main results: (08:15-08:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
1	247.73	61.93	238.91	240.64	451.42	0.00	300.28	270.37	0.825	1.36	3.56
2	628.68	157.17	610.47	528.93	161.40	0.00	687.37	674.77	0.915	2.53	7.08
3	622.08	155.52	604.39	684.20	87.67	0.00	680.66	675.87	0.914	2.62	7.04

Main results: (08:30-08:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
1	247.73	61.93	245.08	245.79	461.10	0.00	294.86	270.37	0.840	3.56	4.22
2	628.68	157.17	623.50	540.61	165.57	0.00	684.90	674.77	0.918	7.08	8.38
3	622.08	155.52	617.35	699.52	89.54	0.00	679.69	675.87	0.915	7.04	8.22

Main results: (08:45-09:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
1	202.27	50.57	212.46	210.57	394.73	0.00	332.04	270.37	0.609	4.22	1.68

2	513.32	128.33	534.83	463.67	143.53	0.00	697.97	674.77	0.735	8.38	3.00
3	507.92	126.98	528.49	601.56	76.81	0.00	686.30	675.87	0.740	8.22	3.08

Main results: (09:00-09:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
1	169.39	42.35	172.65	171.67	322.00	0.00	372.78	270.37	0.454	1.68	0.88
2	429.88	107.47	435.62	378.02	116.63	0.00	713.92	674.77	0.602	3.00	1.56
3	425.36	106.34	431.12	489.70	62.56	0.00	693.70	675.87	0.613	3.08	1.64

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.84	0.72	16.789	C	B
2	20.06	1.34	12.086	B	B
3	20.96	1.40	12.813	B	B

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	18.66	1.24	24.855	C	C
2	34.64	2.31	18.146	C	B
3	35.80	2.39	19.025	C	B

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	43.51	2.90	52.420	F	D
2	83.94	5.60	39.591	E	D
3	83.80	5.59	39.965	E	D

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	59.25	3.95	66.447	F	E
2	117.29	7.82	51.487	F	D
3	115.69	7.71	51.095	F	D

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	29.73	1.98	32.217	D	C
2	55.54	3.70	24.411	C	C
3	56.56	3.77	25.176	D	C

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	13.92	0.93	18.263	C	B
2	25.18	1.68	13.190	B	B
3	26.51	1.77	13.995	B	B

A1 - (Default Analysis Set) - D3 - 2021 Baseline, AM

Data Errors and Warnings
No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2021 Baseline, AM	2021 Baseline	AM			Yes			07:45	09:15	90	15	ONE HOUR

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
1	ONE HOUR	Yes	241.00	100.000	N/A
2	ONE HOUR	Yes	612.00	100.000	N/A
3	ONE HOUR	Yes	605.00	100.000	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

From	To		
	1	2	3
	1	2	3
1	0.000	78.000	163.000
2	88.000	0.000	524.000