Appendix E

ARUN DISTRICT COUNCIL AL/3/19/PL



REFUSE TRACKING WESTERN PERIMETER



REFUSE TRACKING WESTERN LINK



REFUSE TRACKING EASTERN LINK



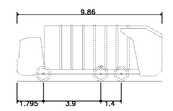
REFUSE TRACKING EASTERN PERIMETER

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VEHICLE PROFILE



Large Refuse Vehicle (3 axle)	
Overall Length	9.860m
Overall Width	2.450m
Overall Body Height	3.814m
Min Body Ground Clearance	0.366m
Track Width	2.450m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

NORTH

Rev.	Description	Date	By	Chkd
B	REVISED LAYOUT	20.08.18	SN	MS
A	REVISED LAYOUT	28.08.18	SRW	MS

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Client: Taylor Wimpey

Project Name: THE HEDGEROWS WESTERGATE

Title: REFUSE VEHICLE TRACKING

Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
MS	23.08.18	SRW	22.08.18

Client Drawing No.: -

Scale: 1:500 (AT A1 SIZE)

PBA Drawing No.: 064.0007.001

Revision: B

ARUN DISTRICT COUNCIL ALVS/PL



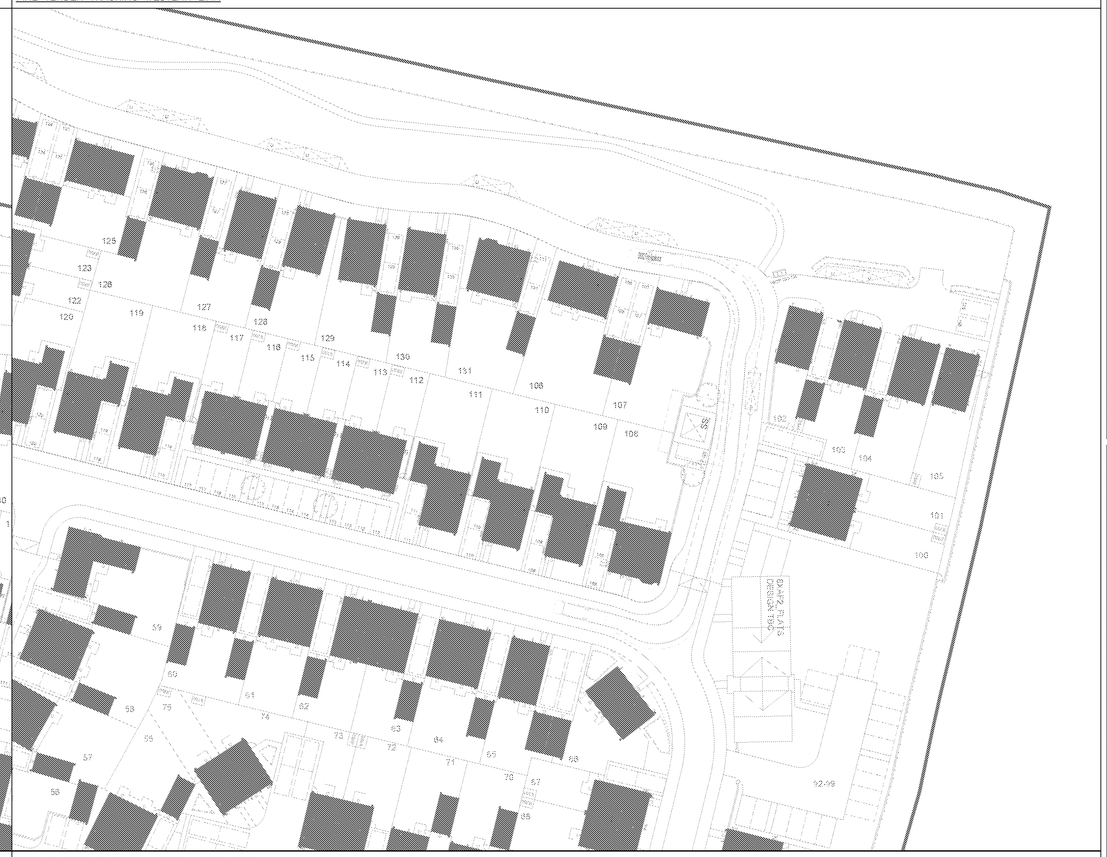
FIRE TENDER TRACKING WESTERN PERIMETER



FIRE TENDER TRACKING WESTERN LINK



FIRE TENDER TRACKING EASTERN LINK



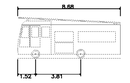
FIRE TENDER TRACKING EASTERN PERIMETER

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VEHICLE PROFILE



DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.712m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m

NORTH

Rev.	Description	Date	By	Chkd
B	REVISED SITE LAYOUT	20.12.18	SN	MS
A	REVISED SITE LAYOUT	28.08.18	SRW	MS

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Client: Taylor Wimpey

Project Name: THE HEDGEROWS WESTERGATE

Title: FIRE TENDER TRACKING

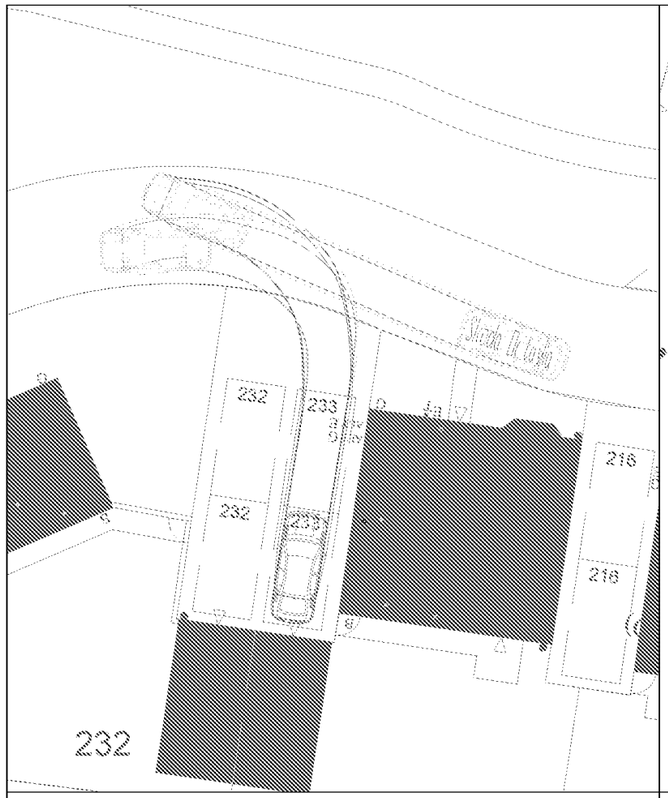
Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
MS	23.08.18	SRW	22.08.18

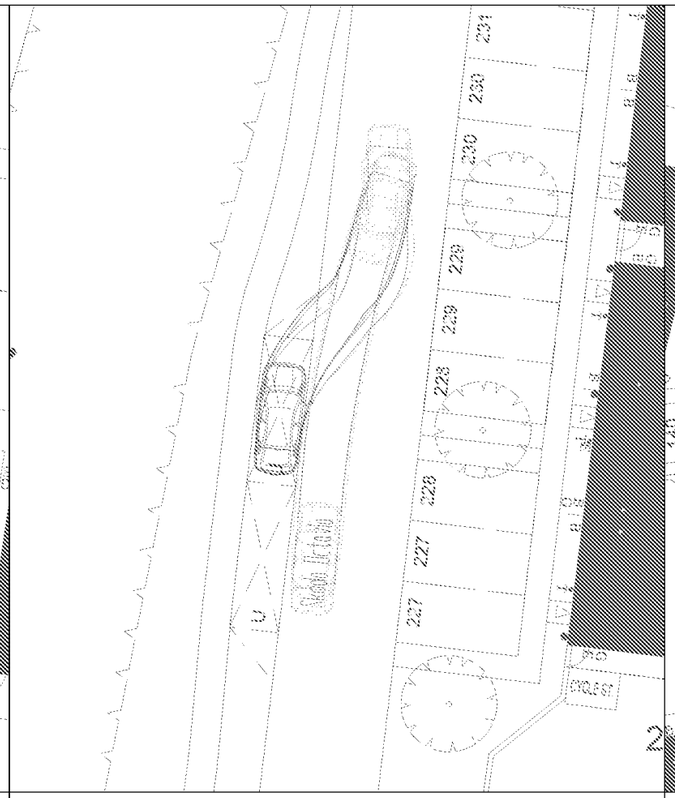
Client Drawing No.	Scale	
-	1:500	(AT A1 SIZE)

PBA Drawing No.	Revision
064.0007.002	B

ARUN DISTRICT COUNCIL ALS/PL



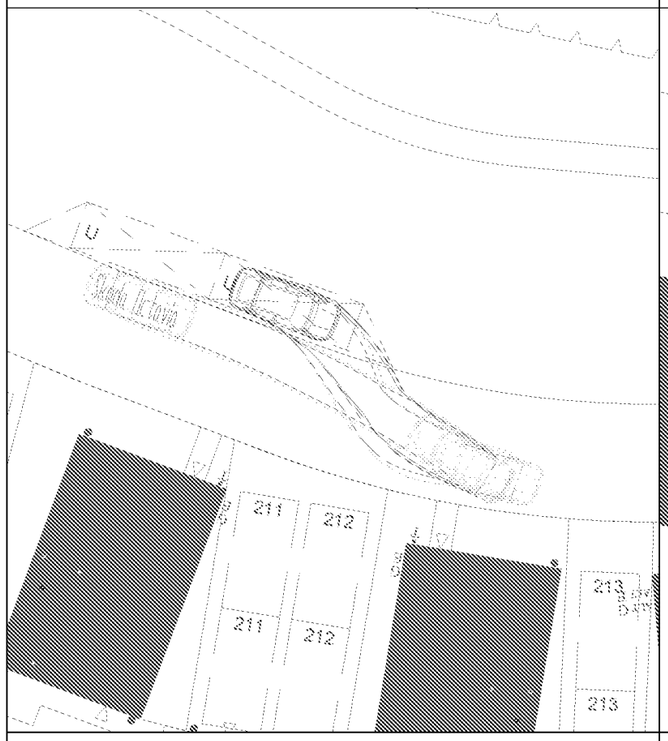
PLOT 233



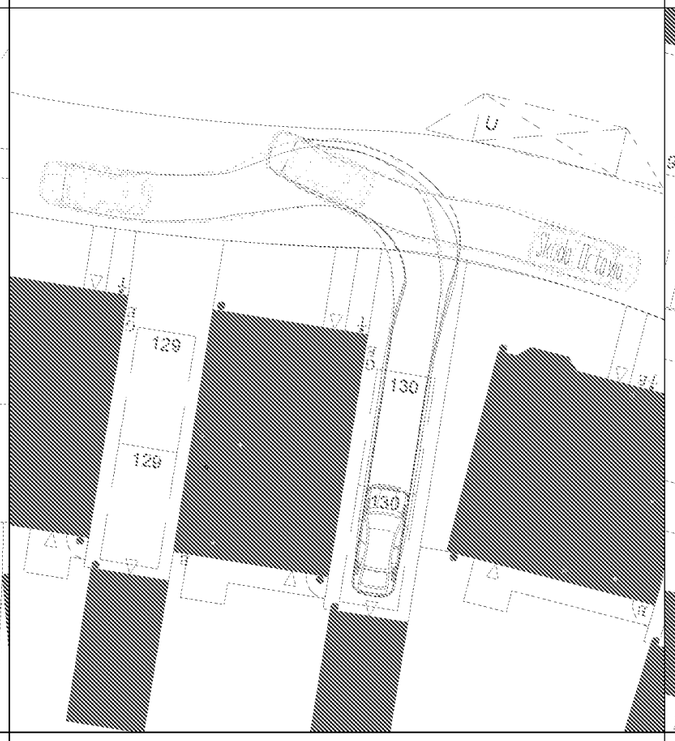
VISITOR BAY



PLOT 139



VISITOR BAY



PLOT 130

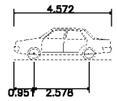


PLOT 117

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VEHICLE PROFILE



Skoda Octavia	
Overall Length	4.572m
Overall Width	1.769m
Overall Body Height	1.488m
Min Body Ground Clearance	0.249m
Max Track Width	1.713m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.100m

NORTH

Rev	Description	Date	By	Chk
A	REVISED LAYOUT	20.12.18	SN	MS

Project Name: THE HEDGEROWS WESTERGATE

Project Phase: PRELIMINARY

Title: PARKING BAY TRACKING

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Client: Taylor Wimpey

Checked By	Checked Date	Scale	
MS	03.09.18	1:250	(AT A3 SIZE)
Drawn By	**Drawn Date**	**Client Drawing No.**	**PBA Drawing No.** / **Revision**
SPW	28.08.18	-	064.0007.003 / A

ARUN DISTRICT COUNCIL AUG 2019

Appendix F

LIST OF SITES relevant to selection parameters

1 **CB-03-A-02** **SEMI DETACHED** **CUMBRIA**
HAWKSHEAD AVENUE

WORKINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: MONDAY *20/06/05* *Survey Type: MANUAL*

2 **CB-03-A-04** **SEMI DETACHED** **CUMBRIA**
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY *24/04/09* *Survey Type: MANUAL*

3 **CW-03-A-01** **TERRACED** **CORNWALL**
ALVERTON ROAD

PENZANCE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 13
Survey date: THURSDAY *30/06/05* *Survey Type: MANUAL*

4 **CW-03-A-02** **SEMI D./DETATCHED** **CORNWALL**
BOSVEAN GARDENS

TRURO
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 73
Survey date: TUESDAY *18/09/07* *Survey Type: MANUAL*

5 **ES-03-A-02** **PRIVATE HOUSING** **EAST SUSSEX**
SOUTH COAST ROAD

PEACEHAVEN
Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY *18/11/11* *Survey Type: MANUAL*

6 **LE-03-A-01** **DETACHED** **LEICESTERSHIRE**
REDWOOD AVENUE

MELTON MOWBRAY
Edge of Town
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY *03/05/05* *Survey Type: MANUAL*

7 **NF-03-A-01** **SEMI DET. & BUNGALOWS** **NORFOLK**
YARMOUTH ROAD

CAISTER-ON-SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY *16/10/12* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 **NY-03-A-01** **MIXED HOUSES** **NORTH YORKSHIRE**
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: TUESDAY *25/09/07* *Survey Type: MANUAL*

9 **NY-03-A-03** **PRIVATE HOUSING** **NORTH YORKSHIRE**
NEW ROW

BOROUGHBRIDGE
Edge of Town Centre
Residential Zone
Total Number of dwellings: 14
Survey date: MONDAY *15/09/08* *Survey Type: MANUAL*

10 **NY-03-A-05** **HOUSES AND FLATS** **NORTH YORKSHIRE**
BOROUGHBRIDGE ROAD

RIPON
Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: MONDAY *22/09/08* *Survey Type: MANUAL*

11 **NY-03-A-06** **BUNGALOWS & SEMI DET.** **NORTH YORKSHIRE**
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY *14/10/11* *Survey Type: MANUAL*

12 **SF-03-A-03** **MIXED HOUSES** **SUFFOLK**
BARTON HILL
FORNHAM ST MARTIN
BURY ST EDMUNDS
Edge of Town
Out of Town
Total Number of dwellings: 101
Survey date: MONDAY *15/05/06* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

AG-03-A-01	Ireland
AN-03-A-07	Ireland
AR-03-A-01	Ireland
CP-03-A-02	Wales
CS-03-A-01	Ireland
CS-03-A-02	Ireland
CV-03-A-01	Ireland
DN-03-A-01	Ireland
FI-03-A-02	Scotland
GA-03-A-01	Ireland
GA-03-A-02	Ireland
GA-03-A-03	Ireland
GA-03-A-04	Ireland
HI-03-A-11	Scotland
KD-03-A-02	Ireland
MA-03-A-01	Ireland
PK-03-A-01	Scotland

MANUALLY DESELECTED SITES (Cont.)

RO-03-A-01	Ireland
RO-03-A-02	Ireland
SR-03-A-01	Scotland

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	53	0.057	12	53	0.274	12	53	0.331
08:00 - 09:00	12	53	0.124	**12**	**53**	**0.388**	12	53	0.512
09:00 - 10:00	12	53	0.176	12	53	0.217	12	53	0.393
10:00 - 11:00	12	53	0.156	12	53	0.195	12	53	0.351
11:00 - 12:00	12	53	0.170	12	53	0.153	12	53	0.323
12:00 - 13:00	12	53	0.212	12	53	0.184	12	53	0.396
13:00 - 14:00	12	53	0.200	12	53	0.179	12	53	0.379
14:00 - 15:00	12	53	0.193	12	53	0.198	12	53	0.391
15:00 - 16:00	12	53	0.281	12	53	0.181	12	53	0.462
16:00 - 17:00	12	53	0.373	12	53	0.231	**12**	**53**	**0.604**
17:00 - 18:00	**12**	**53**	**0.379**	12	53	0.198	12	53	0.577
18:00 - 19:00	12	53	0.222	12	53	0.181	12	53	0.403
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	11 - 115 (units:)
Survey date date range:	01/01/05 - 18/12/12
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	20

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix G

ARUN DISTRICT COUNCIL AL/3/19/PL

Appendix L PICADY Modelling Output

ARUN DISTRICT COUNCIL AL/3/19/PL

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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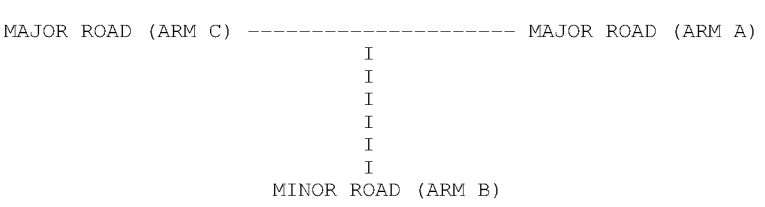
Run with file:- "C:\Westergate\B2233A27\B2233A27AM.vpi" (drive-on-the-left) at 10:08:13 on Thursday, 20 June 2013

RUN INFORMATION

RUN TITLE	: Westergate A27/B2233
LOCATION	: Westergate
DATE	: 06/06/13
CLIENT	:
ENUMERATOR	: Administrator [TNT-LAPTOP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A27 East
ARM B IS B2233
ARM C IS A27 West

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 18.00 M.
CENTRAL RESERVE WIDTH	(WCR) 6.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.00 M.
- VISIBILITY	(VC-B)160.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 140.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows AM 2010

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	25.67	38.51	25.67
ARM B	15.00	45.00	75.00	8.24	12.36	8.24
ARM C	15.00	45.00	75.00	20.52	30.79	20.52

Demand set: A27/B2233 Base Flows AM 2010

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	16.0	2038.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	659.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.934	0.066	0.000
		1533.0	109.0	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 A27/B2233 Base Flows AM 2010
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)
07.45-08.00									
B-AC	8.27	9.34	0.886		0.00	5.51	63.2		0.60
C-A	19.24								
C-B	1.37	8.62	0.159		0.00	0.19	2.7		0.14
A-B	0.20								
A-C	25.57								

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)
08.00-08.15									
B-AC	9.87	8.61	1.146		5.51	26.89	249.5		2.28
C-A	22.97								
C-B	1.63	7.95	0.205		0.19	0.26	3.7		0.16
A-B	0.24								
A-C	30.54								

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)
08.15-08.30									
B-AC	12.09	7.61	1.588		26.89	94.18	908.4		8.20
C-A	28.13								
C-B	2.00	7.02	0.285		0.26	0.39	5.6		0.20
A-B	0.29								
A-C	37.40								

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)
08.30-08.45									
B-AC	12.09	7.61	1.588		94.18	161.38	1916.7		15.83
C-A	28.13								
C-B	2.00	7.02	0.285		0.39	0.39	5.9		0.20
A-B	0.29								
A-C	37.40								

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)
08.45-09.00									
B-AC	9.87	8.61	1.146		161.38	180.33	2562.8		19.61
C-A	22.97								
C-B	1.63	7.95	0.205		0.39	0.26	4.1		0.16
A-B	0.24								
A-C	30.54								

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)
09.00-09.15									
B-AC	8.27	9.34	0.886		180.33	165.11	2590.7		18.60
C-A	19.24								
C-B	1.37	8.62	0.159		0.26	0.19	2.9		0.14
A-B	0.20								
A-C	25.57								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	5.5	******
08.15	26.9	**************************
08.30	94.2	**********
08.45	161.4	**********
09.00	180.3	**********
09.15	165.1	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	907.1	604.7	8291.4	9.14	9751.5	10.75
C-A	2110.1	1406.7				
C-B	150.0	100.0	25.0	0.17	25.0	0.17
A-B	22.0	14.7				
A-C	2805.2	1870.1				
ALL	5994.3	3996.2	8316.4	1.39	9776.4	1.63

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows AM 2015

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	26.33	39.49	26.33
ARM B	15.00	45.00	75.00	8.45	12.67	8.45
ARM C	15.00	45.00	75.00	21.05	31.57	21.05

Demand set: A27/B2233 Base Flows AM 2015

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	16.0	2090.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	676.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.933	0.067	0.000
		1572.0	112.0	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 A27/B2233 Base Flows AM 2015
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)
07.45-08.00									
B-AC	8.48	9.24	0.918		0.00	6.68	73.5		0.68
C-A	19.72								
C-B	1.41	8.53	0.165		0.00	0.20	2.8		0.14
A-B	0.20								
A-C	26.22								

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)
08.00-08.15									
B-AC	10.13	8.50	1.192		6.68	32.79	300.8		2.74
C-A	23.55								
C-B	1.68	7.84	0.214		0.20	0.27	3.9		0.16
A-B	0.24								
A-C	31.31								

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)
08.15-08.30									
B-AC	12.40	7.48	1.659		32.79	106.80	1047.2		9.56
C-A	28.85								
C-B	2.06	6.89	0.298		0.27	0.42	6.0		0.21
A-B	0.29								
A-C	38.35								

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)
08.30-08.45									
B-AC	12.40	7.48	1.659		106.80	180.75	2156.7		17.90
C-A	28.85								
C-B	2.06	6.89	0.298		0.42	0.42	6.3		0.21
A-B	0.29								
A-C	38.35								

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)
08.45-09.00									
B-AC	10.13	8.50	1.192		180.75	205.20	2894.6		22.23
C-A	23.55								
C-B	1.68	7.84	0.214		0.42	0.28	4.3		0.16
A-B	0.24								
A-C	31.31								

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)
09.00-09.15									
B-AC	8.48	9.24	0.918		205.20	194.50	2997.8		21.74
C-A	19.72								
C-B	1.41	8.53	0.165		0.28	0.20	3.1		0.14
A-B	0.20								
A-C	26.22								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	6.7	*******
08.15	32.8	**********
08.30	106.8	**********
08.45	180.8	**********
09.00	205.2	**********
09.15	194.5	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	930.5	620.3	9470.6	10.18	11517.5	12.38
C-A	2163.7	1442.5				
C-B	154.2	102.8	26.4	0.17	26.4	0.17
A-B	22.0	14.7				
A-C	2876.7	1917.8				
ALL	6147.1	4098.1	9496.9	1.54	11543.9	1.88

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows AM 2025

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	30.59	45.88	30.59
ARM B	15.00	45.00	75.00	9.81	14.72	9.81
ARM C	15.00	45.00	75.00	24.46	36.69	24.46

Demand set: A27/B2233 Base Flows AM 2025

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	19.0	2428.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	785.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.934	0.066	0.000
		1827.0	130.0	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 A27/B2233 Base Flows AM 2025
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)
07.45-08.00									
B-AC	9.85	8.62	1.142		0.00	23.65	199.1		1.72
C-A	22.92								
C-B	1.63	7.96	0.205		0.00	0.25	3.7		0.16
A-B	0.24								
A-C	30.47								

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)
08.00-08.15									
B-AC	11.76	7.76	1.515		23.65	83.78	806.2		7.66
C-A	27.37								
C-B	1.95	7.16	0.272		0.25	0.37	5.3		0.19
A-B	0.28								
A-C	36.38								

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)
08.15-08.30									
B-AC	14.41	6.57	2.192		83.78	201.28	2138.0		21.31
C-A	33.53								
C-B	2.39	6.05	0.394		0.37	0.63	9.0		0.27
A-B	0.35								
A-C	44.55								

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)
08.30-08.45									
B-AC	14.41	6.57	2.192		201.28	318.76	3900.3		39.76
C-A	33.53								
C-B	2.39	6.05	0.394		0.63	0.64	9.6		0.27
A-B	0.35								
A-C	44.55								

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)
08.45-09.00									
B-AC	11.76	7.76	1.515		318.76	378.75	5231.3		42.09
C-A	27.37								
C-B	1.95	7.16	0.272		0.64	0.38	6.0		0.19
A-B	0.28								
A-C	36.38								

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)
09.00-09.15									
B-AC	9.85	8.62	1.142		378.75	397.16	5819.3		45.14
C-A	22.92								
C-B	1.63	7.96	0.205		0.38	0.26	4.1		0.16
A-B	0.24								
A-C	30.47								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	23.6	**********
08.15	83.8	**********
08.30	201.3	**********
08.45	318.8	**********
09.00	378.7	**********
09.15	397.2	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.6	*
08.45	0.6	*
09.00	0.4	
09.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	1080.5	720.3	18094.1	16.75	27240.1	25.21
C-A	2514.7	1676.5				
C-B	178.9	119.3	37.5	0.21	37.5	0.21
A-B	26.2	17.4				
A-C	3342.0	2228.0				
ALL	7142.3	4761.5	18131.6	2.54	27277.6	3.82

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows With Scheme AM 2015

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	26.56	39.84	26.56
ARM B	15.00	45.00	75.00	8.54	12.81	8.54
ARM C	15.00	45.00	75.00	21.17	31.76	21.17

Demand set: A27/B2233 Flows With Scheme AM 2015

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	16.0	2109.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	683.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.932	0.068	0.000
		1579.0	115.0	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 A27/B2233 Flows With Scheme AM 2015
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)
07.45-08.00									
B-AC	8.57	9.21	0.931		0.00	7.23	78.2		0.72
C-A	19.81								
C-B	1.44	8.50	0.170		0.00	0.20	2.9		0.14
A-B	0.20								
A-C	26.46								
08.00-08.15									
B-AC	10.23	8.46	1.210		7.23	35.30	323.2		2.93
C-A	23.66								
C-B	1.72	7.81	0.221		0.20	0.28	4.1		0.16
A-B	0.24								
A-C	31.60								
08.15-08.30									
B-AC	12.53	7.43	1.688		35.30	111.99	1104.8		10.14
C-A	28.98								
C-B	2.11	6.85	0.308		0.28	0.44	6.3		0.21
A-B	0.29								
A-C	38.70								
08.30-08.45									
B-AC	12.53	7.43	1.688		111.99	188.62	2254.5		20.42
C-A	28.98								
C-B	2.11	6.85	0.308		0.44	0.44	6.6		0.21
A-B	0.29								
A-C	38.70								

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)
08.45-09.00									
B-AC	10.23	8.46	1.210		188.62	215.26	3029.1		23.29
C-A	23.66								
C-B	1.72	7.81	0.221		0.44	0.29	4.5		0.16
A-B	0.24								
A-C	31.60								

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)
09.00-09.15									
B-AC	8.57	9.21	0.931		215.26	206.36	3162.1		23.00
C-A	19.81								
C-B	1.44	8.50	0.170		0.29	0.21	3.2		0.14
A-B	0.20								
A-C	26.46								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	7.2	*******
08.15	35.3	**********
08.30	112.0	**********
08.45	188.6	**********
09.00	215.3	**********
09.15	206.4	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	940.1	626.7	9952.0	10.59	12264.9	13.05
C-A	2173.4	1448.9				
C-B	158.3	105.5	27.5	0.17	27.5	0.17
A-B	22.0	14.7				
A-C	2902.9	1935.3				
ALL	6196.7	4131.1	9979.5	1.61	12292.4	1.98

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme AM 2025

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	30.83	46.24	30.83
ARM B	15.00	45.00	75.00	9.90	14.85	9.90
ARM C	15.00	45.00	75.00	24.59	36.88	24.59

Demand set: A27/B2233 Flows with Scheme AM 2025

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	19.0	2447.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	792.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.932	0.068	0.000
		1834.0	133.0	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 A27/B2233 Flows with Scheme AM 2025
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)
07.45-08.00									
B-AC	9.94	8.59	1.157		0.00	25.16	209.9		1.81
C-A	23.01								
C-B	1.67	7.93	0.211		0.00	0.26	3.8		0.16
A-B	0.24								
A-C	30.70								

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)
08.00-08.15									
B-AC	11.87	7.72	1.537		25.16	87.47	845.1		8.08
C-A	27.48								
C-B	1.99	7.12	0.280		0.26	0.38	5.5		0.19
A-B	0.28								
A-C	36.66								

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)
08.15-08.30									
B-AC	14.53	6.52	2.228		87.47	207.65	2213.4		22.15
C-A	33.65								
C-B	2.44	6.01	0.406		0.38	0.66	9.4		0.28
A-B	0.35								
A-C	44.90								

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)
08.30-08.45									
B-AC	14.53	6.52	2.228		207.65	327.82	4016.0		41.24
C-A	33.65								
C-B	2.44	6.01	0.406		0.66	0.67	10.1		0.28
A-B	0.35								
A-C	44.90								

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)
08.45-09.00									
B-AC	11.87	7.72	1.537		327.82	390.00	5383.6		43.44
C-A	27.48								
C-B	1.99	7.12	0.280		0.67	0.40	6.2		0.20
A-B	0.28								
A-C	36.66								

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)
09.00-09.15									
B-AC	9.94	8.59	1.157		390.00	410.24	6001.8		46.71
C-A	23.01								
C-B	1.67	7.93	0.211		0.40	0.27	4.2		0.16
A-B	0.24								
A-C	30.70								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	25.2	************************
08.15	87.5	**********
08.30	207.6	**********
08.45	327.8	**********
09.00	390.0	**********
09.15	410.2	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.7	*
08.45	0.7	*
09.00	0.4	
09.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	1090.1	726.8	18669.8	17.13	28467.7	26.11
C-A	2524.4	1682.9				
C-B	183.1	122.0	39.2	0.21	39.2	0.21
A-B	26.2	17.4				
A-C	3368.1	2245.4				
ALL	7191.8	4794.6	18709.0	2.60	28506.9	3.96

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme AM 2025 Sens 5050

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	30.74	46.11	30.74
ARM B	15.00	45.00	75.00	9.99	14.98	9.99
ARM C	15.00	45.00	75.00	24.58	36.86	24.58

Demand set: A27/B2233 Flows with Scheme AM 2025 Sens 5050

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	19.0	2440.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	799.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.931	0.069	0.000
		1831.0	135.0	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 A27/B2233 Flows with Scheme AM 2025 Sens 5050
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)
07.45-08.00									
B-AC	10.03	8.60	1.166		0.00	26.12	216.8		1.87
C-A	22.97								
C-B	1.69	7.94	0.213		0.00	0.27	3.8		0.16
A-B	0.24								
A-C	30.62								

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)
08.00-08.15									
B-AC	11.97	7.74	1.547		26.12	89.77	869.5		8.28
C-A	27.43								
C-B	2.02	7.13	0.284		0.27	0.39	5.6		0.20
A-B	0.28								
A-C	36.56								

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)
08.15-08.30									
B-AC	14.66	6.54	2.242		89.77	211.59	2260.2		22.53
C-A	33.60								
C-B	2.48	6.02	0.411		0.39	0.68	9.6		0.28
A-B	0.35								
A-C	44.77								

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)
08.30-08.45									
B-AC	14.66	6.54	2.242		211.59	333.41	4087.5		41.85
C-A	33.60								
C-B	2.48	6.02	0.411		0.68	0.69	10.3		0.28
A-B	0.35								
A-C	44.77								

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)
08.45-09.00									
B-AC	11.97	7.74	1.547		333.41	396.93	5477.5		44.10
C-A	27.43								
C-B	2.02	7.13	0.284		0.69	0.40	6.3		0.20
A-B	0.28								
A-C	36.56								

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)
09.00-09.15									
B-AC	10.03	8.60	1.166		396.93	418.30	6114.3		47.53
C-A	22.97								
C-B	1.69	7.94	0.213		0.40	0.27	4.3		0.16
A-B	0.24								
A-C	30.62								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	26.1	**************************
08.15	89.8	**********
08.30	211.6	**********
08.45	333.4	**********
09.00	396.9	**********
09.15	418.3	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.7	*
08.45	0.7	*
09.00	0.4	
09.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	1099.8	733.2	19025.8	17.30	29197.4	26.55
C-A	2520.2	1680.2				
C-B	185.8	123.9	39.9	0.21	39.9	0.21
A-B	26.2	17.4				
A-C	3358.5	2239.0				
ALL	7190.5	4793.6	19065.7	2.65	29237.3	4.07

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme AM 2025 Sens 8020

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	30.65	45.97	30.65
ARM B	15.00	45.00	75.00	10.09	15.13	10.09
ARM C	15.00	45.00	75.00	24.59	36.88	24.59

Demand set: A27/B2233 Flows with Scheme AM 2025 Sens 8020

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	19.0	2433.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	807.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.930	0.070	0.000
		1829.0	138.0	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 A27/B2233 Flows with Scheme AM 2025 Sens 8020
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)
07.45-08.00									
B-AC	10.13	8.61	1.176		0.00	27.25	224.9		1.93
C-A	22.95								
C-B	1.73	7.95	0.218		0.00	0.27	3.9		0.16
A-B	0.24								
A-C	30.53								

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)
08.00-08.15									
B-AC	12.09	7.75	1.560		27.25	92.46	898.1		8.54
C-A	27.40								
C-B	2.07	7.15	0.289		0.27	0.40	5.8		0.20
A-B	0.28								
A-C	36.45								

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)
08.15-08.30									
B-AC	14.81	6.56	2.258		92.46	216.20	2315.0		22.98
C-A	33.56								
C-B	2.53	6.04	0.419		0.40	0.70	9.9		0.28
A-B	0.35								
A-C	44.65								

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)
08.30-08.45									
B-AC	14.81	6.56	2.258		216.20	339.94	4171.1		37.51
C-A	33.56								
C-B	2.53	6.04	0.419		0.70	0.71	10.6		0.28
A-B	0.35								
A-C	44.65								

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)
08.45-09.00									
B-AC	12.09	7.75	1.560		339.94	405.04	5587.4		44.90
C-A	27.40								
C-B	2.07	7.15	0.289		0.71	0.41	6.5		0.20
A-B	0.28								
A-C	36.45								

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)
09.00-09.15									
B-AC	10.13	8.61	1.176		405.04	427.72	6245.7		48.50
C-A	22.95								
C-B	1.73	7.95	0.218		0.41	0.28	4.4		0.16
A-B	0.24								
A-C	30.53								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	27.3	**********
08.15	92.5	**********
08.30	216.2	**********
08.45	339.9	**********
09.00	405.0	**********
09.15	427.7	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.7	*
08.45	0.7	*
09.00	0.4	
09.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	1110.8	740.5	19442.2	17.50	30061.3	27.06
C-A	2517.5	1678.3				
C-B	189.9	126.6	41.1	0.22	41.1	0.22
A-B	26.2	17.4				
A-C	3348.8	2232.6				
ALL	7193.2	4795.5	19483.3	2.71	30102.4	4.18

* 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 ==========

Printed at 10:12:17 on 20/06/2013]

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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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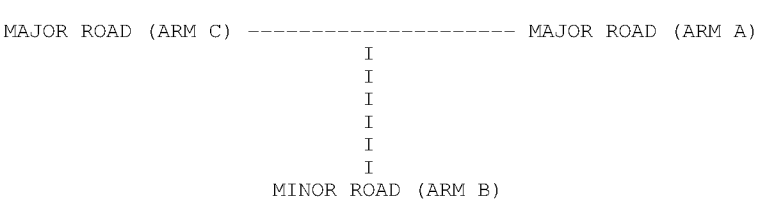
Run with file:- "C:\Westergate\B2233A27\B2233A27PM.vpi" (drive-on-the-left) at 13:11:53 on Thursday, 20 June 2013

RUN INFORMATION

RUN TITLE	: Westergate A27/B2233
LOCATION	: Westergate
DATE	: 06/06/13
CLIENT	:
ENUMERATOR	: Administrator [TNT-LAPTOP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A27 East
ARM B IS B2233
ARM C IS A27 West

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 18.00 M.
CENTRAL RESERVE WIDTH	(WCR) 6.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.00 M.
- VISIBILITY	(VC-B)160.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 140.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows PM 2013

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	16.91	25.37	16.91
ARM B	15.00	45.00	75.00	2.25	3.38	2.25
ARM C	15.00	45.00	75.00	27.69	41.53	27.69

Demand set: A27/B2233 Base Flows PM 2013

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	18.0	1335.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.000	0.000	1.000
		0.0	0.0	180.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.844	0.156	0.000
		1869.0	346.0	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 A27/B2233 Base Flows PM 2013
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)
07.45-08.00									
B-AC	2.26	10.61	0.213		0.00	0.27	3.9		0.12
C-A	23.45								
C-B	4.34	9.80	0.443		0.00	0.78	11.0		0.18
A-B	0.23								
A-C	16.75								

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)
08.00-08.15									
B-AC	2.70	10.14	0.266		0.27	0.36	5.2		0.13
C-A	28.00								
C-B	5.18	9.36	0.554		0.78	1.20	17.0		0.24
A-B	0.27								
A-C	20.00								

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)
08.15-08.30									
B-AC	3.30	9.48	0.348		0.36	0.53	7.6		0.16
C-A	34.30								
C-B	6.35	8.75	0.726		1.20	2.43	32.6		0.39
A-B	0.33								
A-C	24.50								

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)
08.30-08.45									
B-AC	3.30	9.48	0.348		0.53	0.53	7.9		0.16
C-A	34.30								
C-B	6.35	8.75	0.726		2.43	2.53	37.3		0.41
A-B	0.33								
A-C	24.50								

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)
08.45-09.00									
B-AC	2.70	10.14	0.266		0.53	0.37	5.7		0.13
C-A	28.00								
C-B	5.18	9.36	0.554		2.53	1.28	20.7		0.25
A-B	0.27								
A-C	20.00								

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)
09.00-09.15									
B-AC	2.26	10.61	0.213		0.37	0.27	4.2		0.12
C-A	23.45								
C-B	4.34	9.80	0.443		1.28	0.81	12.8		0.19
A-B	0.23								
A-C	16.75								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.5	*
08.45	0.5	*
09.00	0.4	
09.15	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.8	*
08.15	1.2	*
08.30	2.4	**
08.45	2.5	***
09.00	1.3	*
09.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	247.8	165.2	34.5	0.14	34.5	0.14
C-A	2572.5	1715.0				
C-B	476.2	317.5	131.4	0.28	131.5	0.28
A-B	24.8	16.5				
A-C	1837.5	1225.0				
ALL	5158.8	3439.2	166.0	0.03	166.0	0.03

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows PM 2015

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	17.06	25.59	17.06
ARM B	15.00	45.00	75.00	2.28	3.41	2.28
ARM C	15.00	45.00	75.00	27.94	41.91	27.94

Demand set: A27/B2233 Base Flows PM 2015

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	18.0	1347.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	182.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.844	0.156	0.000
		1886.0	349.0	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 A27/B2233 Base Flows PM 2015
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)
07.45-08.00									
B-AC	2.28	10.59	0.216		0.00	0.27	3.9		0.12
C-A	23.66								
C-B	4.38	9.78	0.448		0.00	0.79	11.2		0.18
A-B	0.23								
A-C	16.90								

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)
08.00-08.15									
B-AC	2.73	10.11	0.270		0.27	0.36	5.3		0.14
C-A	28.26								
C-B	5.23	9.33	0.560		0.79	1.23	17.4		0.24
A-B	0.27								
A-C	20.18								

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)
08.15-08.30									
B-AC	3.34	9.45	0.353		0.36	0.54	7.8		0.16
C-A	34.61								
C-B	6.40	8.72	0.735		1.23	2.53	33.7		0.40
A-B	0.33								
A-C	24.72								

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)
08.30-08.45									
B-AC	3.34	9.45	0.353		0.54	0.54	8.1		0.16
C-A	34.61								
C-B	6.40	8.72	0.735		2.53	2.64	38.9		0.43
A-B	0.33								
A-C	24.72								

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)
08.45-09.00									
B-AC	2.73	10.11	0.270		0.54	0.37	5.8		0.14
C-A	28.26								
C-B	5.23	9.33	0.560		2.64	1.32	21.4		0.25
A-B	0.27								
A-C	20.18								

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)
09.00-09.15									
B-AC	2.28	10.59	0.216		0.37	0.28	4.3		0.12
C-A	23.66								
C-B	4.38	9.78	0.448		1.32	0.83	13.1		0.19
A-B	0.23								
A-C	16.90								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.5	*
08.45	0.5	*
09.00	0.4	
09.15	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.8	*
08.15	1.2	*
08.30	2.5	***
08.45	2.6	***
09.00	1.3	*
09.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	250.5	167.0	35.2	0.14	35.2	0.14
C-A	2595.9	1730.6				
C-B	480.4	320.2	135.6	0.28	135.7	0.28
A-B	24.8	16.5				
A-C	1854.0	1236.0				
ALL	5205.6	3470.4	170.8	0.03	170.9	0.03

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows PM 2025

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	19.88	29.81	19.88
ARM B	15.00	45.00	75.00	2.66	3.99	2.66
ARM C	15.00	45.00	75.00	32.72	49.09	32.72

Demand set: A27/B2233 Base Flows PM 2025

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	12.0	1578.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	213.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.844	0.156	0.000
		2209.0	409.0	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 A27/B2233 Base Flows PM 2025
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)
07.45-08.00									
B-AC	2.67	10.18	0.263		0.00	0.35	5.1		0.13
C-A	27.72								
C-B	5.13	9.40	0.546		0.00	1.16	16.1		0.23
A-B	0.15								
A-C	19.80								

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)
08.00-08.15									
B-AC	3.19	9.62	0.332		0.35	0.49	7.1		0.16
C-A	33.10								
C-B	6.13	8.88	0.690		1.16	2.08	28.4		0.35
A-B	0.18								
A-C	23.64								

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)
08.15-08.30									
B-AC	3.91	8.84	0.442		0.49	0.77	11.1		0.20
C-A	40.54								
C-B	7.51	8.16	0.919		2.08	6.63	76.2		0.85
A-B	0.22								
A-C	28.96								

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)
08.30-08.45									
B-AC	3.91	8.84	0.442		0.77	0.78	11.7		0.20
C-A	40.54								
C-B	7.51	8.16	0.919		6.63	7.94	110.4		1.14
A-B	0.22								
A-C	28.96								

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)
08.45-09.00									
B-AC	3.19	9.62	0.332		0.78	0.50	7.9		0.16
C-A	33.10								
C-B	6.13	8.88	0.690		7.94	2.40	47.0		0.47
A-B	0.18								
A-C	23.64								

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)
09.00-09.15									
B-AC	2.67	10.18	0.263		0.50	0.36	5.6		0.13
C-A	27.72								
C-B	5.13	9.40	0.546		2.40	1.24	20.0		0.24
A-B	0.15								
A-C	19.80								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.5	
08.30	0.8	*
08.45	0.8	*
09.00	0.5	*
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.2	*
08.15	2.1	**
08.30	6.6	*******
08.45	7.9	********
09.00	2.4	**
09.15	1.2	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	293.2	195.5	48.4	0.17	48.4	0.17
C-A	3040.5	2027.0				
C-B	563.0	375.3	298.2	0.53	298.2	0.53
A-B	16.5	11.0				
A-C	2172.0	1448.0				
ALL	6085.2	4056.8	346.5	0.06	346.6	0.06

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows With Scheme PM 2015

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	17.19	25.78	17.19
ARM B	15.00	45.00	75.00	2.33	3.49	2.33
ARM C	15.00	45.00	75.00	28.26	42.39	28.26

Demand set: A27/B2233 Flows With Scheme PM 2015

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	18.0	1357.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	186.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.843	0.157	0.000
		1905.0	356.0	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 A27/B2233 Flows With Scheme PM 2015
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)
07.45-08.00									
B-AC	2.33	10.57	0.221		0.00	0.28	4.1		0.12
C-A	23.90								
C-B	4.47	9.76	0.458		0.00	0.82	11.6		0.19
A-B	0.23								
A-C	17.03								

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)
08.00-08.15									
B-AC	2.79	10.09	0.276		0.28	0.38	5.5		0.14
C-A	28.54								
C-B	5.33	9.31	0.573		0.82	1.29	18.3		0.25
A-B	0.27								
A-C	20.33								

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)
08.15-08.30									
B-AC	3.41	9.42	0.362		0.38	0.56	8.1		0.17
C-A	34.96								
C-B	6.53	8.69	0.752		1.29	2.73	36.1		0.43
A-B	0.33								
A-C	24.90								

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)
08.30-08.45									
B-AC	3.41	9.42	0.362		0.56	0.56	8.4		0.17
C-A	34.96								
C-B	6.53	8.69	0.752		2.73	2.86	42.1		0.46
A-B	0.33								
A-C	24.90								

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)
08.45-09.00									
B-AC	2.79	10.09	0.276		0.56	0.39	6.0		0.14
C-A	28.54								
C-B	5.33	9.31	0.573		2.86	1.39	22.6		0.26
A-B	0.27								
A-C	20.33								

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)
09.00-09.15									
B-AC	2.33	10.57	0.221		0.39	0.29	4.4		0.12
C-A	23.90								
C-B	4.47	9.76	0.458		1.39	0.86	13.6		0.19
A-B	0.23								
A-C	17.03								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.6	*
08.45	0.6	*
09.00	0.4	
09.15	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.8	*
08.15	1.3	*
08.30	2.7	***
08.45	2.9	***
09.00	1.4	*
09.15	0.9	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	256.0	170.7	36.4	0.14	36.4	0.14
C-A	2622.1	1748.1				
C-B	490.0	326.7	144.3	0.29	144.4	0.29
A-B	24.8	16.5				
A-C	1867.8	1245.2				
ALL	5260.7	3507.1	180.8	0.03	180.8	0.03

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme PM 2025

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	20.11	30.17	20.11
ARM B	15.00	45.00	75.00	2.71	4.07	2.71
ARM C	15.00	45.00	75.00	33.05	49.57	33.05

Demand set: A27/B2233 Flows with Scheme PM 2025

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	21.0	1588.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	217.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.843	0.157	0.000
		2228.0	416.0	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 A27/B2233 Flows with Scheme PM 2025
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)
07.45-08.00									
B-AC	2.72	10.15	0.268		0.00	0.36	5.2		0.13
C-A	27.96								
C-B	5.22	9.37	0.557		0.00	1.21	16.8		0.23
A-B	0.26								
A-C	19.93								

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)
08.00-08.15									
B-AC	3.25	9.59	0.339		0.36	0.51	7.3		0.16
C-A	33.38								
C-B	6.23	8.84	0.705		1.21	2.22	30.1		0.36
A-B	0.31								
A-C	23.79								

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)
08.15-08.30									
B-AC	3.98	8.81	0.452		0.51	0.81	11.5		0.21
C-A	40.88								
C-B	7.63	8.12	0.941		2.22	7.54	84.5		0.94
A-B	0.39								
A-C	29.14								

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)
08.30-08.45									
B-AC	3.98	8.81	0.452		0.81	0.82	12.2		0.21
C-A	40.88								
C-B	7.63	8.12	0.941		7.54	9.36	128.2		1.31
A-B	0.39								
A-C	29.14								

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)
08.45-09.00									
B-AC	3.25	9.59	0.339		0.82	0.52	8.1		0.16
C-A	33.38								
C-B	6.23	8.84	0.705		9.36	2.60	54.5		0.54
A-B	0.31								
A-C	23.79								

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)
09.00-09.15									
B-AC	2.72	10.15	0.268		0.52	0.37	5.7		0.13
C-A	27.96								
C-B	5.22	9.37	0.557		2.60	1.30	21.1		0.25
A-B	0.26								
A-C	19.93								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.5	*
08.30	0.8	*
08.45	0.8	*
09.00	0.5	*
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.2	*
08.15	2.2	**
08.30	7.5	********
08.45	9.4	*********
09.00	2.6	***
09.15	1.3	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	298.7	199.1	50.1	0.17	50.1	0.17
C-A	3066.7	2044.5				
C-B	572.6	381.7	335.1	0.59	335.2	0.59
A-B	28.9	19.3				
A-C	2185.8	1457.2				
ALL	6152.6	4101.8	385.2	0.06	385.3	0.06

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme PM 2025 Sens 5050

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	20.08	30.11	20.08
ARM B	15.00	45.00	75.00	2.76	4.14	2.76
ARM C	15.00	45.00	75.00	33.05	49.57	33.05

Demand set: A27/B2233 Flows with Scheme PM 2025 Sens 5050

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	21.0	1585.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	221.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.840	0.160	0.000
		2221.0	423.0	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 A27/B2233 Flows with Scheme PM 2025 Sens 5050
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)
07.45-08.00									
B-AC	2.77	10.16	0.273		0.00	0.37	5.3		0.13
C-A	27.87								
C-B	5.31	9.37	0.566		0.00	1.26	17.3		0.24
A-B	0.26								
A-C	19.89								

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)
08.00-08.15									
B-AC	3.31	9.59	0.345		0.37	0.52	7.5		0.16
C-A	33.28								
C-B	6.34	8.85	0.716		1.26	2.33	31.5		0.38
A-B	0.31								
A-C	23.75								

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)
08.15-08.30									
B-AC	4.06	8.81	0.460		0.52	0.83	11.9		0.21
C-A	40.76								
C-B	7.76	8.12	0.956		2.33	8.29	91.2		1.00
A-B	0.39								
A-C	29.09								

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)
08.30-08.45									
B-AC	4.06	8.81	0.460		0.83	0.84	12.6		0.21
C-A	40.76								
C-B	7.76	8.12	0.956		8.29	10.59	143.1		1.45
A-B	0.39								
A-C	29.09								

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)
08.45-09.00									
B-AC	3.31	9.59	0.345		0.84	0.54	8.4		0.16
C-A	33.28								
C-B	6.34	8.85	0.716		10.59	2.77	61.6		0.60
A-B	0.31								
A-C	23.75								

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)
09.00-09.15									
B-AC	2.77	10.16	0.273		0.54	0.38	5.9		0.14
C-A	27.87								
C-B	5.31	9.37	0.566		2.77	1.35	22.0		0.26
A-B	0.26								
A-C	19.89								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.5	*
08.30	0.8	*
08.45	0.8	*
09.00	0.5	*
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.3	*
08.15	2.3	**
08.30	8.3	********
08.45	10.6	**********
09.00	2.8	***
09.15	1.4	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	304.2	202.8	51.5	0.17	51.6	0.17
C-A	3057.0	2038.0				
C-B	582.2	388.2	366.7	0.63	366.8	0.63
A-B	28.9	19.3				
A-C	2181.6	1454.4				
ALL	6154.0	4102.7	418.2	0.07	418.4	0.07

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme PM 2025 Sens 8020

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	20.02	30.04	20.02
ARM B	15.00	45.00	75.00	2.81	4.22	2.81
ARM C	15.00	45.00	75.00	33.05	49.57	33.05

Demand set: A27/B2233 Flows with Scheme PM 2025 Sens 8020

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	21.0	1581.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	225.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.837	0.163	0.000
		2214.0	430.0	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 A27/B2233 Flows with Scheme PM 2025 Sens 8020
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)
07.45-08.00									
B-AC	2.82	10.16	0.278		0.00	0.38	5.5		0.14
C-A	27.78								
C-B	5.40	9.38	0.575		0.00	1.30	17.9		0.24
A-B	0.26								
A-C	19.84								

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)
08.00-08.15									
B-AC	3.37	9.60	0.351		0.38	0.53	7.7		0.16
C-A	33.17								
C-B	6.44	8.86	0.727		1.30	2.45	33.0		0.39
A-B	0.31								
A-C	23.69								

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)
08.15-08.30									
B-AC	4.13	8.83	0.468		0.53	0.86	12.2		0.21
C-A	40.63								
C-B	7.89	8.13	0.970		2.45	9.10	98.3		1.07
A-B	0.39								
A-C	29.01								

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)
08.30-08.45									
B-AC	4.13	8.83	0.468		0.86	0.87	13.0		0.21
C-A	40.63								
C-B	7.89	8.13	0.970		9.10	11.98	159.8		1.59
A-B	0.39								
A-C	29.01								

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)
08.45-09.00									
B-AC	3.37	9.60	0.351		0.87	0.55	8.6		0.16
C-A	33.17								
C-B	6.44	8.86	0.727		11.98	2.97	70.4		0.67
A-B	0.31								
A-C	23.69								

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)
09.00-09.15									
B-AC	2.82	10.16	0.278		0.55	0.39	6.0		0.14
C-A	27.78								
C-B	5.40	9.38	0.575		2.97	1.40	22.9		0.26
A-B	0.26								
A-C	19.84								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.5	*
08.30	0.9	*
08.45	0.9	*
09.00	0.5	*
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.3	*
08.15	2.4	**
08.30	9.1	*********
08.45	12.0	************
09.00	3.0	***
09.15	1.4	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	309.7	206.5	53.0	0.17	53.0	0.17
C-A	3047.4	2031.6				
C-B	591.9	394.6	402.4	0.68	402.5	0.68
A-B	28.9	19.3				
A-C	2176.1	1450.8				
ALL	6154.0	4102.7	455.4	0.07	455.5	0.07

* 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 ==========

Printed at 13:15:02 on 20/06/2013]

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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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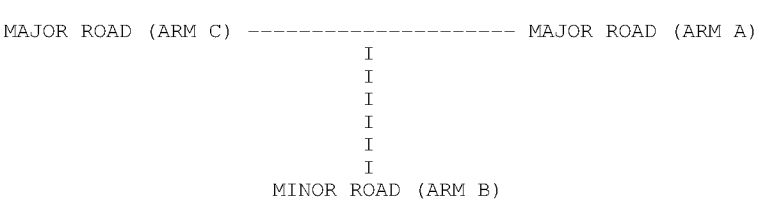
Run with file:- "C:\Westergate\NytonNorth\NytonNorthAM.vpi" (drive-on-the-left) at 09:45:13 on Thursday, 20 June 2013

RUN INFORMATION

RUN TITLE	: B2233 Nyton Road/A29 Westergate Street (North)
LOCATION	: Westergate, West Sussex
DATE	: 25/03/13
CLIENT	:
ENUMERATOR	: Administrator [TNT-LAPTOP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A29 Westergate Street South
ARM B IS B2233 Nyton Road
ARM C IS A29 Westergate Street North

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.00 M.
- VISIBILITY	(VC-B) 70.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 110.0 M.
- VISIBILITY TO RIGHT	(VB-A) 80.0 M.
- LANE 1 WIDTH	(WB-C) 5.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
809.32	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
664.78	0.25	0.10	0.15	0.35

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.21	0.21

(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: B2233 Nyton Road/A29 Westergate Street (North) 2013 AM Pk

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.95	11.92	7.95
ARM B	15.00	45.00	75.00	2.39	3.58	2.39
ARM C	15.00	45.00	75.00	11.60	17.40	11.60

Demand set: B2233 Nyton Road/A29 Westergate Street (North) 2013 AM Pk

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.003	0.997
		0.0	2.0	634.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.010	0.000	0.990
		2.0	0.0	189.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.516	0.484	0.000
		479.0	449.0	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 B2233 Nyton Road/A29 Westergate Street (North) 2013 AM Pk
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)
07.45-08.00									
B-AC	2.40	11.38	0.211		0.00	0.26	3.8		0.11
C-A	6.01								
C-B	5.63	9.47	0.595		0.00	1.41	19.3		0.25
A-B	0.03								
A-C	7.96								

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)
08.00-08.15									
B-AC	2.86	10.96	0.261		0.26	0.35	5.1		0.12
C-A	7.18								
C-B	6.73	9.15	0.735		1.41	2.54	34.4		0.39
A-B	0.03								
A-C	9.50								

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)
08.15-08.30									
B-AC	3.50	10.37	0.338		0.35	0.50	7.3		0.15
C-A	8.79								
C-B	8.24	8.70	0.947		2.54	8.06	90.7		0.93
A-B	0.04								
A-C	11.63								

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)
08.30-08.45									
B-AC	3.50	10.36	0.338		0.50	0.51	7.6		0.15
C-A	8.79								
C-B	8.24	8.70	0.947		8.06	10.07	137.5		1.30
A-B	0.04								
A-C	11.63								

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)
08.45-09.00									
B-AC	2.86	10.95	0.261		0.51	0.36	5.5		0.12
C-A	7.18								
C-B	6.73	9.15	0.735		10.07	3.07	64.0		0.60
A-B	0.03								
A-C	9.50								

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)
09.00-09.15									
B-AC	2.40	11.38	0.211		0.36	0.27	4.1		0.11
C-A	6.01								
C-B	5.63	9.47	0.595		3.07	1.53	24.9		0.27
A-B	0.03								
A-C	7.96								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.3	
08.30	0.5	*
08.45	0.5	*
09.00	0.4	
09.15	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.4	*
08.15	2.5	***
08.30	8.1	********
08.45	10.1	**********
09.00	3.1	***
09.15	1.5	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	262.9	175.3	33.5	0.13	33.5	0.13
C-A	659.3	439.5				
C-B	618.0	412.0	370.7	0.60	370.8	0.60
A-B	2.8	1.8				
A-C	872.7	581.8				
ALL	2415.6	1610.4	404.2	0.17	404.3	0.17

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
809.32	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
664.78	0.25	0.10	0.15	0.35

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.21	0.21

(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: B2233 Nyton Road/A29 Westergate St (North) 2015 AM Base

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.02	12.04	8.02
ARM B	15.00	45.00	75.00	2.41	3.62	2.41
ARM C	15.00	45.00	75.00	11.70	17.55	11.70

Demand set: B2233 Nyton Road/A29 Westergate St (North) 2015 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.005	0.995
		0.0	3.0	639.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.010	0.000	0.990
		2.0	0.0	191.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.516	0.484	0.000
		483.0	453.0	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 B2233 Nyton Road/A29 Westergate St (North) 2015 AM Base
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)
07.45-08.00									
B-AC	2.42	11.36	0.213		0.00	0.27	3.9		0.11
C-A	6.06								
C-B	5.68	9.46	0.601		0.00	1.44	19.7		0.25
A-B	0.04								
A-C	8.02								

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)
08.00-08.15									
B-AC	2.89	10.94	0.264		0.27	0.36	5.2		0.12
C-A	7.24								
C-B	6.79	9.13	0.743		1.44	2.64	35.5		0.40
A-B	0.04								
A-C	9.57								

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)
08.15-08.30									
B-AC	3.54	10.34	0.343		0.36	0.51	7.5		0.15
C-A	8.86								
C-B	8.31	8.68	0.958		2.64	8.65	96.0		0.98
A-B	0.06								
A-C	11.73								

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)
08.30-08.45									
B-AC	3.54	10.33	0.343		0.51	0.52	7.7		0.15
C-A	8.86								
C-B	8.31	8.68	0.958		8.65	11.04	149.3		1.41
A-B	0.06								
A-C	11.73								

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)
08.45-09.00									
B-AC	2.89	10.93	0.265		0.52	0.36	5.6		0.12
C-A	7.24								
C-B	6.79	9.13	0.743		11.04	3.23	70.3		0.65
A-B	0.04								
A-C	9.57								

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)
09.00-09.15									
B-AC	2.42	11.36	0.213		0.36	0.27	4.2		0.11
C-A	6.06								
C-B	5.68	9.46	0.601		3.23	1.57	25.7		0.28
A-B	0.04								
A-C	8.02								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.5	*
08.45	0.5	*
09.00	0.4	
09.15	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.4	*
08.15	2.6	***
08.30	8.7	*********
08.45	11.0	***********
09.00	3.2	***
09.15	1.6	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	265.7	177.1	34.1	0.13	34.1	0.13
C-A	664.8	443.2				
C-B	623.5	415.7	396.5	0.64	396.7	0.64
A-B	4.1	2.8				
A-C	879.5	586.4				
ALL	2437.7	1625.1	430.6	0.18	430.8	0.18

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
809.32	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
664.78	0.25	0.10	0.15	0.35

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.21	0.21

(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: B2233 Nyton Road/A29 Westergate St (North) 2025 AM Base

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	9.31	13.97	9.31
ARM B	15.00	45.00	75.00	2.80	4.20	2.80
ARM C	15.00	45.00	75.00	13.59	20.38	13.59

Demand set: B2233 Nyton Road/A29 Westergate St (North) 2025 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.003	0.997
		0.0	2.0	743.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.009	0.000	0.991
		2.0	0.0	222.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.516	0.484	0.000
		561.0	526.0	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 B2233 Nyton Road/A29 Westergate St (North) 2025 AM Base
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)
07.45-08.00									
B-AC	2.81	11.03	0.255		0.00	0.34	4.9		0.12
C-A	7.04								
C-B	6.60	9.19	0.718		0.00	2.35	30.6		0.35
A-B	0.03								
A-C	9.32								

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)
08.00-08.15									
B-AC	3.36	10.53	0.319		0.34	0.46	6.7		0.14
C-A	8.41								
C-B	7.88	8.81	0.895		2.35	5.85	70.5		0.74
A-B	0.03								
A-C	11.13								

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)
08.15-08.30									
B-AC	4.11	9.80	0.420		0.46	0.71	10.2		0.17
C-A	10.29								
C-B	9.65	8.29	1.165		5.85	28.43	262.8		2.44
A-B	0.04								
A-C	13.63								

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)
08.30-08.45									
B-AC	4.11	9.71	0.423		0.71	0.72	10.8		0.18
C-A	10.29								
C-B	9.65	8.29	1.165		28.43	49.35	583.9		4.90
A-B	0.04								
A-C	13.63								

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)
08.45-09.00									
B-AC	3.36	10.45	0.321		0.72	0.48	7.5		0.14
C-A	8.41								
C-B	7.88	8.81	0.895		49.35	38.04	655.4		5.07
A-B	0.03								
A-C	11.13								

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)
09.00-09.15									
B-AC	2.81	10.99	0.256		0.48	0.35	5.4		0.12
C-A	7.04								
C-B	6.60	9.19	0.718		38.04	3.76	306.2		2.46
A-B	0.03								
A-C	9.32								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.5	
08.30	0.7	*
08.45	0.7	*
09.00	0.5	
09.15	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	2.3	**
08.15	5.9	******
08.30	28.4	****************************
08.45	49.3	***
09.00	38.0	**************************************
09.15	3.8	****

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	308.3	205.5	45.4	0.15	45.4	0.15
C-A	772.2	514.8				
C-B	724.0	482.7	1909.5	2.64	1910.2	2.64
A-B	2.8	1.8				
A-C	1022.7	681.8				
ALL	2829.9	1886.6	1954.9	0.69	1955.7	0.69

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
809.32	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
664.78	0.25	0.10	0.15	0.35

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.21	0.21

(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: B2233 Nyton Road/A29 Westergate St (North) 2015 AM + Development

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.09	12.13	8.09
ARM B	15.00	45.00	75.00	2.47	3.71	2.47
ARM C	15.00	45.00	75.00	12.07	18.11	12.07

Demand set: B2233 Nyton Road/A29 Westergate St (North) 2015 AM + Development

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.003	0.997
		0.0	2.0	645.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.010	0.000	0.990
		2.0	0.0	196.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.519	0.481	0.000
		501.0	465.0	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 B2233 Nyton Road/A29 Westergate St (North) 2015 AM + 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)
07.45-08.00									
B-AC	2.48	11.34	0.219		0.00	0.28	4.0		0.11
C-A	6.29								
C-B	5.83	9.44	0.618		0.00	1.54	21.0		0.26
A-B	0.03								
A-C	8.09								

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)
08.00-08.15									
B-AC	2.97	10.92	0.272		0.28	0.37	5.4		0.13
C-A	7.51								
C-B	6.97	9.12	0.764		1.54	2.91	38.8		0.43
A-B	0.03								
A-C	9.66								

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)
08.15-08.30									
B-AC	3.63	10.31	0.353		0.37	0.54	7.8		0.15
C-A	9.19								
C-B	8.53	8.66	0.985		2.91	10.37	111.0		1.12
A-B	0.04								
A-C	11.84								

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)
08.30-08.45									
B-AC	3.63	10.29	0.353		0.54	0.54	8.1		0.15
C-A	9.19								
C-B	8.53	8.66	0.985		10.37	14.03	184.8		1.70
A-B	0.04								
A-C	11.84								

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)
08.45-09.00									
B-AC	2.97	10.90	0.272		0.54	0.38	5.8		0.13
C-A	7.51								
C-B	6.97	9.12	0.764		14.03	3.72	92.8		0.85
A-B	0.03								
A-C	9.66								

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)
09.00-09.15									
B-AC	2.48	11.34	0.219		0.38	0.28	4.4		0.11
C-A	6.29								
C-B	5.83	9.44	0.618		3.72	1.69	28.1		0.30
A-B	0.03								
A-C	8.09								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.5	*
08.45	0.5	*
09.00	0.4	
09.15	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.5	**
08.15	2.9	***
08.30	10.4	**********
08.45	14.0	**************
09.00	3.7	****
09.15	1.7	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	272.5	181.7	35.5	0.13	35.5	0.13
C-A	689.6	459.7				
C-B	640.0	426.7	476.5	0.74	476.7	0.74
A-B	2.8	1.8				
A-C	887.8	591.9				
ALL	2492.7	1661.8	512.0	0.21	512.2	0.21

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
809.32	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
664.78	0.25	0.10	0.15	0.35

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.21	0.21

(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: B2233 Nyton Road/A29 Westergate St (North) 2025 AM + Development

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	9.39	14.08	9.39
ARM B	15.00	45.00	75.00	2.86	4.29	2.86
ARM C	15.00	45.00	75.00	13.96	20.94	13.96

Demand set: B2233 Nyton Road/A29 Westergate St (North) 2025 AM + Development

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.003	0.997
		0.0	2.0	749.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.009	0.000	0.991
		2.0	0.0	227.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.518	0.482	0.000
		579.0	538.0	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 B2233 Nyton Road/A29 Westergate St (North) 2025 AM + 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)
07.45-08.00									
B-AC	2.87	11.01	0.261		0.00	0.35	5.0		0.12
C-A	7.27								
C-B	6.75	9.17	0.736		0.00	2.54	32.9		0.37
A-B	0.03								
A-C	9.40								

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)
08.00-08.15									
B-AC	3.43	10.51	0.327		0.35	0.48	7.0		0.14
C-A	8.68								
C-B	8.06	8.79	0.917		2.54	6.72	79.1		0.82
A-B	0.03								
A-C	11.22								

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)
08.15-08.30									
B-AC	4.20	9.75	0.431		0.48	0.74	10.7		0.18
C-A	10.62								
C-B	9.87	8.26	1.195		6.72	32.47	298.5		2.73
A-B	0.04								
A-C	13.74								

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)
08.30-08.45									
B-AC	4.20	9.64	0.436		0.74	0.76	11.3		0.18
C-A	10.62								
C-B	9.87	8.26	1.195		32.47	56.90	670.7		5.59
A-B	0.04								
A-C	13.74								

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)
08.45-09.00									
B-AC	3.43	10.40	0.330		0.76	0.50	7.8		0.14
C-A	8.68								
C-B	8.06	8.79	0.917		56.90	48.22	788.4		6.06
A-B	0.03								
A-C	11.22								

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)
09.00-09.15									
B-AC	2.87	10.95	0.262		0.50	0.36	5.5		0.12
C-A	7.27								
C-B	6.75	9.17	0.736		48.22	14.70	471.9		3.61
A-B	0.03								
A-C	9.40								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.5	
08.30	0.7	*
08.45	0.8	*
09.00	0.5	
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	2.5	***
08.15	6.7	*******
08.30	32.5	**********
08.45	56.9	**********
09.00	48.2	**********
09.15	14.7	**********

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	315.2	210.1	47.3	0.15	47.3	0.15
C-A	797.0	531.3				
C-B	740.5	493.7	2341.5	3.16	2353.3	3.18
A-B	2.8	1.8				
A-C	1030.9	687.3				
ALL	2886.4	1924.2	2388.8	0.83	2400.6	0.83

* 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 ==========

Printed at 09:47:49 on 20/06/2013]

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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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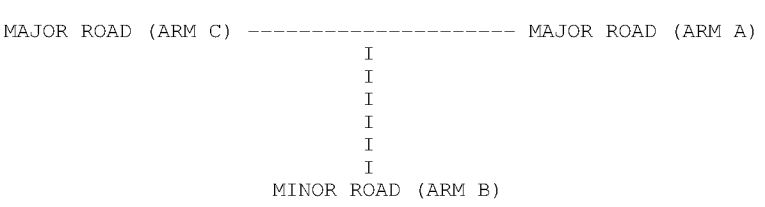
Run with file:- "C:\Westergate\NytonNorth\NytonNorthPM.vpi" (drive-on-the-left) at 09:50:53 on Thursday, 20 June 2013

RUN INFORMATION

RUN TITLE	: B2233 Nyton Road/A29 Westergate Street (North)
LOCATION	: Westergate, West Sussex
DATE	: 25/03/13
CLIENT	:
ENUMERATOR	: Administrator [TNT-LAPTOP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A29 Westergate Street South
ARM B IS B2233 Nyton Road
ARM C IS A29 Westergate Street North

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.00 M.
- VISIBILITY	(VC-B) 70.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 110.0 M.
- VISIBILITY TO RIGHT	(VB-A) 80.0 M.
- LANE 1 WIDTH	(WB-C) 5.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
809.32	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
664.78	0.25	0.10	0.15	0.35

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.21	0.21

(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: B2233 Nyton Road/A29 Westergate Street (North) 2013 PM Pk

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 TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.99	7.48	4.99
ARM B	15.00	45.00	75.00	3.99	5.98	3.99
ARM C	15.00	45.00	75.00	10.68	16.01	10.68

Demand set: B2233 Nyton Road/A29 Westergate Street (North) 2013 PM Pk

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	0.003	0.997
		0.0	1.0	398.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.003	0.000	0.997
		1.0	0.0	318.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.754	0.246	0.000
		644.0	210.0	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 B2233 Nyton Road/A29 Westergate Street (North) 2013 PM Pk
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	4.00	12.21	0.328		0.00	0.48	6.9		0.12
C-A	8.08								
C-B	2.63	10.09	0.261		0.00	0.35	5.0		0.13
A-B	0.01								
A-C	4.99								
16.30-16.45									
B-AC	4.78	11.96	0.400		0.48	0.66	9.5		0.14
C-A	9.65								
C-B	3.15	9.89	0.318		0.35	0.46	6.7		0.15
A-B	0.01								
A-C	5.96								
16.45-17.00									
B-AC	5.85	11.61	0.504		0.66	0.99	14.3		0.17
C-A	11.82								
C-B	3.85	9.61	0.401		0.46	0.66	9.5		0.17
A-B	0.02								
A-C	7.30								
17.00-17.15									
B-AC	5.85	11.61	0.504		0.99	1.01	15.0		0.17
C-A	11.82								
C-B	3.85	9.61	0.401		0.66	0.66	9.9		0.17
A-B	0.02								
A-C	7.30								

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	4.78	11.96	0.400		1.01	0.68	10.5		0.14
C-A	9.65								
C-B	3.15	9.89	0.318		0.66	0.47	7.3		0.15
A-B	0.01								
A-C	5.96								

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	4.00	12.21	0.328		0.68	0.49	7.6		0.12
C-A	8.08								
C-B	2.63	10.09	0.261		0.47	0.36	5.5		0.13
A-B	0.01								
A-C	4.99								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	
16.45	0.7	*
17.00	1.0	*
17.15	1.0	*
17.30	0.7	*
17.45	0.5	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.3	
16.45	0.5	
17.00	0.7	*
17.15	0.7	*
17.30	0.5	
17.45	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	439.1	292.7	63.9	0.15	63.9	0.15
C-A	886.4	590.9				
C-B	289.0	192.7	44.0	0.15	44.0	0.15
A-B	1.4	0.9				
A-C	547.8	365.2				
ALL	2163.7	1442.5	107.9	0.05	107.9	0.05

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
809.32	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
664.78	0.25	0.10	0.15	0.35

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.21	0.21

(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: B2233 Nyton Road/A29 Westergate St (North) 2015 PM Base

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 TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.04	7.56	5.04
ARM B	15.00	45.00	75.00	4.03	6.04	4.03
ARM C	15.00	45.00	75.00	10.77	16.16	10.77

Demand set: B2233 Nyton Road/A29 Westergate St (North) 2015 PM Base

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	0.002	0.998
		0.0	1.0	402.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.003	0.000	0.997
		1.0	0.0	321.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.754	0.246	0.000
		650.0	212.0	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 B2233 Nyton Road/A29 Westergate St (North) 2015 PM Base
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	4.04	12.19	0.331		0.00	0.49	7.0		0.12
C-A	8.16								
C-B	2.66	10.08	0.264		0.00	0.35	5.1		0.13
A-B	0.01								
A-C	5.04								

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)
16.30-16.45									
B-AC	4.82	11.94	0.404		0.49	0.67	9.7		0.14
C-A	9.74								
C-B	3.18	9.88	0.322		0.35	0.47	6.8		0.15
A-B	0.01								
A-C	6.02								

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-AC	5.91	11.59	0.510		0.67	1.02	14.6		0.17
C-A	11.93								
C-B	3.89	9.59	0.405		0.47	0.67	9.7		0.17
A-B	0.02								
A-C	7.38								

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	5.91	11.59	0.510		1.02	1.03	15.3		0.18
C-A	11.93								
C-B	3.89	9.59	0.405		0.67	0.68	10.1		0.18
A-B	0.02								
A-C	7.38								

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	4.82	11.94	0.404		1.03	0.69	10.7		0.14
C-A	9.74								
C-B	3.18	9.88	0.322		0.68	0.48	7.5		0.15
A-B	0.01								
A-C	6.02								

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)
17.30-17.45									
B-AC	4.04	12.19	0.331		0.69	0.50	7.7		0.12
C-A	8.16								
C-B	2.66	10.08	0.264		0.48	0.36	5.6		0.14
A-B	0.01								
A-C	5.04								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	
16.45	0.7	*
17.00	1.0	*
17.15	1.0	*
17.30	0.7	*
17.45	0.5	*

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.4	
16.45	0.5	
17.00	0.7	*
17.15	0.7	*
17.30	0.5	
17.45	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	443.2	295.5	65.1	0.15	65.1	0.15
C-A	894.7	596.5				
C-B	291.8	194.5	44.7	0.15	44.7	0.15
A-B	1.4	0.9				
A-C	553.3	368.9				
ALL	2184.4	1456.3	109.9	0.05	109.9	0.05

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
809.32	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
664.78	0.25	0.10	0.15	0.35

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.21	0.21

(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: B2233 Nyton Road/A29 Westergate St (North) 2025 PM Base

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 TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.89	8.83	5.89
ARM B	15.00	45.00	75.00	4.71	7.07	4.71
ARM C	15.00	45.00	75.00	12.61	18.92	12.61

Demand set: B2233 Nyton Road/A29 Westergate St (North) 2025 PM Base

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	0.002	0.998
		0.0	1.0	470.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.003	0.000	0.997
		1.0	0.0	376.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.754	0.246	0.000
		761.0	248.0	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 B2233 Nyton Road/A29 Westergate St (North) 2025 PM Base
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	4.73	11.98	0.395		0.00	0.64	9.2		0.14
C-A	9.55								
C-B	3.11	9.90	0.314		0.00	0.45	6.5		0.15
A-B	0.01								
A-C	5.90								

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)
16.30-16.45									
B-AC	5.65	11.68	0.483		0.64	0.92	13.2		0.16
C-A	11.40								
C-B	3.72	9.66	0.384		0.45	0.61	8.9		0.17
A-B	0.01								
A-C	7.04								

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-AC	6.92	11.28	0.614		0.92	1.53	21.5		0.23
C-A	13.96								
C-B	4.55	9.33	0.488		0.61	0.93	13.3		0.21
A-B	0.02								
A-C	8.62								

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	6.92	11.28	0.614		1.53	1.56	23.2		0.23
C-A	13.96								
C-B	4.55	9.33	0.488		0.93	0.94	14.0		0.21
A-B	0.02								
A-C	8.62								

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	5.65	11.68	0.483		1.56	0.96	15.0		0.17
C-A	11.40								
C-B	3.72	9.66	0.384		0.94	0.64	9.9		0.17
A-B	0.01								
A-C	7.04								

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)
17.30-17.45									
B-AC	4.73	11.98	0.395		0.96	0.66	10.3		0.14
C-A	9.55								
C-B	3.11	9.90	0.314		0.64	0.46	7.2		0.15
A-B	0.01								
A-C	5.90								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.6	*
16.45	0.9	*
17.00	1.5	**
17.15	1.6	**
17.30	1.0	*
17.45	0.7	*

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	
16.45	0.6	*
17.00	0.9	*
17.15	0.9	*
17.30	0.6	*
17.45	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	518.9	345.9	92.5	0.18	92.5	0.18
C-A	1047.5	698.3				
C-B	341.4	227.6	59.8	0.18	59.8	0.18
A-B	1.4	0.9				
A-C	646.9	431.3				
ALL	2556.0	1704.0	152.3	0.06	152.3	0.06

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
809.32	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
664.78	0.25	0.10	0.15	0.35

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.21	0.21

(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: B2233 Nyton Road/A29 Westergate St (North) 2015 PM + 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 TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.25	7.88	5.25
ARM B	15.00	45.00	75.00	4.18	6.26	4.18
ARM C	15.00	45.00	75.00	10.98	16.46	10.98

Demand set: B2233 Nyton Road/A29 Westergate St (North) 2015 PM + 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	0.002	0.998
		0.0	1.0	419.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.003	0.000	0.997
		1.0	0.0	333.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.752	0.248	0.000
		660.0	218.0	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 B2233 Nyton Road/A29 Westergate St (North) 2015 PM + 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	4.19	12.14	0.345		0.00	0.52	7.5		0.12
C-A	8.28								
C-B	2.74	10.04	0.273		0.00	0.37	5.3		0.14
A-B	0.01								
A-C	5.26								

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	5.00	11.88	0.421		0.52	0.72	10.4		0.14
C-A	9.89								
C-B	3.27	9.82	0.332		0.37	0.49	7.1		0.15
A-B	0.01								
A-C	6.28								

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	6.13	11.51	0.532		0.72	1.11	15.9		0.18
C-A	12.11								
C-B	4.00	9.53	0.420		0.49	0.71	10.2		0.18
A-B	0.02								
A-C	7.69								

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)
17.00-17.15									
B-AC	6.13	11.51	0.532		1.11	1.12	16.8		0.19
C-A	12.11								
C-B	4.00	9.53	0.420		0.71	0.72	10.7		0.18
A-B	0.02								
A-C	7.69								

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	5.00	11.88	0.421		1.12	0.74	11.6		0.15
C-A	9.89								
C-B	3.27	9.82	0.332		0.72	0.51	7.9		0.15
A-B	0.01								
A-C	6.28								

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	4.19	12.14	0.345		0.74	0.53	8.3		0.13
C-A	8.28								
C-B	2.74	10.04	0.273		0.51	0.38	5.9		0.14
A-B	0.01								
A-C	5.26								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	*
16.45	0.7	*
17.00	1.1	*
17.15	1.1	*
17.30	0.7	*
17.45	0.5	*

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.4	
16.45	0.5	
17.00	0.7	*
17.15	0.7	*
17.30	0.5	*
17.45	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	459.7	306.5	70.3	0.15	70.3	0.15
C-A	908.4	605.6				
C-B	300.1	200.0	47.1	0.16	47.1	0.16
A-B	1.4	0.9				
A-C	576.7	384.5				
ALL	2246.3	1497.6	117.4	0.05	117.4	0.05

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
809.32	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
664.78	0.25	0.10	0.15	0.35

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.21	0.21

(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: B2233 Nyton Road/A29 Westergate St (North) 2025 PM + 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 TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.10	9.15	6.10
ARM B	15.00	45.00	75.00	4.86	7.29	4.86
ARM C	15.00	45.00	75.00	12.81	19.22	12.81

Demand set: B2233 Nyton Road/A29 Westergate St (North) 2025 PM + 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	0.002	0.998
		0.0	1.0	487.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.003	0.000	0.997
		1.0	0.0	388.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.752	0.248	0.000
		771.0	254.0	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 B2233 Nyton Road/A29 Westergate St (North) 2025 PM + 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	4.88	11.92	0.409		0.00	0.68	9.7		0.14
C-A	9.67								
C-B	3.19	9.86	0.323		0.00	0.47	6.7		0.15
A-B	0.01								
A-C	6.11								

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	5.83	11.62	0.502		0.68	0.98	14.2		0.17
C-A	11.55								
C-B	3.81	9.61	0.396		0.47	0.64	9.3		0.17
A-B	0.01								
A-C	7.30								

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	7.14	11.20	0.637		0.98	1.69	23.6		0.24
C-A	14.15								
C-B	4.66	9.27	0.503		0.64	0.98	14.0		0.21
A-B	0.02								
A-C	8.94								

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	7.14	11.20	0.637		1.69	1.72	25.6		0.25
C-A	14.15								
C-B	4.66	9.27	0.503		0.98	1.00	14.9		0.22
A-B	0.02								
A-C	8.94								

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	5.83	11.62	0.502		1.72	1.03	16.3		0.18
C-A	11.55								
C-B	3.81	9.61	0.396		1.00	0.67	10.4		0.17
A-B	0.01								
A-C	7.30								

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	4.88	11.92	0.409		1.03	0.70	11.0		0.14
C-A	9.67								
C-B	3.19	9.86	0.323		0.67	0.48	7.5		0.15
A-B	0.01								
A-C	6.11								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.7	*
16.45	1.0	*
17.00	1.7	**
17.15	1.7	**
17.30	1.0	*
17.45	0.7	*

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	
16.45	0.6	*
17.00	1.0	*
17.15	1.0	*
17.30	0.7	*
17.45	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	535.4	357.0	100.3	0.19	100.4	0.19
C-A	1061.2	707.5				
C-B	349.6	233.1	62.9	0.18	62.9	0.18
A-B	1.4	0.9				
A-C	670.3	446.9				
ALL	2618.0	1745.3	163.3	0.06	163.3	0.06

* 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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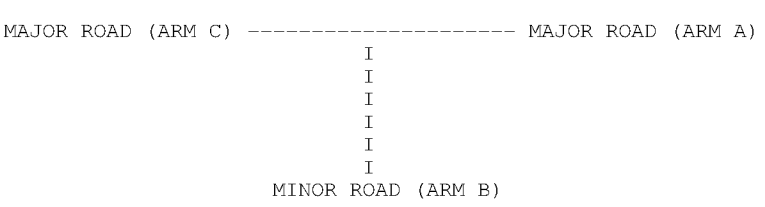
Run with file:- "C:\Westergate\NytonSouth\NytonSouth.vpi" (drive-on-the-left) at 10:00:26 on Thursday, 20 June 2013

RUN INFORMATION

RUN TITLE	: Westergate Nyton Road/A29 Westergate Street (south)
LOCATION	: Westergate
DATE	: 25/03/13
CLIENT	:
ENUMERATOR	: Administrator [TNT-LAPTOP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A29 Westergate Street North
ARM B IS Nyton Road
ARM C IS A29 Westergate Street South

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 8.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 60.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 110.0 M.
- VISIBILITY TO RIGHT	(VB-A) 70.0 M.
- LANE 1 WIDTH	(WB-C) 3.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
548.71	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
608.71	0.22	0.22

(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: Nyton Road/A29 Westergate Street (south) 2013 AM Base

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	10.48	15.71	10.48
ARM B	15.00	45.00	75.00	0.75	1.13	0.75
ARM C	15.00	45.00	75.00	6.01	9.02	6.01

Demand set: Nyton Road/A29 Westergate Street (south) 2013 AM Base

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
	ARM A	0.000	0.247	0.753
		0.0	207.0	631.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.933	0.000	0.067
		56.0	0.0	4.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.998	0.002	0.000
		480.0	1.0	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 AND FOR TIME PERIOD 1 — Nyton Road/A29 Westergate Street (south) 2013 AM Base

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)
07.45-08.00									
B-AC	0.75	6.34	0.119		0.00	0.13	1.9		0.18
C-A	6.02								
C-B	0.01	7.88	0.002		0.00	0.00	0.0		0.13
A-B	2.60								
A-C	7.92								
08.00-08.15									
B-AC	0.90	5.77	0.156		0.13	0.18	2.6		0.21
C-A	7.19								
C-B	0.01	7.44	0.002		0.00	0.00	0.0		0.13
A-B	3.10								
A-C	9.45								
08.15-08.30									
B-AC	1.10	4.98	0.221		0.18	0.28	4.0		0.26
C-A	8.81								
C-B	0.02	6.83	0.003		0.00	0.00	0.0		0.15
A-B	3.80								
A-C	11.58								
08.30-08.45									
B-AC	1.10	4.98	0.221		0.28	0.28	4.2		0.26
C-A	8.81								
C-B	0.02	6.83	0.003		0.00	0.00	0.0		0.15
A-B	3.80								
A-C	11.58								

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)
08.45-09.00									
B-AC	0.90	5.77	0.156		0.28	0.19	2.9		0.21
C-A	7.19								
C-B	0.01	7.44	0.002		0.00	0.00	0.0		0.13
A-B	3.10								
A-C	9.45								

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)
09.00-09.15									
B-AC	0.75	6.34	0.119		0.19	0.14	2.1		0.18
C-A	6.02								
C-B	0.01	7.88	0.002		0.00	0.00	0.0		0.13
A-B	2.60								
A-C	7.92								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.3
08.45	0.3
09.00	0.2
09.15	0.1

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	82.6	55.1	17.8	0.22	17.8	0.22
C-A	660.7	440.5				
C-B	1.4	0.9	0.2	0.14	0.2	0.14
A-B	284.9	189.9				
A-C	868.5	579.0				
ALL	1898.1	1265.4	18.0	0.01	18.0	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 For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
548.71	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
608.71	0.22	0.22

(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: Nyton Road/A29 Westergate Street (south) 2015 AM Base

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	10.56	15.84	10.56
ARM B	15.00	45.00	75.00	0.75	1.13	0.75
ARM C	15.00	45.00	75.00	6.06	9.09	6.06

Demand set: Nyton Road/A29 Westergate Street (south) 2015 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.247	0.753
		0.0	209.0	636.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.933	0.000	0.067
		56.0	0.0	4.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.998	0.002	0.000
		484.0	1.0	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 Nyton Road/A29 Westergate Street (south) 2015 AM Base
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)
07.45-08.00									
B-AC	0.75	6.31	0.119		0.00	0.13	1.9		0.18
C-A	6.07								
C-B	0.01	7.86	0.002		0.00	0.00	0.0		0.13
A-B	2.62								
A-C	7.98								

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)
08.00-08.15									
B-AC	0.90	5.74	0.157		0.13	0.18	2.7		0.21
C-A	7.25								
C-B	0.01	7.42	0.002		0.00	0.00	0.0		0.14
A-B	3.13								
A-C	9.53								

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)
08.15-08.30									
B-AC	1.10	4.94	0.223		0.18	0.28	4.0		0.26
C-A	8.88								
C-B	0.02	6.81	0.003		0.00	0.00	0.0		0.15
A-B	3.84								
A-C	11.67								

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)
08.30-08.45									
B-AC	1.10	4.94	0.223		0.28	0.28	4.2		0.26
C-A	8.88								
C-B	0.02	6.81	0.003		0.00	0.00	0.0		0.15
A-B	3.84								
A-C	11.67								

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)
08.45-09.00									
B-AC	0.90	5.74	0.157		0.28	0.19	2.9		0.21
C-A	7.25								
C-B	0.01	7.42	0.002		0.00	0.00	0.0		0.14
A-B	3.13								
A-C	9.53								

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)
09.00-09.15									
B-AC	0.75	6.31	0.119		0.19	0.14	2.1		0.18
C-A	6.07								
C-B	0.01	7.86	0.002		0.00	0.00	0.0		0.13
A-B	2.62								
A-C	7.98								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.3
08.45	0.3
09.00	0.2
09.15	0.1

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	82.6	55.1	17.9	0.22	17.9	0.22
C-A	666.2	444.1				
C-B	1.4	0.9	0.2	0.14	0.2	0.14
A-B	287.7	191.8				
A-C	875.4	583.6				
ALL	1913.2	1275.5	18.1	0.01	18.1	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 For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
548.71	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
608.71	0.22	0.22

(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: Nyton Road/A29 Westergate Street (south) 2025 AM Base

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	12.29	18.43	12.29
ARM B	15.00	45.00	75.00	0.89	1.33	0.89
ARM C	15.00	45.00	75.00	7.05	10.58	7.05

Demand set: Nyton Road/A29 Westergate Street (south) 2025 AM Base

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.247	0.753
		0.0	243.0	740.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.930	0.000	0.070
		66.0	0.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.998	0.002	0.000
		563.0	1.0	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 AND FOR TIME PERIOD 1 — Nyton Road/A29 Westergate Street (south) 2025 AM Base

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)
07.45-08.00									
B-AC	0.89	5.84	0.153		0.00	0.18	2.5		0.20
C-A	7.06								
C-B	0.01	7.49	0.002		0.00	0.00	0.0		0.13
A-B	3.05								
A-C	9.29								
08.00-08.15									
B-AC	1.06	5.17	0.206		0.18	0.25	3.7		0.24
C-A	8.44								
C-B	0.01	6.97	0.002		0.00	0.00	0.0		0.14
A-B	3.64								
A-C	11.09								
08.15-08.30									
B-AC	1.30	4.24	0.308		0.25	0.43	6.1		0.34
C-A	10.33								
C-B	0.02	6.26	0.003		0.00	0.00	0.0		0.16
A-B	4.46								
A-C	13.58								
08.30-08.45									
B-AC	1.30	4.24	0.308		0.43	0.44	6.5		0.34
C-A	10.33								
C-B	0.02	6.26	0.003		0.00	0.00	0.0		0.16
A-B	4.46								
A-C	13.58								

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)
08.45-09.00									
B-AC	1.06	5.17	0.206		0.44	0.26	4.2		0.24
C-A	8.44								
C-B	0.01	6.97	0.002		0.00	0.00	0.0		0.14
A-B	3.64								
A-C	11.09								

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)
09.00-09.15									
B-AC	0.89	5.84	0.153		0.26	0.18	2.8		0.20
C-A	7.06								
C-B	0.01	7.49	0.002		0.00	0.00	0.0		0.13
A-B	3.05								
A-C	9.29								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	97.7	65.2	25.8	0.26	25.8	0.26
C-A	774.9	516.6				
C-B	1.4	0.9	0.2	0.15	0.2	0.15
A-B	334.5	223.0				
A-C	1018.6	679.0				
ALL	2227.1	1484.7	26.0	0.01	26.0	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 For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
548.71	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
608.71	0.22	0.22

(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: Nyton Road/A29 Westergate Street (south) 2015 AM with scheme

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	10.64	15.96	10.64
ARM B	15.00	45.00	75.00	0.75	1.13	0.75
ARM C	15.00	45.00	75.00	6.29	9.43	6.29

Demand set: Nyton Road/A29 Westergate Street (south) 2015 AM with scheme

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.246	0.754
		0.0	209.0	642.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.933	0.000	0.067
		56.0	0.0	4.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.998	0.002	0.000
		502.0	1.0	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 Nyton Road/A29 Westergate Street (south) 2015 AM with scheme
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)
07.45-08.00									
B-AC	0.75	6.26	0.120		0.00	0.13	1.9		0.18
C-A	6.30								
C-B	0.01	7.85	0.002		0.00	0.00	0.0		0.13
A-B	2.62								
A-C	8.06								
08.00-08.15									
B-AC	0.90	5.68	0.158		0.13	0.19	2.7		0.21
C-A	7.52								
C-B	0.01	7.40	0.002		0.00	0.00	0.0		0.14
A-B	3.13								
A-C	9.62								
08.15-08.30									
B-AC	1.10	4.87	0.226		0.19	0.29	4.1		0.26
C-A	9.21								
C-B	0.02	6.78	0.003		0.00	0.00	0.0		0.15
A-B	3.84								
A-C	11.78								
08.30-08.45									
B-AC	1.10	4.87	0.226		0.29	0.29	4.3		0.27
C-A	9.21								
C-B	0.02	6.78	0.003		0.00	0.00	0.0		0.15
A-B	3.84								
A-C	11.78								

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)
08.45-09.00									
B-AC	0.90	5.68	0.158		0.29	0.19	3.0		0.21
C-A	7.52								
C-B	0.01	7.40	0.002		0.00	0.00	0.0		0.14
A-B	3.13								
A-C	9.62								

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)
09.00-09.15									
B-AC	0.75	6.26	0.120		0.19	0.14	2.1		0.18
C-A	6.30								
C-B	0.01	7.85	0.002		0.00	0.00	0.0		0.13
A-B	2.62								
A-C	8.06								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.3
08.45	0.3
09.00	0.2
09.15	0.1

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	82.6	55.1	18.2	0.22	18.2	0.22
C-A	691.0	460.6				
C-B	1.4	0.9	0.2	0.14	0.2	0.14
A-B	287.7	191.8				
A-C	883.7	589.1				
ALL	1946.3	1297.5	18.4	0.01	18.4	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 For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
548.71	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
608.71	0.22	0.22

(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: Nyton Road/A29 Westergate Street (south) 2025 AM with scheme

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	12.36	18.54	12.36
ARM B	15.00	45.00	75.00	0.89	1.33	0.89
ARM C	15.00	45.00	75.00	7.28	10.91	7.28

Demand set: Nyton Road/A29 Westergate Street (south) 2025 AM with scheme

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.246	0.754
		0.0	243.0	746.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.930	0.000	0.070
		66.0	0.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.998	0.002	0.000
		581.0	1.0	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 Nyton Road/A29 Westergate Street (south) 2025 AM with scheme
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)
07.45-08.00									
B-AC	0.89	5.79	0.154		0.00	0.18	2.6		0.20
C-A	7.29								
C-B	0.01	7.47	0.002		0.00	0.00	0.0		0.13
A-B	3.05								
A-C	9.36								

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)
08.00-08.15									
B-AC	1.06	5.11	0.208		0.18	0.26	3.7		0.25
C-A	8.71								
C-B	0.01	6.95	0.002		0.00	0.00	0.0		0.14
A-B	3.64								
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)
08.15-08.30									
B-AC	1.30	4.16	0.313		0.26	0.44	6.2		0.35
C-A	10.66								
C-B	0.02	6.24	0.003		0.00	0.00	0.0		0.16
A-B	4.46								
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)
08.30-08.45									
B-AC	1.30	4.16	0.313		0.44	0.45	6.7		0.35
C-A	10.66								
C-B	0.02	6.24	0.003		0.00	0.00	0.0		0.16
A-B	4.46								
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)
08.45-09.00									
B-AC	1.06	5.11	0.208		0.45	0.27	4.2		0.25
C-A	8.71								
C-B	0.01	6.95	0.002		0.00	0.00	0.0		0.14
A-B	3.64								
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)
09.00-09.15									
B-AC	0.89	5.79	0.154		0.27	0.18	2.9		0.20
C-A	7.29								
C-B	0.01	7.47	0.002		0.00	0.00	0.0		0.13
A-B	3.05								
A-C	9.36								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	97.7	65.2	26.3	0.27	26.3	0.27
C-A	799.7	533.1				
C-B	1.4	0.9	0.2	0.15	0.2	0.15
A-B	334.5	223.0				
A-C	1026.8	684.5				
ALL	2260.1	1506.7	26.5	0.01	26.5	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 ==========

Printed at 10:00:51 on 20/06/2013]

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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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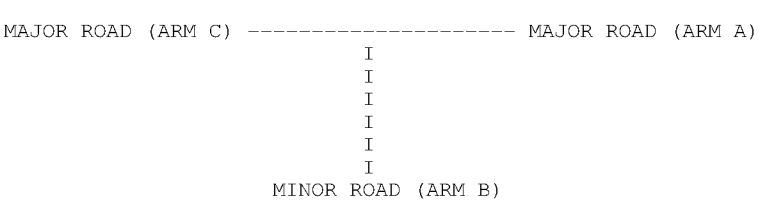
Run with file:- "C:\Westergate\NytonSouth\NytonSouthPM.vpi" (drive-on-the-left) at 10:02:43 on Thursday, 20 June 2013

RUN INFORMATION

RUN TITLE	: Westergate Nyton Road/A29 Westergate Street (south)
LOCATION	: Westergate
DATE	: 25/03/13
CLIENT	:
ENUMERATOR	: Administrator [TNT-LAPTOP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A29 Westergate Street North
ARM B IS Nyton Road
ARM C IS A29 Westergate Street South

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 8.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 60.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 110.0 M.
- VISIBILITY TO RIGHT	(VB-A) 70.0 M.
- LANE 1 WIDTH	(WB-C) 3.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
548.71	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
608.71	0.22	0.22

(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: Nyton Road/A29 Westergate Street (south) 2013 PM Base

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 TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.86	8.79	5.86
ARM B	15.00	45.00	75.00	1.75	2.63	1.75
ARM C	15.00	45.00	75.00	8.07	12.11	8.07

Demand set: Nyton Road/A29 Westergate Street (south) 2013 PM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.000	0.154	0.846
		0.0	72.0	397.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.957	0.000	0.043
		134.0	0.0	6.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		646.0	0.0	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 Nyton Road/A29 Westergate Street (south) 2013 PM Base
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	1.76	6.83	0.257		0.00	0.34	4.8		0.20
C-A	8.11								
C-B	0.00	8.07	0.000		0.00	0.00	0.0		0.00
A-B	0.90								
A-C	4.98								

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	2.10	6.37	0.330		0.34	0.48	6.9		0.23
C-A	9.68								
C-B	0.00	7.85	0.000		0.00	0.00	0.0		0.00
A-B	1.08								
A-C	5.95								

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)
16.45-17.00									
B-AC	2.57	5.72	0.449		0.48	0.79	11.1		0.31
C-A	11.85								
C-B	0.00	7.54	0.000		0.00	0.00	0.0		0.00
A-B	1.32								
A-C	7.29								

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	2.57	5.72	0.449		0.79	0.80	11.9		0.32
C-A	11.85								
C-B	0.00	7.54	0.000		0.00	0.00	0.0		0.00
A-B	1.32								
A-C	7.29								

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	2.10	6.37	0.330		0.80	0.50	7.9		0.24
C-A	9.68								
C-B	0.00	7.85	0.000		0.00	0.00	0.0		0.00
A-B	1.08								
A-C	5.95								

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)
17.30-17.45									
B-AC	1.76	6.83	0.257		0.50	0.35	5.5		0.20
C-A	8.11								
C-B	0.00	8.07	0.000		0.00	0.00	0.0		0.00
A-B	0.90								
A-C	4.98								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.3	
16.45	0.5	
17.00	0.8	*
17.15	0.8	*
17.30	0.5	*
17.45	0.4	

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	192.7	128.5	48.2	0.25	48.2	0.25
C-A	889.2	592.8				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	99.1	66.1				
A-C	546.4	364.3				
ALL	1727.4	1151.6	48.2	0.03	48.2	0.03

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
548.71	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
608.71	0.22	0.22

(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: Nyton Road/A29 Westergate Street (south) 2015 PM Base

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 TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.93	8.89	5.93
ARM B	15.00	45.00	75.00	1.76	2.64	1.76
ARM C	15.00	45.00	75.00	8.15	12.22	8.15

Demand set: Nyton Road/A29 Westergate Street (south) 2015 PM Base

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	0.154	0.846
		0.0	73.0	401.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.957	0.000	0.043
		135.0	0.0	6.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		652.0	0.0	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 AND FOR TIME PERIOD 1 — Nyton Road/A29 Westergate Street (south) 2015 PM Base

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	1.77	6.81	0.260		0.00	0.35	4.9		0.20
C-A	8.18								
C-B	0.00	8.06	0.000		0.00	0.00	0.0		0.00
A-B	0.92								
A-C	5.03								
16.30-16.45									
B-AC	2.11	6.34	0.333		0.35	0.49	7.0		0.24
C-A	9.77								
C-B	0.00	7.83	0.000		0.00	0.00	0.0		0.00
A-B	1.09								
A-C	6.01								
16.45-17.00									
B-AC	2.59	5.69	0.455		0.49	0.81	11.3		0.32
C-A	11.96								
C-B	0.00	7.52	0.000		0.00	0.00	0.0		0.00
A-B	1.34								
A-C	7.36								
17.00-17.15									
B-AC	2.59	5.69	0.455		0.81	0.82	12.2		0.32
C-A	11.96								
C-B	0.00	7.52	0.000		0.00	0.00	0.0		0.00
A-B	1.34								
A-C	7.36								

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)
17.15-17.30									
B-AC	2.11	6.34	0.333		0.82	0.51	8.1		0.24
C-A	9.77								
C-B	0.00	7.83	0.000		0.00	0.00	0.0		0.00
A-B	1.09								
A-C	6.01								

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	1.77	6.81	0.260		0.51	0.36	5.6		0.20
C-A	8.18								
C-B	0.00	8.06	0.000		0.00	0.00	0.0		0.00
A-B	0.92								
A-C	5.03								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.3	
16.45	0.5	
17.00	0.8	*
17.15	0.8	*
17.30	0.5	*
17.45	0.4	

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	194.1	129.4	49.1	0.25	49.1	0.25
C-A	897.4	598.3				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	100.5	67.0				
A-C	551.9	368.0				
ALL	1743.9	1162.6	49.1	0.03	49.1	0.03

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
548.71	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
608.71	0.22	0.22

(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: Nyton Road/A29 Westergate Street (south) 2025 PM Base

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 TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.93	10.39	6.93
ARM B	15.00	45.00	75.00	2.06	3.09	2.06
ARM C	15.00	45.00	75.00	9.55	14.33	9.55

Demand set: Nyton Road/A29 Westergate Street (south) 2025 PM Base

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	0.153	0.847
		0.0	85.0	469.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.958	0.000	0.042
		158.0	0.0	7.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		764.0	0.0	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 Nyton Road/A29 Westergate Street (south) 2025 PM Base
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	2.07	6.39	0.324		0.00	0.47	6.6		0.23
C-A	9.59								
C-B	0.00	7.86	0.000		0.00	0.00	0.0		0.00
A-B	1.07								
A-C	5.88								

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-AC	2.47	5.84	0.423		0.47	0.71	10.1		0.29
C-A	11.45								
C-B	0.00	7.60	0.000		0.00	0.00	0.0		0.00
A-B	1.27								
A-C	7.03								

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	3.03	5.08	0.596		0.71	1.37	18.7		0.47
C-A	14.02								
C-B	0.00	7.23	0.000		0.00	0.00	0.0		0.00
A-B	1.56								
A-C	8.61								

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-AC	3.03	5.08	0.596		1.37	1.42	21.0		0.48
C-A	14.02								
C-B	0.00	7.23	0.000		0.00	0.00	0.0		0.00
A-B	1.56								
A-C	8.61								

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)
17.15-17.30									
B-AC	2.47	5.84	0.423		1.42	0.76	12.2		0.30
C-A	11.45								
C-B	0.00	7.60	0.000		0.00	0.00	0.0		0.00
A-B	1.27								
A-C	7.03								

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	2.07	6.39	0.324		0.76	0.49	7.7		0.23
C-A	9.59								
C-B	0.00	7.86	0.000		0.00	0.00	0.0		0.00
A-B	1.07								
A-C	5.88								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	
16.45	0.7	*
17.00	1.4	*
17.15	1.4	*
17.30	0.8	*
17.45	0.5	

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	227.1	151.4	76.3	0.34	76.3	0.34
C-A	1051.6	701.1				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	117.0	78.0				
A-C	645.5	430.4				
ALL	2041.2	1360.8	76.3	0.04	76.3	0.04

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
548.71	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
608.71	0.22	0.22

(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: Nyton Road/A29 Westergate Street (south) 2015 PM with scheme

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 TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.14	9.21	6.14
ARM B	15.00	45.00	75.00	1.76	2.64	1.76
ARM C	15.00	45.00	75.00	8.27	12.41	8.27

Demand set: Nyton Road/A29 Westergate Street (south) 2015 PM with scheme

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	0.149	0.851
		0.0	73.0	418.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.957	0.000	0.043
		135.0	0.0	6.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		662.0	0.0	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 Nyton Road/A29 Westergate Street (south) 2015 PM with scheme
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	1.77	6.74	0.263		0.00	0.35	5.0		0.20
C-A	8.31								
C-B	0.00	8.02	0.000		0.00	0.00	0.0		0.00
A-B	0.92								
A-C	5.24								

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)
16.30-16.45									
B-AC	2.11	6.26	0.338		0.35	0.50	7.2		0.24
C-A	9.92								
C-B	0.00	7.78	0.000		0.00	0.00	0.0		0.00
A-B	1.09								
A-C	6.26								

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	2.59	5.59	0.463		0.50	0.83	11.7		0.33
C-A	12.15								
C-B	0.00	7.46	0.000		0.00	0.00	0.0		0.00
A-B	1.34								
A-C	7.67								

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	2.59	5.59	0.463		0.83	0.85	12.6		0.33
C-A	12.15								
C-B	0.00	7.46	0.000		0.00	0.00	0.0		0.00
A-B	1.34								
A-C	7.67								

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	2.11	6.26	0.338		0.85	0.52	8.3		0.24
C-A	9.92								
C-B	0.00	7.78	0.000		0.00	0.00	0.0		0.00
A-B	1.09								
A-C	6.26								

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	1.77	6.74	0.263		0.52	0.36	5.7		0.20
C-A	8.31								
C-B	0.00	8.02	0.000		0.00	0.00	0.0		0.00
A-B	0.92								
A-C	5.24								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.3	
16.45	0.5	
17.00	0.8	*
17.15	0.8	*
17.30	0.5	*
17.45	0.4	

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	194.1	129.4	50.3	0.26	50.3	0.26
C-A	911.2	607.5				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	100.5	67.0				
A-C	575.3	383.6				
ALL	1781.1	1187.4	50.3	0.03	50.3	0.03

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
668.00	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
548.71	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
608.71	0.22	0.22

(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: Nyton Road/A29 Westergate Street (south) 2025 PM with scheme

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 TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.14	10.71	7.14
ARM B	15.00	45.00	75.00	2.06	3.09	2.06
ARM C	15.00	45.00	75.00	9.68	14.51	9.68

Demand set: Nyton Road/A29 Westergate Street (south) 2025 PM with scheme

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	0.149	0.851
		0.0	85.0	486.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.958	0.000	0.042
		158.0	0.0	7.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		774.0	0.0	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 Nyton Road/A29 Westergate Street (south) 2025 PM with scheme
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	2.07	6.33	0.327		0.00	0.48	6.7		0.23
C-A	9.71								
C-B	0.00	7.82	0.000		0.00	0.00	0.0		0.00
A-B	1.07								
A-C	6.10								

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-AC	2.47	5.76	0.429		0.48	0.73	10.3		0.30
C-A	11.60								
C-B	0.00	7.55	0.000		0.00	0.00	0.0		0.00
A-B	1.27								
A-C	7.28								

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	3.03	4.98	0.608		0.73	1.44	19.4		0.49
C-A	14.20								
C-B	0.00	7.17	0.000		0.00	0.00	0.0		0.00
A-B	1.56								
A-C	8.92								

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	3.03	4.98	0.608		1.44	1.49	22.0		0.51
C-A	14.20								
C-B	0.00	7.17	0.000		0.00	0.00	0.0		0.00
A-B	1.56								
A-C	8.92								

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	2.47	5.76	0.429		1.49	0.78	12.5		0.31
C-A	11.60								
C-B	0.00	7.55	0.000		0.00	0.00	0.0		0.00
A-B	1.27								
A-C	7.28								

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	2.07	6.33	0.327		0.78	0.50	7.8		0.24
C-A	9.71								
C-B	0.00	7.82	0.000		0.00	0.00	0.0		0.00
A-B	1.07								
A-C	6.10								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	
16.45	0.7	*
17.00	1.4	*
17.15	1.5	*
17.30	0.8	*
17.45	0.5	

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	227.1	151.4	78.8	0.35	78.8	0.35
C-A	1065.4	710.2				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	117.0	78.0				
A-C	668.9	446.0				
ALL	2078.4	1385.6	78.8	0.04	78.8	0.04

* 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 ==========

Printed at 10:04:05 on 20/06/2013]

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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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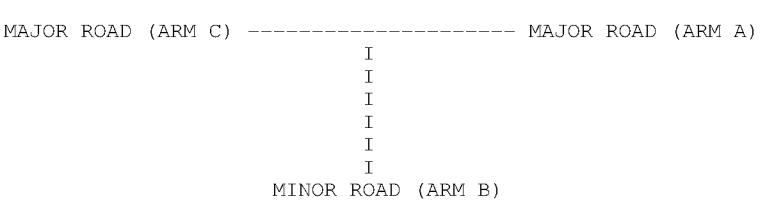
Run with file:- "C:\Westergate\SiteAccess\Siteaccess.vpi" (drive-on-the-left) at 09:36:39 on Thursday, 20 June 2013

RUN INFORMATION

RUN TITLE	: Westergate Site Access Junction
LOCATION	: Westergate
DATE	: 25/03/13
CLIENT	:
ENUMERATOR	: Administrator [TNT-LAPTOP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A29 Fontwell Avenue South
ARM B IS Site Access
ARM C IS A29 Fontwell Avenue North

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.00 M.
- VISIBILITY	(VC-B)110.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 70.0 M.
- VISIBILITY TO RIGHT	(VB-A) 80.0 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	4.75 M.
WIDTH AT 10 M FROM JUNCTION	3.25 M.
WIDTH AT 15 M FROM JUNCTION	2.75 M.
WIDTH AT 20 M FROM JUNCTION	2.75 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

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

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing 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 STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
693.19	0.27	0.27

(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: 2015 With Development AM Peak

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.71	11.57	7.71
ARM B	15.00	45.00	75.00	1.00	1.50	1.00
ARM C	15.00	45.00	75.00	6.68	10.01	6.68

Demand set: 2015 With Development AM Peak

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.024	0.976
		0.0	15.0	602.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.538	0.000	0.463
		43.0	0.0	37.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.976	0.024	0.000
		521.0	13.0	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 2015 With Development AM 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)
07.45-08.00									
B-C	0.46	9.59	0.048		0.00	0.05	0.7		0.11
B-A	0.54	6.49	0.083		0.00	0.09	1.3		0.17
C-A	6.54								
C-B	0.16	9.47	0.017		0.00	0.02	0.3		0.11
A-B	0.19								
A-C	7.55								

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)
08.00-08.15									
B-C	0.55	9.12	0.061		0.05	0.06	0.9		0.12
B-A	0.64	5.87	0.110		0.09	0.12	1.8		0.19
C-A	7.81								
C-B	0.19	9.07	0.021		0.02	0.02	0.3		0.11
A-B	0.22								
A-C	9.02								

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)
08.15-08.30									
B-C	0.68	8.44	0.080		0.06	0.09	1.3		0.13
B-A	0.79	5.01	0.158		0.12	0.18	2.7		0.24
C-A	9.56								
C-B	0.24	8.51	0.028		0.02	0.03	0.4		0.12
A-B	0.28								
A-C	11.05								

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)
08.30-08.45									
B-C	0.68	8.44	0.080		0.09	0.09	1.3		0.13
B-A	0.79	5.00	0.158		0.18	0.19	2.8		0.24
C-A	9.56								
C-B	0.24	8.51	0.028		0.03	0.03	0.4		0.12
A-B	0.28								
A-C	11.05								

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)
08.45-09.00									
B-C	0.55	9.12	0.061		0.09	0.07	1.0		0.12
B-A	0.64	5.87	0.110		0.19	0.13	1.9		0.19
C-A	7.81								
C-B	0.19	9.07	0.021		0.03	0.02	0.3		0.11
A-B	0.22								
A-C	9.02								

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)
09.00-09.15									
B-C	0.46	9.59	0.048		0.07	0.05	0.8		0.11
B-A	0.54	6.49	0.083		0.13	0.09	1.4		0.17
C-A	6.54								
C-B	0.16	9.47	0.017		0.02	0.02	0.3		0.11
A-B	0.19								
A-C	7.55								

QUEUE FOR STREAM B-C

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 B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.2
08.45	0.2
09.00	0.1
09.15	0.1

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	50.9	34.0	6.0	0.12	6.0	0.12
B-A	59.2	39.5	11.8	0.20	11.8	0.20
C-A	717.1	478.1				
C-B	17.9	11.9	2.0	0.11	2.0	0.11
A-B	20.6	13.8				
A-C	828.6	552.4				
ALL	1694.4	1129.6	19.9	0.01	19.9	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 For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

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

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing 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 STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
693.19	0.27	0.27

(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: 2025 with Development AM Peak

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.94	13.41	8.94
ARM B	15.00	45.00	75.00	1.00	1.50	1.00
ARM C	15.00	45.00	75.00	7.74	11.61	7.74

Demand set: 2025 with Development AM Peak

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.021	0.979
		0.0	15.0	700.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.538	0.000	0.463
		43.0	0.0	37.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.979	0.021	0.000
		606.0	13.0	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 2025 with Development AM 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)
07.45-08.00									
B-C	0.46	9.24	0.050		0.00	0.05	0.8		0.11
B-A	0.54	5.98	0.090		0.00	0.10	1.4		0.18
C-A	7.60								
C-B	0.16	9.14	0.018		0.00	0.02	0.3		0.11
A-B	0.19								
A-C	8.78								

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)
08.00-08.15									
B-C	0.55	8.69	0.064		0.05	0.07	1.0		0.12
B-A	0.64	5.26	0.122		0.10	0.14	2.0		0.22
C-A	9.08								
C-B	0.19	8.68	0.022		0.02	0.02	0.3		0.12
A-B	0.22								
A-C	10.49								

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)
08.15-08.30									
B-C	0.68	7.89	0.086		0.07	0.09	1.4		0.14
B-A	0.79	4.26	0.185		0.14	0.22	3.2		0.29
C-A	11.12								
C-B	0.24	8.03	0.030		0.02	0.03	0.4		0.13
A-B	0.28								
A-C	12.85								

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)
08.30-08.45									
B-C	0.68	7.89	0.086		0.09	0.09	1.4		0.14
B-A	0.79	4.26	0.185		0.22	0.22	3.4		0.29
C-A	11.12								
C-B	0.24	8.03	0.030		0.03	0.03	0.5		0.13
A-B	0.28								
A-C	12.85								

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)
08.45-09.00									
B-C	0.55	8.69	0.064		0.09	0.07	1.1		0.12
B-A	0.64	5.26	0.122		0.22	0.14	2.2		0.22
C-A	9.08								
C-B	0.19	8.68	0.022		0.03	0.02	0.4		0.12
A-B	0.22								
A-C	10.49								

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)
09.00-09.15									
B-C	0.46	9.24	0.050		0.07	0.05	0.8		0.11
B-A	0.54	5.98	0.090		0.14	0.10	1.6		0.18
C-A	7.60								
C-B	0.16	9.14	0.018		0.02	0.02	0.3		0.11
A-B	0.19								
A-C	8.78								

QUEUE FOR STREAM B-C

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 B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.2
08.45	0.2
09.00	0.1
09.15	0.1

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	50.9	34.0	6.4	0.13	6.4	0.13
B-A	59.2	39.5	13.7	0.23	13.7	0.23
C-A	834.1	556.1				
C-B	17.9	11.9	2.1	0.12	2.1	0.12
A-B	20.6	13.8				
A-C	963.5	642.3				
ALL	1946.3	1297.5	22.2	0.01	22.2	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 ==========

Printed at 09:39:33 on 20/06/2013]

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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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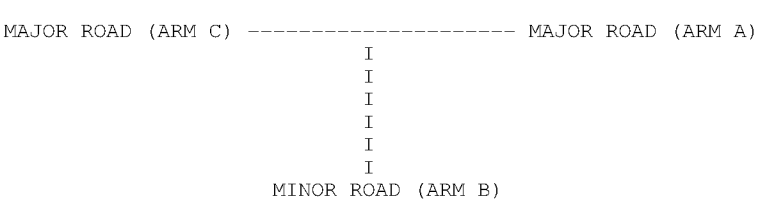
Run with file:- "C:\Westergate\SiteAccess\SiteaccessPM.vpi" (drive-on-the-left) at 09:40:48 on Thursday, 20 June 2013

RUN INFORMATION

RUN TITLE	: Westergate Site Access Junction
LOCATION	: Westergate
DATE	: 25/03/13
CLIENT	:
ENUMERATOR	: Administrator [TNT-LAPTOP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A29 Fontwell Avenue South
ARM B IS Site Access
ARM C IS A29 Fontwell Avenue North

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.00 M.
- VISIBILITY	(VC-B)110.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 70.0 M.
- VISIBILITY TO RIGHT	(VB-A) 80.0 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	4.75 M.
WIDTH AT 10 M FROM JUNCTION	3.25 M.
WIDTH AT 15 M FROM JUNCTION	2.75 M.
WIDTH AT 20 M FROM JUNCTION	2.75 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing 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 STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
693.19	0.27	0.27

(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: 2015 With Development PM Peak

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 TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.20	7.80	5.20
ARM B	15.00	45.00	75.00	0.54	0.81	0.54
ARM C	15.00	45.00	75.00	9.06	13.59	9.06

Demand set: 2015 With Development PM Peak

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	0.101	0.899
		0.0	42.0	374.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.535	0.000	0.465
		23.0	0.0	20.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.949	0.051	0.000
		688.0	37.0	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 2015 With Development 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)
16.15-16.30									
B-C	0.25	10.45	0.024		0.00	0.02	0.4		0.10
B-A	0.29	6.75	0.043		0.00	0.04	0.6		0.15
C-A	8.63								
C-B	0.46	10.15	0.046		0.00	0.05	0.7		0.10
A-B	0.53								
A-C	4.69								

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	0.30	10.15	0.030		0.02	0.03	0.4		0.10
B-A	0.34	6.18	0.056		0.04	0.06	0.9		0.17
C-A	10.31								
C-B	0.55	9.88	0.056		0.05	0.06	0.9		0.11
A-B	0.63								
A-C	5.60								

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	0.37	9.73	0.038		0.03	0.04	0.6		0.11
B-A	0.42	5.39	0.078		0.06	0.08	1.2		0.20
C-A	12.63								
C-B	0.68	9.50	0.071		0.06	0.08	1.1		0.11
A-B	0.77								
A-C	6.86								

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	0.37	9.73	0.038		0.04	0.04	0.6		0.11
B-A	0.42	5.39	0.078		0.08	0.08	1.3		0.20
C-A	12.63								
C-B	0.68	9.50	0.071		0.08	0.08	1.1		0.11
A-B	0.77								
A-C	6.86								

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)
17.15-17.30									
B-C	0.30	10.15	0.030		0.04	0.03	0.5		0.10
B-A	0.34	6.18	0.056		0.08	0.06	0.9		0.17
C-A	10.31								
C-B	0.55	9.88	0.056		0.08	0.06	0.9		0.11
A-B	0.63								
A-C	5.60								

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-C	0.25	10.45	0.024		0.03	0.02	0.4		0.10
B-A	0.29	6.75	0.043		0.06	0.05	0.7		0.15
C-A	8.63								
C-B	0.46	10.15	0.046		0.06	0.05	0.7		0.10
A-B	0.53								
A-C	4.69								

QUEUE FOR STREAM B-C

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

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

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 (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	27.5	18.4	2.8	0.10	2.8	0.10
B-A	31.7	21.1	5.6	0.18	5.6	0.18
C-A	947.0	631.3				
C-B	50.9	34.0	5.5	0.11	5.5	0.11
A-B	57.8	38.5				
A-C	514.8	343.2				
ALL	1629.7	1086.5	13.9	0.01	13.9	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 For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

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

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing 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 STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
693.19	0.27	0.27

(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: 2025 with Development PM Peak

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 TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.01	9.02	6.01
ARM B	15.00	45.00	75.00	0.54	0.81	0.54
ARM C	15.00	45.00	75.00	10.54	15.81	10.54

Demand set: 2025 with Development PM Peak

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	0.087	0.913
		0.0	42.0	439.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.535	0.000	0.465
		23.0	0.0	20.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.956	0.044	0.000
		806.0	37.0	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 2025 with Development 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)
16.15-16.30									
B-C	0.25	10.22	0.025		0.00	0.03	0.4		0.10
B-A	0.29	6.28	0.046		0.00	0.05	0.7		0.17
C-A	10.11								
C-B	0.46	9.93	0.047		0.00	0.05	0.7		0.11
A-B	0.53								
A-C	5.51								

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	0.30	9.87	0.030		0.03	0.03	0.5		0.10
B-A	0.34	5.62	0.061		0.05	0.06	0.9		0.19
C-A	12.08								
C-B	0.55	9.62	0.058		0.05	0.06	0.9		0.11
A-B	0.63								
A-C	6.58								

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	0.37	9.38	0.039		0.03	0.04	0.6		0.11
B-A	0.42	4.70	0.090		0.06	0.10	1.4		0.23
C-A	14.79								
C-B	0.68	9.18	0.074		0.06	0.08	1.2		0.12
A-B	0.77								
A-C	8.06								

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)
17.00-17.15									
B-C	0.37	9.38	0.039		0.04	0.04	0.6		0.11
B-A	0.42	4.70	0.090		0.10	0.10	1.5		0.23
C-A	14.79								
C-B	0.68	9.18	0.074		0.08	0.08	1.2		0.12
A-B	0.77								
A-C	8.06								

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)
17.15-17.30									
B-C	0.30	9.87	0.030		0.04	0.03	0.5		0.10
B-A	0.34	5.62	0.061		0.10	0.07	1.0		0.19
C-A	12.08								
C-B	0.55	9.62	0.058		0.08	0.06	0.9		0.11
A-B	0.63								
A-C	6.58								

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-C	0.25	10.21	0.025		0.03	0.03	0.4		0.10
B-A	0.29	6.28	0.046		0.07	0.05	0.8		0.17
C-A	10.11								
C-B	0.46	9.93	0.047		0.06	0.05	0.8		0.11
A-B	0.53								
A-C	5.51								

QUEUE FOR STREAM B-C

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

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

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 (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	27.5	18.4	2.9	0.11	2.9	0.11
B-A	31.7	21.1	6.3	0.20	6.3	0.20
C-A	1109.4	739.6				
C-B	50.9	34.0	5.7	0.11	5.7	0.11
A-B	57.8	38.5				
A-C	604.3	402.8				
ALL	1881.6	1254.4	14.8	0.01	14.8	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 ==========

Printed at 09:41:44 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27A29\A27A29AM.vai" (drive-on-the-left) at 12:31:06 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Rbt East
LOCATION: Westergate
DATE: 20/06/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29
ARM B - A27 South
ARM C - A27 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.95	40.00	50.00	50.00	70.0	0.653	34.996
ARM B	7.80	10.30	35.00	50.00	50.00	78.0	0.734	42.851
ARM C	7.50	8.40	14.00	44.00	50.00	50.0	0.727	39.865

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2010 Base AM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.57	12.86	8.57
ARM B	15.00	45.00	75.00	21.64	32.46	21.64
ARM C	15.00	45.00	75.00	21.02	31.54	21.02

DEMAND SET TITLE: 2010 Base AM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	9.0	677.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.057	0.051	0.892
		98.0	89.0	1544.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.312	0.681	0.008
		524.0	1145.0	13.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	8.61	24.82	0.347	- - -	0.0	0.5	7.7	-	0.061
ARM B	21.72	36.52	0.595	- - -	0.0	1.5	21.0	-	0.067
ARM C	21.10	38.17	0.553	- - -	0.0	1.2	17.8	-	0.058

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)
08.00-08.15									
ARM A	10.28	22.82	0.450	- - -	0.5	0.8	11.9	-	0.079
ARM B	25.94	35.28	0.735	- - -	1.5	2.7	38.4	-	0.105
ARM C	25.20	37.83	0.666	- - -	1.2	2.0	28.4	-	0.079

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)
08.15-08.30									
ARM A	12.59	20.16	0.625	- - -	0.8	1.6	23.2	-	0.130
ARM B	31.76	33.60	0.945	- - -	2.7	11.9	138.8	-	0.345
ARM C	30.87	37.42	0.825	- - -	2.0	4.5	61.3	-	0.145

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)
08.30-08.45									
ARM A	12.59	20.07	0.627	- - -	1.6	1.7	24.7	-	0.133
ARM B	31.76	33.56	0.947	- - -	11.9	13.8	195.1	-	0.466
ARM C	30.87	37.38	0.826	- - -	4.5	4.6	68.2	-	0.153

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)
08.45-09.00									
ARM A	10.28	22.70	0.453	- - -	1.7	0.8	13.0	-	0.081
ARM B	25.94	35.22	0.736	- - -	13.8	2.9	53.8	-	0.126
ARM C	25.20	37.77	0.667	- - -	4.6	2.0	32.1	-	0.082

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)
09.00-09.15									
ARM A	8.61	24.75	0.348	- - -	0.8	0.5	8.2	-	0.062
ARM B	21.72	36.48	0.595	- - -	2.9	1.5	23.1	-	0.069
ARM C	21.10	38.15	0.553	- - -	2.0	1.2	19.3	-	0.059

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	*
08.15	0.8	*
08.30	1.6	**
08.45	1.7	**
09.00	0.8	*
09.15	0.5	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.5	*
08.15	2.7	***
08.30	11.9	**********
08.45	13.8	**********
09.00	2.9	***
09.15	1.5	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.2	*
08.15	2.0	**
08.30	4.5	****
08.45	4.6	*****
09.00	2.0	**
09.15	1.2	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	944.2	629.5	88.6	0.09	88.6	0.09
B	2382.6	1588.4	470.3	0.20	470.3	0.20
C	2315.1	1543.4	227.1	0.10	227.2	0.10
ALL	5642.0	3761.3	786.1	0.14	786.1	0.14

T75

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

END OF JOB

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

Printed at 12:31:38 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27A29\A27A29PM.vai" (drive-on-the-left) at 12:53:54 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Rbt East
LOCATION: Westergate
DATE: 20/06/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29
ARM B - A27 South
ARM C - A27 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.95	40.00	50.00	50.00	70.0	0.653	34.996
ARM B	7.80	10.30	35.00	50.00	50.00	78.0	0.734	42.851
ARM C	7.50	8.40	14.00	44.00	50.00	50.0	0.727	39.865

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2013 Base PM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.46	12.69	8.46
ARM B	15.00	45.00	75.00	15.27	22.91	15.27
ARM C	15.00	45.00	75.00	24.13	36.19	24.13

DEMAND SET TITLE: 2013 Base PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.038	0.962
		0.0	26.0	651.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.054	0.023	0.923
		66.0	28.0	1128.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.293	0.704	0.003
		565.0	1359.0	6.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	8.49	23.64	0.359	- - -	0.0	0.6	8.1	-	0.066
ARM B	15.33	36.83	0.416	- - -	0.0	0.7	10.4	-	0.046
ARM C	24.22	39.01	0.621	- - -	0.0	1.6	23.3	-	0.067

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									
ARM A	10.14	21.41	0.474	- - -	0.6	0.9	13.0	-	0.088
ARM B	18.31	35.64	0.514	- - -	0.7	1.0	15.4	-	0.058
ARM C	28.92	38.84	0.744	- - -	1.6	2.8	40.5	-	0.099

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									
ARM A	12.42	18.51	0.671	- - -	0.9	2.0	27.8	-	0.160
ARM B	22.42	34.06	0.658	- - -	1.0	1.9	27.3	-	0.085
ARM C	35.42	38.61	0.917	- - -	2.8	9.2	114.7	-	0.251

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									
ARM A	12.42	18.33	0.678	- - -	2.0	2.1	30.4	-	0.169
ARM B	22.42	34.01	0.659	- - -	1.9	1.9	28.6	-	0.086
ARM C	35.42	38.61	0.917	- - -	9.2	10.0	144.6	-	0.297

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)
17.45-18.00									
ARM A	10.14	21.16	0.479	- - -	2.1	0.9	14.5	-	0.092
ARM B	18.31	35.57	0.515	- - -	1.9	1.1	16.5	-	0.058
ARM C	28.92	38.84	0.745	- - -	10.0	3.0	50.7	-	0.111

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)
18.00-18.15									
ARM A	8.49	23.54	0.361	- - -	0.9	0.6	8.7	-	0.067
ARM B	15.33	36.78	0.417	- - -	1.1	0.7	11.0	-	0.047
ARM C	24.22	39.01	0.621	- - -	3.0	1.7	25.7	-	0.068

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	2.0	**
17.45	2.1	**
18.00	0.9	*
18.15	0.6	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	1.9	**
17.45	1.9	**
18.00	1.1	*
18.15	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.6	**
17.15	2.8	***
17.30	9.2	*********
17.45	10.0	**********
18.00	3.0	***
18.15	1.7	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	931.8	621.2	102.6	0.11	102.6	0.11
B	1682.0	1121.3	109.2	0.06	109.2	0.06
C	2656.5	1771.0	399.6	0.15	399.6	0.15
ALL	5270.3	3513.6	611.4	0.12	611.5	0.12

T75

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

END OF JOB

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

Printed at 12:54:04 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27A29\A27A29AM.vai" (drive-on-the-left) at 12:32:07 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Rbt East
LOCATION: Westergate
DATE: 20/06/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29
ARM B - A27 South
ARM C - A27 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.95	40.00	50.00	50.00	70.0	0.653	34.996
ARM B	7.80	10.30	35.00	50.00	50.00	78.0	0.734	42.851
ARM C	7.50	8.40	14.00	44.00	50.00	50.0	0.727	39.865

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2015 Base AM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.79	13.18	8.79
ARM B	15.00	45.00	75.00	22.17	33.26	22.17
ARM C	15.00	45.00	75.00	21.55	32.32	21.55

DEMAND SET TITLE: 2015 Base AM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	9.0	694.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.056	0.051	0.892
		100.0	91.0	1583.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.311	0.681	0.008
		537.0	1174.0	13.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME / ARM	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)
07.45-08.00									
ARM A	8.82	24.57	0.359	- - -	0.0	0.6	8.1	-	0.063
ARM B	22.26	36.37	0.612	- - -	0.0	1.6	22.5	-	0.070
ARM C	21.63	38.13	0.567	- - -	0.0	1.3	18.9	-	0.060

TIME / ARM	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)
08.00-08.15									
ARM A	10.53	22.52	0.468	- - -	0.6	0.9	12.7	-	0.083
ARM B	26.58	35.09	0.757	- - -	1.6	3.0	42.7	-	0.115
ARM C	25.83	37.79	0.684	- - -	1.3	2.1	30.6	-	0.083

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)
08.15-08.30									
ARM A	12.90	19.81	0.651	- - -	0.9	1.8	25.7	-	0.142
ARM B	32.55	33.37	0.975	- - -	3.0	16.6	179.8	-	0.441
ARM C	31.64	37.39	0.846	- - -	2.1	5.1	69.5	-	0.162

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)
08.30-08.45									
ARM A	12.90	19.70	0.655	- - -	1.8	1.9	27.7	-	0.147
ARM B	32.55	33.33	0.977	- - -	16.6	21.3	287.9	-	0.684
ARM C	31.64	37.34	0.847	- - -	5.1	5.3	78.9	-	0.174

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)
08.45-09.00									
ARM A	10.53	22.36	0.471	- - -	1.9	0.9	14.0	-	0.085
ARM B	26.58	35.03	0.759	- - -	21.3	3.3	75.1	-	0.161
ARM C	25.83	37.69	0.685	- - -	5.3	2.2	35.3	-	0.087

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)
09.00-09.15									
ARM A	8.82	24.50	0.360	- - -	0.9	0.6	8.7	-	0.064
ARM B	22.26	36.32	0.613	- - -	3.3	1.6	25.0	-	0.072
ARM C	21.63	38.11	0.568	- - -	2.2	1.3	20.5	-	0.061

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.6	*
08.15	0.9	*
08.30	1.8	**
08.45	1.9	**
09.00	0.9	*
09.15	0.6	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.6	**
08.15	3.0	***
08.30	16.6	*****************
08.45	21.3	*********************
09.00	3.3	***
09.15	1.6	**

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.3	*
08.15	2.1	**
08.30	5.1	*****
08.45	5.3	*****
09.00	2.2	**
09.15	1.3	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	967.6	645.1	97.0	0.10	97.0	0.10
B	2441.8	1627.9	633.0	0.26	633.1	0.26
C	2373.0	1582.0	253.7	0.11	253.7	0.11
ALL	5782.4	3854.9	983.7	0.17	983.8	0.17

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

END OF JOB

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

Printed at 12:32:31 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:- "C:\Westergate\A27A29\A27A29PM.vai" (drive-on-the-left) at 12:54:27 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Rbt East
LOCATION: Westergate
DATE: 20/06/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29
ARM B - A27 South
ARM C - A27 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.95	40.00	50.00	50.00	70.0	0.653	34.996
ARM B	7.80	10.30	35.00	50.00	50.00	78.0	0.734	42.851
ARM C	7.50	8.40	14.00	44.00	50.00	50.0	0.727	39.865

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2015 Base PM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.54	12.81	8.54
ARM B	15.00	45.00	75.00	15.41	23.12	15.41
ARM C	15.00	45.00	75.00	24.35	36.53	24.35

DEMAND SET TITLE: 2015 Base PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.038	0.962
		0.0	26.0	657.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.054	0.023	0.923
		67.0	28.0	1138.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.293	0.704	0.003
		570.0	1372.0	6.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	8.57	23.53	0.364	- - -	0.0	0.6	8.3	-	0.066
ARM B	15.47	36.77	0.421	- - -	0.0	0.7	10.6	-	0.047
ARM C	24.44	39.00	0.627	- - -	0.0	1.7	23.9	-	0.068

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									
ARM A	10.23	21.28	0.481	- - -	0.6	0.9	13.3	-	0.090
ARM B	18.47	35.58	0.519	- - -	0.7	1.1	15.7	-	0.058
ARM C	29.19	38.83	0.752	- - -	1.7	2.9	41.9	-	0.102

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									
ARM A	12.53	18.37	0.682	- - -	0.9	2.1	29.0	-	0.167
ARM B	22.63	33.98	0.666	- - -	1.1	2.0	28.2	-	0.087
ARM C	35.75	38.60	0.926	- - -	2.9	10.0	123.3	-	0.269

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									
ARM A	12.53	18.18	0.689	- - -	2.1	2.2	32.0	-	0.176
ARM B	22.63	33.93	0.667	- - -	2.0	2.0	29.6	-	0.089
ARM C	35.75	38.60	0.926	- - -	10.0	11.0	159.0	-	0.326

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)
17.45-18.00									
ARM A	10.23	21.00	0.487	- - -	2.2	1.0	15.0	-	0.094
ARM B	18.47	35.50	0.520	- - -	2.0	1.1	16.9	-	0.059
ARM C	29.19	38.83	0.752	- - -	11.0	3.1	53.7	-	0.116

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)
18.00-18.15									
ARM A	8.57	23.44	0.366	- - -	1.0	0.6	8.9	-	0.068
ARM B	15.47	36.73	0.421	- - -	1.1	0.7	11.2	-	0.047
ARM C	24.44	39.00	0.627	- - -	3.1	1.7	26.4	-	0.070

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	2.1	**
17.45	2.2	**
18.00	1.0	*
18.15	0.6	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.1	*
17.30	2.0	**
17.45	2.0	**
18.00	1.1	*
18.15	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.7	**
17.15	2.9	***
17.30	10.0	**********
17.45	11.0	**********
18.00	3.1	***
18.15	1.7	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	940.1	626.7	106.7	0.11	106.7	0.11
B	1697.1	1131.4	112.2	0.07	112.2	0.07
C	2681.3	1787.5	428.2	0.16	428.2	0.16
ALL	5318.5	3545.7	647.0	0.12	647.1	0.12

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

END OF JOB

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

Printed at 12:54:47 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:- "C:\Westergate\A27A29\A27A29AM.vai" (drive-on-the-left) at 12:33:26 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Rbt East
LOCATION: Westergate
DATE: 20/06/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29
ARM B - A27 South
ARM C - A27 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.95	40.00	50.00	50.00	70.0	0.653	34.996
ARM B	7.80	10.30	35.00	50.00	50.00	78.0	0.734	42.851
ARM C	7.50	8.40	14.00	44.00	50.00	50.0	0.727	39.865

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2015 With Dvt AM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.79	13.18	8.79
ARM B	15.00	45.00	75.00	22.25	33.38	22.25
ARM C	15.00	45.00	75.00	21.77	32.66	21.77

DEMAND SET TITLE: 2015 With Dvt AM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	9.0	694.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.056	0.051	0.893
		100.0	91.0	1589.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.309	0.684	0.007
		538.0	1191.0	13.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	8.82	24.43	0.361	- - -	0.0	0.6	8.2	-	0.064
ARM B	22.33	36.37	0.614	- - -	0.0	1.6	22.7	-	0.070
ARM C	21.86	38.13	0.573	- - -	0.0	1.3	19.3	-	0.061

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)
08.00-08.15									
ARM A	10.53	22.36	0.471	- - -	0.6	0.9	12.9	-	0.084
ARM B	26.67	35.09	0.760	- - -	1.6	3.1	43.3	-	0.116
ARM C	26.10	37.79	0.691	- - -	1.3	2.2	31.6	-	0.085

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)
08.15-08.30									
ARM A	12.90	19.61	0.658	- - -	0.9	1.9	26.4	-	0.146
ARM B	32.66	33.38	0.979	- - -	3.1	17.2	185.2	-	0.457
ARM C	31.97	37.39	0.855	- - -	2.2	5.5	73.4	-	0.171

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)
08.30-08.45									
ARM A	12.90	19.50	0.662	- - -	1.9	1.9	28.5	-	0.152
ARM B	32.66	33.33	0.980	- - -	17.2	22.5	301.4	-	0.711
ARM C	31.97	37.34	0.856	- - -	5.5	5.7	84.1	-	0.184

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)
08.45-09.00									
ARM A	10.53	22.18	0.475	- - -	1.9	0.9	14.2	-	0.087
ARM B	26.67	35.03	0.761	- - -	22.5	3.3	78.9	-	0.166
ARM C	26.10	37.68	0.693	- - -	5.7	2.3	36.7	-	0.090

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)
09.00-09.15									
ARM A	8.82	24.36	0.362	- - -	0.9	0.6	8.8	-	0.065
ARM B	22.33	36.32	0.615	- - -	3.3	1.6	25.2	-	0.073
ARM C	21.86	38.11	0.573	- - -	2.3	1.4	21.0	-	0.062

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.6	*
08.15	0.9	*
08.30	1.9	**
08.45	1.9	**
09.00	0.9	*
09.15	0.6	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.6	**
08.15	3.1	***
08.30	17.2	*****************
08.45	22.5	**********************
09.00	3.3	***
09.15	1.6	**

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.3	*
08.15	2.2	**
08.30	5.5	*****
08.45	5.7	******
09.00	2.3	**
09.15	1.4	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	967.6	645.1	99.0	0.10	99.0	0.10
B	2450.0	1633.4	656.6	0.27	656.6	0.27
C	2397.7	1598.5	266.1	0.11	266.1	0.11
ALL	5815.4	3876.9	1021.7	0.18	1021.8	0.18

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

END OF JOB

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

Printed at 12:33:55 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27A29\A27A29PM.vai" (drive-on-the-left) at 12:55:47 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Rbt East
LOCATION: Westergate
DATE: 20/06/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29
ARM B - A27 South
ARM C - A27 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.95	40.00	50.00	50.00	70.0	0.653	34.996
ARM B	7.80	10.30	35.00	50.00	50.00	78.0	0.734	42.851
ARM C	7.50	8.40	14.00	44.00	50.00	50.0	0.727	39.865

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2015 With Dvt PM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.55	12.83	8.55
ARM B	15.00	45.00	75.00	15.63	23.44	15.63
ARM C	15.00	45.00	75.00	24.48	36.71	24.48

DEMAND SET TITLE: 2015 With Dvt PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.038	0.962
		0.0	26.0	658.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.054	0.022	0.924
		67.0	28.0	1155.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.292	0.705	0.003
		571.0	1381.0	6.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	8.58	23.46	0.366	- - -	0.0	0.6	8.4	-	0.067
ARM B	15.68	36.76	0.427	- - -	0.0	0.7	10.9	-	0.047
ARM C	24.57	39.00	0.630	- - -	0.0	1.7	24.2	-	0.068

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									
ARM A	10.25	21.20	0.483	- - -	0.6	0.9	13.5	-	0.091
ARM B	18.73	35.57	0.527	- - -	0.7	1.1	16.2	-	0.059
ARM C	29.34	38.83	0.755	- - -	1.7	3.0	42.7	-	0.103

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									
ARM A	12.55	18.28	0.687	- - -	0.9	2.1	29.6	-	0.170
ARM B	22.94	33.97	0.675	- - -	1.1	2.0	29.3	-	0.090
ARM C	35.93	38.60	0.931	- - -	3.0	10.5	128.3	-	0.280

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									
ARM A	12.55	18.08	0.694	- - -	2.1	2.2	32.7	-	0.180
ARM B	22.94	33.92	0.676	- - -	2.0	2.1	30.9	-	0.091
ARM C	35.93	38.60	0.931	- - -	10.5	11.6	167.6	-	0.344

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)
17.45-18.00									
ARM A	10.25	20.89	0.490	- - -	2.2	1.0	15.3	-	0.095
ARM B	18.73	35.49	0.528	- - -	2.1	1.1	17.4	-	0.060
ARM C	29.34	38.83	0.756	- - -	11.6	3.2	55.5	-	0.119

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)
18.00-18.15									
ARM A	8.58	23.36	0.367	- - -	1.0	0.6	9.0	-	0.068
ARM B	15.68	36.72	0.427	- - -	1.1	0.7	11.5	-	0.048
ARM C	24.57	39.00	0.630	- - -	3.2	1.7	26.8	-	0.070

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	2.1	**
17.45	2.2	**
18.00	1.0	*
18.15	0.6	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.1	*
17.30	2.0	**
17.45	2.1	**
18.00	1.1	*
18.15	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.7	**
17.15	3.0	***
17.30	10.5	**********
17.45	11.6	**********
18.00	3.2	***
18.15	1.7	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	941.5	627.7	108.4	0.12	108.4	0.12
B	1720.5	1147.0	116.1	0.07	116.1	0.07
C	2695.0	1796.7	445.2	0.17	445.2	0.17
ALL	5357.1	3571.4	669.6	0.12	669.7	0.13

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END OF JOB

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

Printed at 12:56:17 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27A29\A27A29AM.vai" (drive-on-the-left) at 12:32:43 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Rbt East
LOCATION: Westergate
DATE: 20/06/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29
ARM B - A27 South
ARM C - A27 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.95	40.00	50.00	50.00	70.0	0.653	34.996
ARM B	7.80	10.30	35.00	50.00	50.00	78.0	0.734	42.851
ARM C	7.50	8.40	14.00	44.00	50.00	50.0	0.727	39.865

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2025 Base AM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	10.23	15.34	10.23
ARM B	15.00	45.00	75.00	25.79	38.68	25.79
ARM C	15.00	45.00	75.00	25.04	37.56	25.04

DEMAND SET TITLE: 2025 Base AM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	11.0	807.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.057	0.051	0.892
		117.0	106.0	1840.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.312	0.681	0.007
		624.0	1364.0	15.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	10.26	22.90	0.448	- - -	0.0	0.8	11.7	-	0.078
ARM B	25.89	35.32	0.733	- - -	0.0	2.7	37.6	-	0.102
ARM C	25.13	37.84	0.664	- - -	0.0	1.9	27.9	-	0.077

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)
08.00-08.15									
ARM A	12.26	20.54	0.597	- - -	0.8	1.5	20.8	-	0.120
ARM B	30.91	33.84	0.913	- - -	2.7	8.7	108.2	-	0.272
ARM C	30.01	37.47	0.801	- - -	1.9	3.9	53.8	-	0.130

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)
08.15-08.30									
ARM A	15.01	17.87	0.840	- - -	1.5	4.6	60.0	-	0.307
ARM B	37.86	31.94	1.185	- - -	8.7	99.4	819.4	-	1.821
ARM C	36.76	37.36	0.984	- - -	3.9	19.2	205.9	-	0.454

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)
08.30-08.45									
ARM A	15.01	17.58	0.854	- - -	4.6	5.3	75.7	-	0.372
ARM B	37.86	31.81	1.190	- - -	99.4	190.2	2172.7	-	4.577
ARM C	36.76	37.37	0.984	- - -	19.2	25.1	336.3	-	0.705

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)
08.45-09.00									
ARM A	12.26	19.76	0.620	- - -	5.3	1.7	27.7	-	0.142
ARM B	30.91	33.63	0.919	- - -	190.2	152.1	2567.6	-	5.088
ARM C	30.01	37.24	0.806	- - -	25.1	4.4	106.2	-	0.209

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)
09.00-09.15									
ARM A	10.26	22.46	0.457	- - -	1.7	0.8	13.2	-	0.083
ARM B	25.89	35.24	0.735	- - -	152.1	15.2	1254.9	-	2.444
ARM C	25.13	37.11	0.677	- - -	4.4	2.1	33.6	-	0.086

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.8	*
08.15	1.5	*
08.30	4.6	*****
08.45	5.3	*****
09.00	1.7	**
09.15	0.8	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	2.7	***
08.15	8.7	*********
08.30	99.4	**********
08.45	190.2	**********
09.00	152.1	**********
09.15	15.2	***************

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.9	**
08.15	3.9	****
08.30	19.2	*******************
08.45	25.1	*************************
09.00	4.4	****
09.15	2.1	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1125.9	750.6	209.1	0.19	209.1	0.19
B	2839.6	1893.0	6960.4	2.45	6963.7	2.45
C	2757.0	1838.0	763.6	0.28	763.6	0.28
ALL	6722.5	4481.6	7933.0	1.18	7936.4	1.18

T75

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

END OF JOB

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

Printed at 12:33:13 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27A29\A27A29PM.vai" (drive-on-the-left) at 12:55:00 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Rbt East
LOCATION: Westergate
DATE: 20/06/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29
ARM B - A27 South
ARM C - A27 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.95	40.00	50.00	50.00	70.0	0.653	34.996
ARM B	7.80	10.30	35.00	50.00	50.00	78.0	0.734	42.851
ARM C	7.50	8.40	14.00	44.00	50.00	50.0	0.727	39.865

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2025 Base PM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	10.01	15.02	10.01
ARM B	15.00	45.00	75.00	18.05	27.07	18.05
ARM C	15.00	45.00	75.00	28.51	42.77	28.51

DEMAND SET TITLE: 2025 Base PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.039	0.961
		0.0	31.0	770.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.054	0.023	0.923
		78.0	33.0	1333.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.293	0.704	0.003
		668.0	1606.0	7.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	10.05	21.60	0.465	- - -	0.0	0.9	12.4	-	0.086
ARM B	18.12	35.74	0.507	- - -	0.0	1.0	14.9	-	0.056
ARM C	28.62	38.86	0.737	- - -	0.0	2.7	38.4	-	0.095

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									
ARM A	12.00	19.02	0.631	- - -	0.9	1.7	23.7	-	0.140
ARM B	21.64	34.35	0.630	- - -	1.0	1.7	24.3	-	0.078
ARM C	34.18	38.66	0.884	- - -	2.7	6.8	90.0	-	0.199

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									
ARM A	14.70	17.04	0.862	- - -	1.7	5.3	67.4	-	0.357
ARM B	26.50	32.58	0.813	- - -	1.7	4.1	56.5	-	0.156
ARM C	41.86	38.39	1.090	- - -	6.8	64.1	551.4	-	1.062

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									
ARM A	14.70	16.90	0.870	- - -	5.3	6.0	85.7	-	0.430
ARM B	26.50	32.42	0.817	- - -	4.1	4.3	63.7	-	0.167
ARM C	41.86	38.39	1.090	- - -	64.1	116.9	1358.7	-	2.448

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)
17.45-18.00									
ARM A	12.00	16.98	0.707	- - -	6.0	2.5	42.1	-	0.220
ARM B	21.64	34.14	0.634	- - -	4.3	1.8	27.7	-	0.082
ARM C	34.18	38.65	0.884	- - -	116.9	54.8	1287.7	-	2.266

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)
18.00-18.15									
ARM A	10.05	19.92	0.505	- - -	2.5	1.0	16.3	-	0.103
ARM B	18.12	35.62	0.509	- - -	1.8	1.0	16.1	-	0.058
ARM C	28.62	38.85	0.737	- - -	54.8	2.9	186.4	-	0.247

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.9	*
17.15	1.7	**
17.30	5.3	*****
17.45	6.0	******
18.00	2.5	***
18.15	1.0	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.7	**
17.30	4.1	****
17.45	4.3	****
18.00	1.8	**
18.15	1.0	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	2.7	***
17.15	6.8	*******
17.30	64.1	**********
17.45	116.9	**********
18.00	54.8	**********
18.15	2.9	***

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	1102.5	735.0	247.6	0.22	247.6	0.22	
B	1987.6	1325.0	203.2	0.10	203.3	0.10	
C	3139.6	2093.1	3512.6	1.12	3512.7	1.12	
ALL	6229.7	4153.1	3963.4	0.64	3963.6	0.64	

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

END OF JOB

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

Printed at 12:55:30 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:- "C:\Westergate\A27A29\A27A29AM.vai" (drive-on-the-left) at 12:34:13 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Rbt East
LOCATION: Westergate
DATE: 20/06/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29
ARM B - A27 South
ARM C - A27 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.95	40.00	50.00	50.00	70.0	0.653	34.996
ARM B	7.80	10.30	35.00	50.00	50.00	78.0	0.734	42.851
ARM C	7.50	8.40	14.00	44.00	50.00	50.0	0.727	39.865

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2025 With Dvt AM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	10.23	15.34	10.23
ARM B	15.00	45.00	75.00	25.86	38.79	25.86
ARM C	15.00	45.00	75.00	25.26	37.89	25.26

DEMAND SET TITLE: 2025 With Dvt AM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	11.0	807.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.057	0.051	0.892
		117.0	106.0	1846.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.309	0.683	0.007
		625.0	1381.0	15.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	10.26	22.76	0.451	- - -	0.0	0.8	11.8	-	0.079
ARM B	25.96	35.32	0.735	- - -	0.0	2.7	37.9	-	0.103
ARM C	25.36	37.84	0.670	- - -	0.0	2.0	28.6	-	0.078

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)
08.00-08.15									
ARM A	12.26	20.38	0.601	- - -	0.8	1.5	21.2	-	0.122
ARM B	31.00	33.84	0.916	- - -	2.7	8.9	110.4	-	0.278
ARM C	30.28	37.47	0.808	- - -	2.0	4.0	55.9	-	0.134

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)
08.15-08.30									
ARM A	15.01	17.73	0.846	- - -	1.5	4.8	62.0	-	0.318
ARM B	37.97	31.95	1.188	- - -	8.9	101.1	833.2	-	1.848
ARM C	37.09	37.37	0.992	- - -	4.0	21.5	224.1	-	0.486

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)
08.30-08.45									
ARM A	15.01	17.44	0.861	- - -	4.8	5.5	79.2	-	0.391
ARM B	37.97	31.82	1.193	- - -	101.1	193.5	2209.5	-	4.650
ARM C	37.09	37.37	0.992	- - -	21.5	29.2	383.5	-	0.795

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)
08.45-09.00									
ARM A	12.26	19.49	0.629	- - -	5.5	1.7	29.0	-	0.148
ARM B	31.00	33.62	0.922	- - -	193.5	156.8	2627.2	-	5.207
ARM C	30.28	37.24	0.813	- - -	29.2	4.6	125.3	-	0.242

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)
09.00-09.15									
ARM A	10.26	22.32	0.460	- - -	1.7	0.9	13.4	-	0.084
ARM B	25.96	35.24	0.737	- - -	156.8	21.0	1333.5	-	2.588
ARM C	25.36	37.12	0.683	- - -	4.6	2.2	34.6	-	0.087

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.8	*
08.15	1.5	*
08.30	4.8	*****
08.45	5.5	******
09.00	1.7	**
09.15	0.9	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	2.7	***
08.15	8.9	*********
08.30	101.1	**********
08.45	193.5	**********
09.00	156.8	**********
09.15	21.0	**********

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	2.0	**
08.15	4.0	****
08.30	21.5	**********
08.45	29.2	**********
09.00	4.6	*****
09.15	2.2	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1125.9	750.6	216.6	0.19	216.6	0.19
B	2847.8	1898.6	7151.7	2.51	7158.0	2.51
C	2781.8	1854.5	852.1	0.31	852.1	0.31
ALL	6755.5	4503.7	8220.4	1.22	8226.7	1.22

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

END OF JOB

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

Printed at 12:34:41 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27A29\A27A29PM.vai" (drive-on-the-left) at 12:56:31 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Rbt East
LOCATION: Westergate
DATE: 20/06/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29
ARM B - A27 South
ARM C - A27 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.95	40.00	50.00	50.00	70.0	0.653	34.996
ARM B	7.80	10.30	35.00	50.00	50.00	78.0	0.734	42.851
ARM C	7.50	8.40	14.00	44.00	50.00	50.0	0.727	39.865

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2025 With Dvt PM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	10.02	15.04	10.02
ARM B	15.00	45.00	75.00	18.26	27.39	18.26
ARM C	15.00	45.00	75.00	28.64	42.96	28.64

DEMAND SET TITLE: 2025 With Dvt PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.039	0.961
		0.0	31.0	771.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.053	0.023	0.924
		78.0	33.0	1350.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.292	0.705	0.003
		669.0	1615.0	7.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	10.06	21.53	0.467	- - -	0.0	0.9	12.5	-	0.086
ARM B	18.33	35.73	0.513	- - -	0.0	1.0	15.2	-	0.057
ARM C	28.75	38.86	0.740	- - -	0.0	2.8	39.0	-	0.096

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									
ARM A	12.02	18.94	0.634	- - -	0.9	1.7	24.0	-	0.142
ARM B	21.89	34.34	0.638	- - -	1.0	1.7	25.1	-	0.080
ARM C	34.33	38.66	0.888	- - -	2.8	7.1	92.5	-	0.205

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									
ARM A	14.72	17.01	0.865	- - -	1.7	5.4	68.4	-	0.363
ARM B	26.81	32.57	0.823	- - -	1.7	4.4	59.7	-	0.164
ARM C	42.04	38.39	1.095	- - -	7.1	66.7	571.8	-	1.101

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									
ARM A	14.72	16.88	0.872	- - -	5.4	6.1	87.2	-	0.437
ARM B	26.81	32.41	0.827	- - -	4.4	4.6	67.9	-	0.177
ARM C	42.04	38.39	1.095	- - -	66.7	122.2	1418.0	-	2.550

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)
17.45-18.00									
ARM A	12.02	16.95	0.709	- - -	6.1	2.5	42.6	-	0.223
ARM B	21.89	34.12	0.642	- - -	4.6	1.8	28.8	-	0.084
ARM C	34.33	38.65	0.888	- - -	122.2	62.1	1382.5	-	2.427

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)
18.00-18.15									
ARM A	10.06	19.62	0.513	- - -	2.5	1.1	16.8	-	0.107
ARM B	18.33	35.61	0.515	- - -	1.8	1.1	16.5	-	0.058
ARM C	28.75	38.85	0.740	- - -	62.1	3.0	230.5	-	0.306

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.9	*
17.15	1.7	**
17.30	5.4	*****
17.45	6.1	******
18.00	2.5	***
18.15	1.1	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.7	**
17.30	4.4	****
17.45	4.6	*****
18.00	1.8	**
18.15	1.1	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	2.8	***
17.15	7.1	*******
17.30	66.7	**********
17.45	122.2	**********
18.00	62.1	**********
18.15	3.0	***

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1103.9	735.9	251.6	0.23	251.7	0.23
B	2011.0	1340.6	213.1	0.11	213.2	0.11
C	3153.4	2102.3	3734.4	1.18	3734.5	1.18
ALL	6268.2	4178.8	4199.2	0.67	4199.3	0.67

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

END OF JOB

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

Printed at 12:56:54 on 20/06/2013]

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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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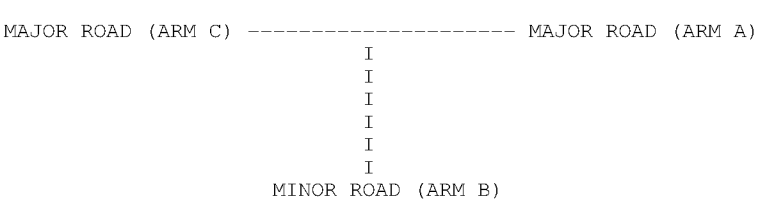
Run with file:- "C:\Westergate\B2233A27\B2233A27AM.vpi" (drive-on-the-left) at 10:08:13 on Thursday, 20 June 2013

RUN INFORMATION

RUN TITLE	: Westergate A27/B2233
LOCATION	: Westergate
DATE	: 06/06/13
CLIENT	:
ENUMERATOR	: Administrator [TNT-LAPTOP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A27 East
ARM B IS B2233
ARM C IS A27 West

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 18.00 M.
CENTRAL RESERVE WIDTH	(WCR) 6.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.00 M.
- VISIBILITY	(VC-B)160.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 140.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows AM 2010

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	25.67	38.51	25.67
ARM B	15.00	45.00	75.00	8.24	12.36	8.24
ARM C	15.00	45.00	75.00	20.52	30.79	20.52

Demand set: A27/B2233 Base Flows AM 2010

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	16.0	2038.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	659.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.934	0.066	0.000
		1533.0	109.0	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 A27/B2233 Base Flows AM 2010
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)
07.45-08.00									
B-AC	8.27	9.34	0.886		0.00	5.51	63.2		0.60
C-A	19.24								
C-B	1.37	8.62	0.159		0.00	0.19	2.7		0.14
A-B	0.20								
A-C	25.57								

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)
08.00-08.15									
B-AC	9.87	8.61	1.146		5.51	26.89	249.5		2.28
C-A	22.97								
C-B	1.63	7.95	0.205		0.19	0.26	3.7		0.16
A-B	0.24								
A-C	30.54								

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)
08.15-08.30									
B-AC	12.09	7.61	1.588		26.89	94.18	908.4		8.20
C-A	28.13								
C-B	2.00	7.02	0.285		0.26	0.39	5.6		0.20
A-B	0.29								
A-C	37.40								

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)
08.30-08.45									
B-AC	12.09	7.61	1.588		94.18	161.38	1916.7		15.83
C-A	28.13								
C-B	2.00	7.02	0.285		0.39	0.39	5.9		0.20
A-B	0.29								
A-C	37.40								

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)
08.45-09.00									
B-AC	9.87	8.61	1.146		161.38	180.33	2562.8		19.61
C-A	22.97								
C-B	1.63	7.95	0.205		0.39	0.26	4.1		0.16
A-B	0.24								
A-C	30.54								

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)
09.00-09.15									
B-AC	8.27	9.34	0.886		180.33	165.11	2590.7		18.60
C-A	19.24								
C-B	1.37	8.62	0.159		0.26	0.19	2.9		0.14
A-B	0.20								
A-C	25.57								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	5.5	******
08.15	26.9	**************************
08.30	94.2	**********
08.45	161.4	**********
09.00	180.3	**********
09.15	165.1	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	907.1	604.7	8291.4	9.14	9751.5	10.75
C-A	2110.1	1406.7				
C-B	150.0	100.0	25.0	0.17	25.0	0.17
A-B	22.0	14.7				
A-C	2805.2	1870.1				
ALL	5994.3	3996.2	8316.4	1.39	9776.4	1.63

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows AM 2015

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	26.33	39.49	26.33
ARM B	15.00	45.00	75.00	8.45	12.67	8.45
ARM C	15.00	45.00	75.00	21.05	31.57	21.05

Demand set: A27/B2233 Base Flows AM 2015

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	16.0	2090.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	676.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.933	0.067	0.000
		1572.0	112.0	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 A27/B2233 Base Flows AM 2015
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)
07.45-08.00									
B-AC	8.48	9.24	0.918		0.00	6.68	73.5		0.68
C-A	19.72								
C-B	1.41	8.53	0.165		0.00	0.20	2.8		0.14
A-B	0.20								
A-C	26.22								

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)
08.00-08.15									
B-AC	10.13	8.50	1.192		6.68	32.79	300.8		2.74
C-A	23.55								
C-B	1.68	7.84	0.214		0.20	0.27	3.9		0.16
A-B	0.24								
A-C	31.31								

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)
08.15-08.30									
B-AC	12.40	7.48	1.659		32.79	106.80	1047.2		9.56
C-A	28.85								
C-B	2.06	6.89	0.298		0.27	0.42	6.0		0.21
A-B	0.29								
A-C	38.35								

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)
08.30-08.45									
B-AC	12.40	7.48	1.659		106.80	180.75	2156.7		17.90
C-A	28.85								
C-B	2.06	6.89	0.298		0.42	0.42	6.3		0.21
A-B	0.29								
A-C	38.35								

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)
08.45-09.00									
B-AC	10.13	8.50	1.192		180.75	205.20	2894.6		22.23
C-A	23.55								
C-B	1.68	7.84	0.214		0.42	0.28	4.3		0.16
A-B	0.24								
A-C	31.31								

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)
09.00-09.15									
B-AC	8.48	9.24	0.918		205.20	194.50	2997.8		21.74
C-A	19.72								
C-B	1.41	8.53	0.165		0.28	0.20	3.1		0.14
A-B	0.20								
A-C	26.22								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	6.7	*******
08.15	32.8	**********
08.30	106.8	**********
08.45	180.8	**********
09.00	205.2	**********
09.15	194.5	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	930.5	620.3	9470.6	10.18	11517.5	12.38
C-A	2163.7	1442.5				
C-B	154.2	102.8	26.4	0.17	26.4	0.17
A-B	22.0	14.7				
A-C	2876.7	1917.8				
ALL	6147.1	4098.1	9496.9	1.54	11543.9	1.88

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows AM 2025

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	30.59	45.88	30.59
ARM B	15.00	45.00	75.00	9.81	14.72	9.81
ARM C	15.00	45.00	75.00	24.46	36.69	24.46

Demand set: A27/B2233 Base Flows AM 2025

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	19.0	2428.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	785.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.934	0.066	0.000
		1827.0	130.0	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 A27/B2233 Base Flows AM 2025
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)
07.45-08.00									
B-AC	9.85	8.62	1.142		0.00	23.65	199.1		1.72
C-A	22.92								
C-B	1.63	7.96	0.205		0.00	0.25	3.7		0.16
A-B	0.24								
A-C	30.47								

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)
08.00-08.15									
B-AC	11.76	7.76	1.515		23.65	83.78	806.2		7.66
C-A	27.37								
C-B	1.95	7.16	0.272		0.25	0.37	5.3		0.19
A-B	0.28								
A-C	36.38								

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)
08.15-08.30									
B-AC	14.41	6.57	2.192		83.78	201.28	2138.0		21.31
C-A	33.53								
C-B	2.39	6.05	0.394		0.37	0.63	9.0		0.27
A-B	0.35								
A-C	44.55								

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)
08.30-08.45									
B-AC	14.41	6.57	2.192		201.28	318.76	3900.3		39.76
C-A	33.53								
C-B	2.39	6.05	0.394		0.63	0.64	9.6		0.27
A-B	0.35								
A-C	44.55								

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)
08.45-09.00									
B-AC	11.76	7.76	1.515		318.76	378.75	5231.3		42.09
C-A	27.37								
C-B	1.95	7.16	0.272		0.64	0.38	6.0		0.19
A-B	0.28								
A-C	36.38								

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)
09.00-09.15									
B-AC	9.85	8.62	1.142		378.75	397.16	5819.3		45.14
C-A	22.92								
C-B	1.63	7.96	0.205		0.38	0.26	4.1		0.16
A-B	0.24								
A-C	30.47								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	23.6	**********
08.15	83.8	**********
08.30	201.3	**********
08.45	318.8	**********
09.00	378.7	**********
09.15	397.2	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.6	*
08.45	0.6	*
09.00	0.4	
09.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	1080.5	720.3	18094.1	16.75	27240.1	25.21
C-A	2514.7	1676.5				
C-B	178.9	119.3	37.5	0.21	37.5	0.21
A-B	26.2	17.4				
A-C	3342.0	2228.0				
ALL	7142.3	4761.5	18131.6	2.54	27277.6	3.82

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows With Scheme AM 2015

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	26.56	39.84	26.56
ARM B	15.00	45.00	75.00	8.54	12.81	8.54
ARM C	15.00	45.00	75.00	21.17	31.76	21.17

Demand set: A27/B2233 Flows With Scheme AM 2015

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	16.0	2109.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	683.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.932	0.068	0.000
		1579.0	115.0	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 A27/B2233 Flows With Scheme AM 2015
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)
07.45-08.00									
B-AC	8.57	9.21	0.931		0.00	7.23	78.2		0.72
C-A	19.81								
C-B	1.44	8.50	0.170		0.00	0.20	2.9		0.14
A-B	0.20								
A-C	26.46								
08.00-08.15									
B-AC	10.23	8.46	1.210		7.23	35.30	323.2		2.93
C-A	23.66								
C-B	1.72	7.81	0.221		0.20	0.28	4.1		0.16
A-B	0.24								
A-C	31.60								
08.15-08.30									
B-AC	12.53	7.43	1.688		35.30	111.99	1104.8		10.14
C-A	28.98								
C-B	2.11	6.85	0.308		0.28	0.44	6.3		0.21
A-B	0.29								
A-C	38.70								
08.30-08.45									
B-AC	12.53	7.43	1.688		111.99	188.62	2254.5		20.42
C-A	28.98								
C-B	2.11	6.85	0.308		0.44	0.44	6.6		0.21
A-B	0.29								
A-C	38.70								

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)
08.45-09.00									
B-AC	10.23	8.46	1.210		188.62	215.26	3029.1		23.29
C-A	23.66								
C-B	1.72	7.81	0.221		0.44	0.29	4.5		0.16
A-B	0.24								
A-C	31.60								

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)
09.00-09.15									
B-AC	8.57	9.21	0.931		215.26	206.36	3162.1		23.00
C-A	19.81								
C-B	1.44	8.50	0.170		0.29	0.21	3.2		0.14
A-B	0.20								
A-C	26.46								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	7.2	*******
08.15	35.3	**********
08.30	112.0	**********
08.45	188.6	**********
09.00	215.3	**********
09.15	206.4	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	940.1	626.7	9952.0	10.59	12264.9	13.05
C-A	2173.4	1448.9				
C-B	158.3	105.5	27.5	0.17	27.5	0.17
A-B	22.0	14.7				
A-C	2902.9	1935.3				
ALL	6196.7	4131.1	9979.5	1.61	12292.4	1.98

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme AM 2025

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	30.83	46.24	30.83
ARM B	15.00	45.00	75.00	9.90	14.85	9.90
ARM C	15.00	45.00	75.00	24.59	36.88	24.59

Demand set: A27/B2233 Flows with Scheme AM 2025

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	19.0	2447.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	792.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.932	0.068	0.000
		1834.0	133.0	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 A27/B2233 Flows with Scheme AM 2025
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)
07.45-08.00									
B-AC	9.94	8.59	1.157		0.00	25.16	209.9		1.81
C-A	23.01								
C-B	1.67	7.93	0.211		0.00	0.26	3.8		0.16
A-B	0.24								
A-C	30.70								

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)
08.00-08.15									
B-AC	11.87	7.72	1.537		25.16	87.47	845.1		8.08
C-A	27.48								
C-B	1.99	7.12	0.280		0.26	0.38	5.5		0.19
A-B	0.28								
A-C	36.66								

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)
08.15-08.30									
B-AC	14.53	6.52	2.228		87.47	207.65	2213.4		22.15
C-A	33.65								
C-B	2.44	6.01	0.406		0.38	0.66	9.4		0.28
A-B	0.35								
A-C	44.90								

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)
08.30-08.45									
B-AC	14.53	6.52	2.228		207.65	327.82	4016.0		41.24
C-A	33.65								
C-B	2.44	6.01	0.406		0.66	0.67	10.1		0.28
A-B	0.35								
A-C	44.90								

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)
08.45-09.00									
B-AC	11.87	7.72	1.537		327.82	390.00	5383.6		43.44
C-A	27.48								
C-B	1.99	7.12	0.280		0.67	0.40	6.2		0.20
A-B	0.28								
A-C	36.66								

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)
09.00-09.15									
B-AC	9.94	8.59	1.157		390.00	410.24	6001.8		46.71
C-A	23.01								
C-B	1.67	7.93	0.211		0.40	0.27	4.2		0.16
A-B	0.24								
A-C	30.70								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	25.2	************************
08.15	87.5	**********
08.30	207.6	**********
08.45	327.8	**********
09.00	390.0	**********
09.15	410.2	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.7	*
08.45	0.7	*
09.00	0.4	
09.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	1090.1	726.8	18669.8	17.13	28467.7	26.11
C-A	2524.4	1682.9				
C-B	183.1	122.0	39.2	0.21	39.2	0.21
A-B	26.2	17.4				
A-C	3368.1	2245.4				
ALL	7191.8	4794.6	18709.0	2.60	28506.9	3.96

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme AM 2025 Sens 5050

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	30.74	46.11	30.74
ARM B	15.00	45.00	75.00	9.99	14.98	9.99
ARM C	15.00	45.00	75.00	24.58	36.86	24.58

Demand set: A27/B2233 Flows with Scheme AM 2025 Sens 5050

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	19.0	2440.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	799.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.931	0.069	0.000
		1831.0	135.0	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 A27/B2233 Flows with Scheme AM 2025 Sens 5050
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)
07.45-08.00									
B-AC	10.03	8.60	1.166		0.00	26.12	216.8		1.87
C-A	22.97								
C-B	1.69	7.94	0.213		0.00	0.27	3.8		0.16
A-B	0.24								
A-C	30.62								

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)
08.00-08.15									
B-AC	11.97	7.74	1.547		26.12	89.77	869.5		8.28
C-A	27.43								
C-B	2.02	7.13	0.284		0.27	0.39	5.6		0.20
A-B	0.28								
A-C	36.56								

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)
08.15-08.30									
B-AC	14.66	6.54	2.242		89.77	211.59	2260.2		22.53
C-A	33.60								
C-B	2.48	6.02	0.411		0.39	0.68	9.6		0.28
A-B	0.35								
A-C	44.77								

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)
08.30-08.45									
B-AC	14.66	6.54	2.242		211.59	333.41	4087.5		41.85
C-A	33.60								
C-B	2.48	6.02	0.411		0.68	0.69	10.3		0.28
A-B	0.35								
A-C	44.77								

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)
08.45-09.00									
B-AC	11.97	7.74	1.547		333.41	396.93	5477.5		44.10
C-A	27.43								
C-B	2.02	7.13	0.284		0.69	0.40	6.3		0.20
A-B	0.28								
A-C	36.56								

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)
09.00-09.15									
B-AC	10.03	8.60	1.166		396.93	418.30	6114.3		47.53
C-A	22.97								
C-B	1.69	7.94	0.213		0.40	0.27	4.3		0.16
A-B	0.24								
A-C	30.62								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	26.1	**************************
08.15	89.8	**********
08.30	211.6	**********
08.45	333.4	**********
09.00	396.9	**********
09.15	418.3	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.7	*
08.45	0.7	*
09.00	0.4	
09.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	1099.8	733.2	19025.8	17.30	29197.4	26.55
C-A	2520.2	1680.2				
C-B	185.8	123.9	39.9	0.21	39.9	0.21
A-B	26.2	17.4				
A-C	3358.5	2239.0				
ALL	7190.5	4793.6	19065.7	2.65	29237.3	4.07

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme AM 2025 Sens 8020

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	30.65	45.97	30.65
ARM B	15.00	45.00	75.00	10.09	15.13	10.09
ARM C	15.00	45.00	75.00	24.59	36.88	24.59

Demand set: A27/B2233 Flows with Scheme AM 2025 Sens 8020

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	19.0	2433.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	807.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.930	0.070	0.000
		1829.0	138.0	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 A27/B2233 Flows with Scheme AM 2025 Sens 8020
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)
07.45-08.00									
B-AC	10.13	8.61	1.176		0.00	27.25	224.9		1.93
C-A	22.95								
C-B	1.73	7.95	0.218		0.00	0.27	3.9		0.16
A-B	0.24								
A-C	30.53								

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)
08.00-08.15									
B-AC	12.09	7.75	1.560		27.25	92.46	898.1		8.54
C-A	27.40								
C-B	2.07	7.15	0.289		0.27	0.40	5.8		0.20
A-B	0.28								
A-C	36.45								

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)
08.15-08.30									
B-AC	14.81	6.56	2.258		92.46	216.20	2315.0		22.98
C-A	33.56								
C-B	2.53	6.04	0.419		0.40	0.70	9.9		0.28
A-B	0.35								
A-C	44.65								

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)
08.30-08.45									
B-AC	14.81	6.56	2.258		216.20	339.94	4171.1		37.51
C-A	33.56								
C-B	2.53	6.04	0.419		0.70	0.71	10.6		0.28
A-B	0.35								
A-C	44.65								

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)
08.45-09.00									
B-AC	12.09	7.75	1.560		339.94	405.04	5587.4		44.90
C-A	27.40								
C-B	2.07	7.15	0.289		0.71	0.41	6.5		0.20
A-B	0.28								
A-C	36.45								

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)
09.00-09.15									
B-AC	10.13	8.61	1.176		405.04	427.72	6245.7		48.50
C-A	22.95								
C-B	1.73	7.95	0.218		0.41	0.28	4.4		0.16
A-B	0.24								
A-C	30.53								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	27.3	**********
08.15	92.5	**********
08.30	216.2	**********
08.45	339.9	**********
09.00	405.0	**********
09.15	427.7	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.7	*
08.45	0.7	*
09.00	0.4	
09.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	1110.8	740.5	19442.2	17.50	30061.3	27.06
C-A	2517.5	1678.3				
C-B	189.9	126.6	41.1	0.22	41.1	0.22
A-B	26.2	17.4				
A-C	3348.8	2232.6				
ALL	7193.2	4795.5	19483.3	2.71	30102.4	4.18

* 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 ==========

Printed at 10:12:17 on 20/06/2013]

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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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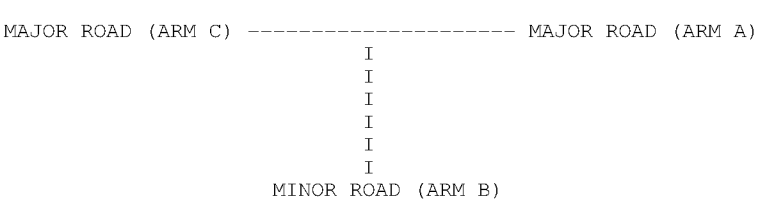
Run with file:- "C:\Westergate\B2233A27\B2233A27PM.vpi" (drive-on-the-left) at 13:11:53 on Thursday, 20 June 2013

RUN INFORMATION

RUN TITLE	: Westergate A27/B2233
LOCATION	: Westergate
DATE	: 06/06/13
CLIENT	:
ENUMERATOR	: Administrator [TNT-LAPTOP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A27 East
ARM B IS B2233
ARM C IS A27 West

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 18.00 M.
CENTRAL RESERVE WIDTH	(WCR) 6.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.00 M.
- VISIBILITY	(VC-B)160.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 140.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows PM 2013

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	16.91	25.37	16.91
ARM B	15.00	45.00	75.00	2.25	3.38	2.25
ARM C	15.00	45.00	75.00	27.69	41.53	27.69

Demand set: A27/B2233 Base Flows PM 2013

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	18.0	1335.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.000	0.000	1.000
		0.0	0.0	180.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.844	0.156	0.000
		1869.0	346.0	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 A27/B2233 Base Flows PM 2013
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)
07.45-08.00									
B-AC	2.26	10.61	0.213		0.00	0.27	3.9		0.12
C-A	23.45								
C-B	4.34	9.80	0.443		0.00	0.78	11.0		0.18
A-B	0.23								
A-C	16.75								

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)
08.00-08.15									
B-AC	2.70	10.14	0.266		0.27	0.36	5.2		0.13
C-A	28.00								
C-B	5.18	9.36	0.554		0.78	1.20	17.0		0.24
A-B	0.27								
A-C	20.00								

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)
08.15-08.30									
B-AC	3.30	9.48	0.348		0.36	0.53	7.6		0.16
C-A	34.30								
C-B	6.35	8.75	0.726		1.20	2.43	32.6		0.39
A-B	0.33								
A-C	24.50								

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)
08.30-08.45									
B-AC	3.30	9.48	0.348		0.53	0.53	7.9		0.16
C-A	34.30								
C-B	6.35	8.75	0.726		2.43	2.53	37.3		0.41
A-B	0.33								
A-C	24.50								

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)
08.45-09.00									
B-AC	2.70	10.14	0.266		0.53	0.37	5.7		0.13
C-A	28.00								
C-B	5.18	9.36	0.554		2.53	1.28	20.7		0.25
A-B	0.27								
A-C	20.00								

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)
09.00-09.15									
B-AC	2.26	10.61	0.213		0.37	0.27	4.2		0.12
C-A	23.45								
C-B	4.34	9.80	0.443		1.28	0.81	12.8		0.19
A-B	0.23								
A-C	16.75								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.5	*
08.45	0.5	*
09.00	0.4	
09.15	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.8	*
08.15	1.2	*
08.30	2.4	**
08.45	2.5	***
09.00	1.3	*
09.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	247.8	165.2	34.5	0.14	34.5	0.14
C-A	2572.5	1715.0				
C-B	476.2	317.5	131.4	0.28	131.5	0.28
A-B	24.8	16.5				
A-C	1837.5	1225.0				
ALL	5158.8	3439.2	166.0	0.03	166.0	0.03

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows PM 2015

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	17.06	25.59	17.06
ARM B	15.00	45.00	75.00	2.28	3.41	2.28
ARM C	15.00	45.00	75.00	27.94	41.91	27.94

Demand set: A27/B2233 Base Flows PM 2015

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	18.0	1347.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	182.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.844	0.156	0.000
		1886.0	349.0	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 A27/B2233 Base Flows PM 2015
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)
07.45-08.00									
B-AC	2.28	10.59	0.216		0.00	0.27	3.9		0.12
C-A	23.66								
C-B	4.38	9.78	0.448		0.00	0.79	11.2		0.18
A-B	0.23								
A-C	16.90								

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)
08.00-08.15									
B-AC	2.73	10.11	0.270		0.27	0.36	5.3		0.14
C-A	28.26								
C-B	5.23	9.33	0.560		0.79	1.23	17.4		0.24
A-B	0.27								
A-C	20.18								

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)
08.15-08.30									
B-AC	3.34	9.45	0.353		0.36	0.54	7.8		0.16
C-A	34.61								
C-B	6.40	8.72	0.735		1.23	2.53	33.7		0.40
A-B	0.33								
A-C	24.72								

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)
08.30-08.45									
B-AC	3.34	9.45	0.353		0.54	0.54	8.1		0.16
C-A	34.61								
C-B	6.40	8.72	0.735		2.53	2.64	38.9		0.43
A-B	0.33								
A-C	24.72								

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)
08.45-09.00									
B-AC	2.73	10.11	0.270		0.54	0.37	5.8		0.14
C-A	28.26								
C-B	5.23	9.33	0.560		2.64	1.32	21.4		0.25
A-B	0.27								
A-C	20.18								

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)
09.00-09.15									
B-AC	2.28	10.59	0.216		0.37	0.28	4.3		0.12
C-A	23.66								
C-B	4.38	9.78	0.448		1.32	0.83	13.1		0.19
A-B	0.23								
A-C	16.90								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.5	*
08.45	0.5	*
09.00	0.4	
09.15	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.8	*
08.15	1.2	*
08.30	2.5	***
08.45	2.6	***
09.00	1.3	*
09.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	250.5	167.0	35.2	0.14	35.2	0.14
C-A	2595.9	1730.6				
C-B	480.4	320.2	135.6	0.28	135.7	0.28
A-B	24.8	16.5				
A-C	1854.0	1236.0				
ALL	5205.6	3470.4	170.8	0.03	170.9	0.03

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Base Flows PM 2025

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	19.88	29.81	19.88
ARM B	15.00	45.00	75.00	2.66	3.99	2.66
ARM C	15.00	45.00	75.00	32.72	49.09	32.72

Demand set: A27/B2233 Base Flows PM 2025

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.008	0.992
		0.0	12.0	1578.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	213.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.844	0.156	0.000
		2209.0	409.0	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 A27/B2233 Base Flows PM 2025
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)
07.45-08.00									
B-AC	2.67	10.18	0.263		0.00	0.35	5.1		0.13
C-A	27.72								
C-B	5.13	9.40	0.546		0.00	1.16	16.1		0.23
A-B	0.15								
A-C	19.80								

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)
08.00-08.15									
B-AC	3.19	9.62	0.332		0.35	0.49	7.1		0.16
C-A	33.10								
C-B	6.13	8.88	0.690		1.16	2.08	28.4		0.35
A-B	0.18								
A-C	23.64								

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)
08.15-08.30									
B-AC	3.91	8.84	0.442		0.49	0.77	11.1		0.20
C-A	40.54								
C-B	7.51	8.16	0.919		2.08	6.63	76.2		0.85
A-B	0.22								
A-C	28.96								

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)
08.30-08.45									
B-AC	3.91	8.84	0.442		0.77	0.78	11.7		0.20
C-A	40.54								
C-B	7.51	8.16	0.919		6.63	7.94	110.4		1.14
A-B	0.22								
A-C	28.96								

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)
08.45-09.00									
B-AC	3.19	9.62	0.332		0.78	0.50	7.9		0.16
C-A	33.10								
C-B	6.13	8.88	0.690		7.94	2.40	47.0		0.47
A-B	0.18								
A-C	23.64								

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)
09.00-09.15									
B-AC	2.67	10.18	0.263		0.50	0.36	5.6		0.13
C-A	27.72								
C-B	5.13	9.40	0.546		2.40	1.24	20.0		0.24
A-B	0.15								
A-C	19.80								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.5	
08.30	0.8	*
08.45	0.8	*
09.00	0.5	*
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.2	*
08.15	2.1	**
08.30	6.6	*******
08.45	7.9	********
09.00	2.4	**
09.15	1.2	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	293.2	195.5	48.4	0.17	48.4	0.17
C-A	3040.5	2027.0				
C-B	563.0	375.3	298.2	0.53	298.2	0.53
A-B	16.5	11.0				
A-C	2172.0	1448.0				
ALL	6085.2	4056.8	346.5	0.06	346.6	0.06

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows With Scheme PM 2015

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	17.19	25.78	17.19
ARM B	15.00	45.00	75.00	2.33	3.49	2.33
ARM C	15.00	45.00	75.00	28.26	42.39	28.26

Demand set: A27/B2233 Flows With Scheme PM 2015

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	18.0	1357.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	186.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.843	0.157	0.000
		1905.0	356.0	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 A27/B2233 Flows With Scheme PM 2015
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)
07.45-08.00									
B-AC	2.33	10.57	0.221		0.00	0.28	4.1		0.12
C-A	23.90								
C-B	4.47	9.76	0.458		0.00	0.82	11.6		0.19
A-B	0.23								
A-C	17.03								

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)
08.00-08.15									
B-AC	2.79	10.09	0.276		0.28	0.38	5.5		0.14
C-A	28.54								
C-B	5.33	9.31	0.573		0.82	1.29	18.3		0.25
A-B	0.27								
A-C	20.33								

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)
08.15-08.30									
B-AC	3.41	9.42	0.362		0.38	0.56	8.1		0.17
C-A	34.96								
C-B	6.53	8.69	0.752		1.29	2.73	36.1		0.43
A-B	0.33								
A-C	24.90								

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)
08.30-08.45									
B-AC	3.41	9.42	0.362		0.56	0.56	8.4		0.17
C-A	34.96								
C-B	6.53	8.69	0.752		2.73	2.86	42.1		0.46
A-B	0.33								
A-C	24.90								

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)
08.45-09.00									
B-AC	2.79	10.09	0.276		0.56	0.39	6.0		0.14
C-A	28.54								
C-B	5.33	9.31	0.573		2.86	1.39	22.6		0.26
A-B	0.27								
A-C	20.33								

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)
09.00-09.15									
B-AC	2.33	10.57	0.221		0.39	0.29	4.4		0.12
C-A	23.90								
C-B	4.47	9.76	0.458		1.39	0.86	13.6		0.19
A-B	0.23								
A-C	17.03								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.6	*
08.45	0.6	*
09.00	0.4	
09.15	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.8	*
08.15	1.3	*
08.30	2.7	***
08.45	2.9	***
09.00	1.4	*
09.15	0.9	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	256.0	170.7	36.4	0.14	36.4	0.14
C-A	2622.1	1748.1				
C-B	490.0	326.7	144.3	0.29	144.4	0.29
A-B	24.8	16.5				
A-C	1867.8	1245.2				
ALL	5260.7	3507.1	180.8	0.03	180.8	0.03

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme PM 2025

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	20.11	30.17	20.11
ARM B	15.00	45.00	75.00	2.71	4.07	2.71
ARM C	15.00	45.00	75.00	33.05	49.57	33.05

Demand set: A27/B2233 Flows with Scheme PM 2025

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	21.0	1588.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	217.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.843	0.157	0.000
		2228.0	416.0	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 A27/B2233 Flows with Scheme PM 2025
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)
07.45-08.00									
B-AC	2.72	10.15	0.268		0.00	0.36	5.2		0.13
C-A	27.96								
C-B	5.22	9.37	0.557		0.00	1.21	16.8		0.23
A-B	0.26								
A-C	19.93								

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)
08.00-08.15									
B-AC	3.25	9.59	0.339		0.36	0.51	7.3		0.16
C-A	33.38								
C-B	6.23	8.84	0.705		1.21	2.22	30.1		0.36
A-B	0.31								
A-C	23.79								

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)
08.15-08.30									
B-AC	3.98	8.81	0.452		0.51	0.81	11.5		0.21
C-A	40.88								
C-B	7.63	8.12	0.941		2.22	7.54	84.5		0.94
A-B	0.39								
A-C	29.14								

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)
08.30-08.45									
B-AC	3.98	8.81	0.452		0.81	0.82	12.2		0.21
C-A	40.88								
C-B	7.63	8.12	0.941		7.54	9.36	128.2		1.31
A-B	0.39								
A-C	29.14								

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)
08.45-09.00									
B-AC	3.25	9.59	0.339		0.82	0.52	8.1		0.16
C-A	33.38								
C-B	6.23	8.84	0.705		9.36	2.60	54.5		0.54
A-B	0.31								
A-C	23.79								

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)
09.00-09.15									
B-AC	2.72	10.15	0.268		0.52	0.37	5.7		0.13
C-A	27.96								
C-B	5.22	9.37	0.557		2.60	1.30	21.1		0.25
A-B	0.26								
A-C	19.93								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.5	*
08.30	0.8	*
08.45	0.8	*
09.00	0.5	*
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.2	*
08.15	2.2	**
08.30	7.5	********
08.45	9.4	*********
09.00	2.6	***
09.15	1.3	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	298.7	199.1	50.1	0.17	50.1	0.17
C-A	3066.7	2044.5				
C-B	572.6	381.7	335.1	0.59	335.2	0.59
A-B	28.9	19.3				
A-C	2185.8	1457.2				
ALL	6152.6	4101.8	385.2	0.06	385.3	0.06

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme PM 2025 Sens 5050

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	20.08	30.11	20.08
ARM B	15.00	45.00	75.00	2.76	4.14	2.76
ARM C	15.00	45.00	75.00	33.05	49.57	33.05

Demand set: A27/B2233 Flows with Scheme PM 2025 Sens 5050

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	21.0	1585.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	221.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.840	0.160	0.000
		2221.0	423.0	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 A27/B2233 Flows with Scheme PM 2025 Sens 5050
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)
07.45-08.00									
B-AC	2.77	10.16	0.273		0.00	0.37	5.3		0.13
C-A	27.87								
C-B	5.31	9.37	0.566		0.00	1.26	17.3		0.24
A-B	0.26								
A-C	19.89								

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)
08.00-08.15									
B-AC	3.31	9.59	0.345		0.37	0.52	7.5		0.16
C-A	33.28								
C-B	6.34	8.85	0.716		1.26	2.33	31.5		0.38
A-B	0.31								
A-C	23.75								

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)
08.15-08.30									
B-AC	4.06	8.81	0.460		0.52	0.83	11.9		0.21
C-A	40.76								
C-B	7.76	8.12	0.956		2.33	8.29	91.2		1.00
A-B	0.39								
A-C	29.09								

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)
08.30-08.45									
B-AC	4.06	8.81	0.460		0.83	0.84	12.6		0.21
C-A	40.76								
C-B	7.76	8.12	0.956		8.29	10.59	143.1		1.45
A-B	0.39								
A-C	29.09								

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)
08.45-09.00									
B-AC	3.31	9.59	0.345		0.84	0.54	8.4		0.16
C-A	33.28								
C-B	6.34	8.85	0.716		10.59	2.77	61.6		0.60
A-B	0.31								
A-C	23.75								

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)
09.00-09.15									
B-AC	2.77	10.16	0.273		0.54	0.38	5.9		0.14
C-A	27.87								
C-B	5.31	9.37	0.566		2.77	1.35	22.0		0.26
A-B	0.26								
A-C	19.89								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.5	*
08.30	0.8	*
08.45	0.8	*
09.00	0.5	*
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.3	*
08.15	2.3	**
08.30	8.3	********
08.45	10.6	**********
09.00	2.8	***
09.15	1.4	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	304.2	202.8	51.5	0.17	51.6	0.17
C-A	3057.0	2038.0				
C-B	582.2	388.2	366.7	0.63	366.8	0.63
A-B	28.9	19.3				
A-C	2181.6	1454.4				
ALL	6154.0	4102.7	418.2	0.07	418.4	0.07

* 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 STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
783.36	0.15	0.06

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
734.15	0.14	0.06	0.09	0.20

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
724.66	0.13	0.13

(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: A27/B2233 Flows with Scheme PM 2025 Sens 8020

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

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	20.02	30.04	20.02
ARM B	15.00	45.00	75.00	2.81	4.22	2.81
ARM C	15.00	45.00	75.00	33.05	49.57	33.05

Demand set: A27/B2233 Flows with Scheme PM 2025 Sens 8020

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.013	0.987
		0.0	21.0	1581.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	225.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.837	0.163	0.000
		2214.0	430.0	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 A27/B2233 Flows with Scheme PM 2025 Sens 8020
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)
07.45-08.00									
B-AC	2.82	10.16	0.278		0.00	0.38	5.5		0.14
C-A	27.78								
C-B	5.40	9.38	0.575		0.00	1.30	17.9		0.24
A-B	0.26								
A-C	19.84								

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)
08.00-08.15									
B-AC	3.37	9.60	0.351		0.38	0.53	7.7		0.16
C-A	33.17								
C-B	6.44	8.86	0.727		1.30	2.45	33.0		0.39
A-B	0.31								
A-C	23.69								

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)
08.15-08.30									
B-AC	4.13	8.83	0.468		0.53	0.86	12.2		0.21
C-A	40.63								
C-B	7.89	8.13	0.970		2.45	9.10	98.3		1.07
A-B	0.39								
A-C	29.01								

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)
08.30-08.45									
B-AC	4.13	8.83	0.468		0.86	0.87	13.0		0.21
C-A	40.63								
C-B	7.89	8.13	0.970		9.10	11.98	159.8		1.59
A-B	0.39								
A-C	29.01								

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)
08.45-09.00									
B-AC	3.37	9.60	0.351		0.87	0.55	8.6		0.16
C-A	33.17								
C-B	6.44	8.86	0.727		11.98	2.97	70.4		0.67
A-B	0.31								
A-C	23.69								

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)
09.00-09.15									
B-AC	2.82	10.16	0.278		0.55	0.39	6.0		0.14
C-A	27.78								
C-B	5.40	9.38	0.575		2.97	1.40	22.9		0.26
A-B	0.26								
A-C	19.84								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.5	*
08.30	0.9	*
08.45	0.9	*
09.00	0.5	*
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.3	*
08.15	2.4	**
08.30	9.1	*********
08.45	12.0	************
09.00	3.0	***
09.15	1.4	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	309.7	206.5	53.0	0.17	53.0	0.17
C-A	3047.4	2031.6				
C-B	591.9	394.6	402.4	0.68	402.5	0.68
A-B	28.9	19.3				
A-C	2176.1	1450.8				
ALL	6154.0	4102.7	455.4	0.07	455.5	0.07

* 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 ==========

Printed at 13:15:02 on 20/06/2013]

Appendix M ARCADY Modelling Output

ARUN DISTRICT COUNCIL AL/3/19/PL

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27Fontwell\FontwellAM.vai" (drive-on-the-left) at 11:01:38 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
ARM B	10.000
ARM C	3.000
ARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2010 AM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	27.05	40.57	27.05
ARM B	15.00	45.00	75.00	3.30	4.95	3.30
ARM C	15.00	45.00	75.00	4.82	7.24	4.82
ARM D	15.00	45.00	75.00	18.54	27.81	18.54

DEMAND SET TITLE: Fontwell Rbt 2010 AM Base

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
07.45 - 09.15	ARM A	0.000	0.022	0.117	0.861
		0.0	47.0	254.0	1863.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.223	0.000	0.174	0.602
		59.0	0.0	46.0	159.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.663	0.047	0.000	0.290
		256.0	18.0	0.0	112.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.829	0.052	0.109	0.011
		1229.0	77.0	161.0	16.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	27.15	50.28	0.540	- - -	0.0	1.2	17.1	-	0.043
ARM B	3.31	20.63	0.161	- - -	0.0	0.2	2.8	-	0.058
ARM C	4.84	14.99	0.323	- - -	0.0	0.5	6.8	-	0.098
ARM D	18.61	36.95	0.504	- - -	0.0	1.0	14.7	-	0.054

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)
08.00-08.15									
ARM A	32.42	49.72	0.652	- - -	1.2	1.9	27.0	-	0.058
ARM B	3.96	17.51	0.226	- - -	0.2	0.3	4.3	-	0.074
ARM C	5.78	12.19	0.475	- - -	0.5	0.9	12.7	-	0.155
ARM D	22.22	36.30	0.612	- - -	1.0	1.6	22.7	-	0.071

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)
08.15-08.30									
ARM A	39.71	48.96	0.811	- - -	1.9	4.1	57.9	-	0.105
ARM B	4.84	13.29	0.365	- - -	0.3	0.6	8.2	-	0.118
ARM C	7.08	8.38	0.845	- - -	0.9	4.3	51.9	-	0.588
ARM D	27.21	35.51	0.766	- - -	1.6	3.2	44.6	-	0.117

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)
08.30-08.45									
ARM A	39.71	48.94	0.811	- - -	4.1	4.2	62.9	-	0.108
ARM B	4.84	13.20	0.367	- - -	0.6	0.6	8.6	-	0.120
ARM C	7.08	8.31	0.853	- - -	4.3	4.9	70.0	-	0.746
ARM D	27.21	35.41	0.769	- - -	3.2	3.3	48.4	-	0.122

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)
08.45-09.00									
ARM A	32.42	49.68	0.653	- - -	4.2	1.9	29.6	-	0.059
ARM B	3.96	17.39	0.227	- - -	0.6	0.3	4.6	-	0.075
ARM C	5.78	12.08	0.479	- - -	4.9	0.9	16.6	-	0.173
ARM D	22.22	36.13	0.615	- - -	3.3	1.6	25.2	-	0.073

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)
09.00-09.15									
ARM A	27.15	50.26	0.540	- - -	1.9	1.2	18.1	-	0.043
ARM B	3.31	20.55	0.161	- - -	0.3	0.2	2.9	-	0.058
ARM C	4.84	14.92	0.325	- - -	0.9	0.5	7.5	-	0.100
ARM D	18.61	36.91	0.504	- - -	1.6	1.0	15.7	-	0.055

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.2	*
08.15	1.9	**
08.30	4.1	****
08.45	4.2	****
09.00	1.9	**
09.15	1.2	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.2	
08.15	0.3	
08.30	0.6	*
08.45	0.6	*
09.00	0.3	
09.15	0.2	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	
08.15	0.9	*
08.30	4.3	****
08.45	4.9	*****
09.00	0.9	*
09.15	0.5	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.0	*
08.15	1.6	**
08.30	3.2	***
08.45	3.3	***
09.00	1.6	**
09.15	1.0	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	2978.6	1985.7	212.6	0.07	212.6	0.07
B	363.4	242.3	31.4	0.09	31.4	0.09
C	531.3	354.2	165.6	0.31	165.6	0.31
D	2041.2	1360.8	171.3	0.08	171.4	0.08
ALL	5914.5	3943.0	580.8	0.10	580.9	0.10

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

END OF JOB

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

Printed at 11:02:26 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27Fontwell\FontwellPM.vai" (drive-on-the-left) at 11:23:21 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
IARM B	10.000
IARM C	3.000
IARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2013 PM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	22.46	33.69	22.46
ARM B	15.00	45.00	75.00	1.90	2.85	1.90
ARM C	15.00	45.00	75.00	4.28	6.41	4.28
ARM D	15.00	45.00	75.00	23.01	34.52	23.01

DEMAND SET TITLE: Fontwell Rbt 2013 PM Base

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.026	0.221	0.753
		0.0	46.0	397.0	1354.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.276	0.000	0.283	0.441
		42.0	0.0	43.0	67.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.713	0.050	0.000	0.237
		244.0	17.0	0.0	81.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.850	0.045	0.086	0.020
		1564.0	82.0	158.0	37.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	22.55	50.05	0.450	- - -	0.0	0.8	12.0	-	0.036
ARM B	1.91	23.04	0.083	- - -	0.0	0.1	1.3	-	0.047
ARM C	4.29	19.07	0.225	- - -	0.0	0.3	4.2	-	0.067
ARM D	23.10	37.25	0.620	- - -	0.0	1.6	23.2	-	0.070

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									
ARM A	26.92	49.44	0.545	- - -	0.8	1.2	17.5	-	0.044
ARM B	2.28	20.39	0.112	- - -	0.1	0.1	1.9	-	0.055
ARM C	5.12	17.06	0.300	- - -	0.3	0.4	6.2	-	0.084
ARM D	27.58	36.65	0.753	- - -	1.6	3.0	41.9	-	0.108

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									
ARM A	32.98	48.67	0.677	- - -	1.2	2.1	30.1	-	0.063
ARM B	2.79	16.81	0.166	- - -	0.1	0.2	2.9	-	0.071
ARM C	6.28	14.32	0.438	- - -	0.4	0.8	11.1	-	0.124
ARM D	33.78	35.84	0.943	- - -	3.0	11.7	138.7	-	0.326

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									
ARM A	32.98	48.61	0.678	- - -	2.1	2.1	31.3	-	0.064
ARM B	2.79	16.75	0.167	- - -	0.2	0.2	3.0	-	0.072
ARM C	6.28	14.29	0.439	- - -	0.8	0.8	11.6	-	0.125
ARM D	33.78	35.82	0.943	- - -	11.7	13.4	190.4	-	0.423

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)
17.45-18.00									
ARM A	26.92	49.34	0.546	- - -	2.1	1.2	18.6	-	0.045
ARM B	2.28	20.30	0.112	- - -	0.2	0.1	1.9	-	0.056
ARM C	5.12	17.01	0.301	- - -	0.8	0.4	6.7	-	0.084
ARM D	27.58	36.63	0.753	- - -	13.4	3.1	57.5	-	0.129

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)
18.00-18.15									
ARM A	22.55	50.02	0.451	- - -	1.2	0.8	12.6	-	0.036
ARM B	1.91	22.99	0.083	- - -	0.1	0.1	1.4	-	0.047
ARM C	4.29	19.03	0.226	- - -	0.4	0.3	4.5	-	0.068
ARM D	23.10	37.23	0.621	- - -	3.1	1.7	25.8	-	0.072

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.2	*
17.30	2.1	**
17.45	2.1	**
18.00	1.2	*
18.15	0.8	*

QUEUE AT ARM B

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

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.8	*
17.45	0.8	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.6	**
17.15	3.0	***
17.30	11.7	**********
17.45	13.4	**********
18.00	3.1	***
18.15	1.7	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	2473.4	1649.0	122.0	0.05	122.0	0.05
B	209.2	139.5	12.4	0.06	12.4	0.06
C	470.7	313.8	44.4	0.09	44.4	0.09
D	2534.0	1689.3	477.6	0.19	477.6	0.19
ALL	5687.4	3791.6	656.3	0.12	656.4	0.12

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

END OF JOB

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

Printed at 11:24:11 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27Fontwell\FontwellAM.vai" (drive-on-the-left) at 11:02:45 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
IARM B	10.000
IARM C	3.000
IARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2015 AM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	27.73	41.59	27.73
ARM B	15.00	45.00	75.00	3.38	5.06	3.38
ARM C	15.00	45.00	75.00	4.95	7.42	4.95
ARM D	15.00	45.00	75.00	19.00	28.50	19.00

DEMAND SET TITLE: Fontwell Rbt 2015 AM Base

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.45 - 09.15					
	ARM A	0.000	0.022	0.117	0.861
		0.0	48.0	260.0	1910.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.222	0.000	0.174	0.604
		60.0	0.0	47.0	163.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.664	0.045	0.000	0.290
		263.0	18.0	0.0	115.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.829	0.052	0.109	0.011
		1260.0	79.0	165.0	16.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	27.83	50.22	0.554	- - -	0.0	1.2	18.1	-	0.044
ARM B	3.39	20.24	0.167	- - -	0.0	0.2	2.9	-	0.059
ARM C	4.97	14.64	0.339	- - -	0.0	0.5	7.4	-	0.103
ARM D	19.07	36.87	0.517	- - -	0.0	1.1	15.5	-	0.056

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)
08.00-08.15									
ARM A	33.23	49.64	0.669	- - -	1.2	2.0	29.1	-	0.060
ARM B	4.05	17.04	0.237	- - -	0.2	0.3	4.5	-	0.077
ARM C	5.93	11.76	0.504	- - -	0.5	1.0	14.2	-	0.170
ARM D	22.77	36.21	0.629	- - -	1.1	1.7	24.3	-	0.074

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)
08.15-08.30									
ARM A	40.70	48.88	0.833	- - -	2.0	4.8	65.7	-	0.117
ARM B	4.95	12.72	0.389	- - -	0.3	0.6	9.1	-	0.128
ARM C	7.27	7.88	0.922	- - -	1.0	6.6	72.5	-	0.824
ARM D	27.89	35.48	0.786	- - -	1.7	3.5	49.4	-	0.128

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)
08.30-08.45									
ARM A	40.70	48.85	0.833	- - -	4.8	4.9	72.4	-	0.122
ARM B	4.95	12.62	0.393	- - -	0.6	0.6	9.5	-	0.130
ARM C	7.27	7.79	0.933	- - -	6.6	8.5	114.4	-	1.246
ARM D	27.89	35.34	0.789	- - -	3.5	3.7	54.2	-	0.134

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)
08.45-09.00									
ARM A	33.23	49.60	0.670	- - -	4.9	2.1	32.2	-	0.063
ARM B	4.05	16.90	0.239	- - -	0.6	0.3	4.9	-	0.078
ARM C	5.93	11.64	0.510	- - -	8.5	1.1	22.9	-	0.210
ARM D	22.77	35.90	0.634	- - -	3.7	1.8	27.5	-	0.078

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)
09.00-09.15									
ARM A	27.83	50.20	0.554	- - -	2.1	1.3	19.2	-	0.045
ARM B	3.39	20.15	0.168	- - -	0.3	0.2	3.1	-	0.060
ARM C	4.97	14.57	0.341	- - -	1.1	0.5	8.1	-	0.105
ARM D	19.07	36.83	0.518	- - -	1.8	1.1	16.7	-	0.057

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.2	*
08.15	2.0	**
08.30	4.8	*****
08.45	4.9	*****
09.00	2.1	**
09.15	1.3	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.2	
08.15	0.3	
08.30	0.6	*
08.45	0.6	*
09.00	0.3	
09.15	0.2	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	*
08.15	1.0	*
08.30	6.6	*******
08.45	8.5	********
09.00	1.1	*
09.15	0.5	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.1	*
08.15	1.7	**
08.30	3.5	****
08.45	3.7	****
09.00	1.8	**
09.15	1.1	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	3052.9	2035.3	236.8	0.08	236.8	0.08
B	371.6	247.8	34.1	0.09	34.1	0.09
C	545.1	363.4	239.4	0.44	239.5	0.44
D	2092.2	1394.8	187.5	0.09	187.6	0.09
ALL	6061.8	4041.2	697.9	0.12	697.9	0.12

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

END OF JOB

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

Printed at 11:03:28 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27Fontwell\FontwellAM.vai" (drive-on-the-left) at 11:05:33 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
IARM B	10.000
IARM C	3.000
IARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2015 with Scheme

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	27.80	41.70	27.80
ARM B	15.00	45.00	75.00	3.38	5.06	3.38
ARM C	15.00	45.00	75.00	5.41	8.12	5.41
ARM D	15.00	45.00	75.00	19.09	28.63	19.09

DEMAND SET TITLE: Fontwell Rbt 2015 with Scheme

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.45 - 09.15	ARM A	0.000	0.022	0.120	0.859
		0.0	48.0	266.0	1910.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.222	0.000	0.174	0.604
		60.0	0.0	47.0	163.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.649	0.042	0.000	0.309
		281.0	18.0	0.0	134.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.825	0.052	0.113	0.010
		1260.0	79.0	172.0	16.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	27.91	50.14	0.557	- - -	0.0	1.2	18.2	-	0.045
ARM B	3.39	20.15	0.168	- - -	0.0	0.2	3.0	-	0.060
ARM C	5.43	14.64	0.371	- - -	0.0	0.6	8.4	-	0.108
ARM D	19.16	36.69	0.522	- - -	0.0	1.1	15.8	-	0.057

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)
08.00-08.15									
ARM A	33.32	49.55	0.672	- - -	1.2	2.0	29.5	-	0.061
ARM B	4.05	16.93	0.239	- - -	0.2	0.3	4.6	-	0.078
ARM C	6.49	11.76	0.552	- - -	0.6	1.2	16.9	-	0.187
ARM D	22.88	35.99	0.636	- - -	1.1	1.7	25.0	-	0.076

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)
08.15-08.30									
ARM A	40.81	48.78	0.837	- - -	2.0	4.9	67.3	-	0.120
ARM B	4.95	12.59	0.393	- - -	0.3	0.6	9.2	-	0.130
ARM C	7.95	7.88	1.008	- - -	1.2	11.0	108.8	-	1.161
ARM D	28.02	35.37	0.792	- - -	1.7	3.7	51.0	-	0.131

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)
08.30-08.45									
ARM A	40.81	48.75	0.837	- - -	4.9	5.0	74.4	-	0.125
ARM B	4.95	12.49	0.397	- - -	0.6	0.7	9.7	-	0.133
ARM C	7.95	7.79	1.020	- - -	11.0	17.0	212.0	-	2.076
ARM D	28.02	35.22	0.796	- - -	3.7	3.8	56.2	-	0.139

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)
08.45-09.00									
ARM A	33.32	49.49	0.673	- - -	5.0	2.1	32.8	-	0.063
ARM B	4.05	16.79	0.241	- - -	0.7	0.3	4.9	-	0.079
ARM C	6.49	11.63	0.558	- - -	17.0	1.3	47.9	-	0.310
ARM D	22.88	35.39	0.647	- - -	3.8	1.9	29.1	-	0.082

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)
09.00-09.15									
ARM A	27.91	50.12	0.557	- - -	2.1	1.3	19.4	-	0.045
ARM B	3.39	20.06	0.169	- - -	0.3	0.2	3.1	-	0.060
ARM C	5.43	14.56	0.373	- - -	1.3	0.6	9.4	-	0.111
ARM D	19.16	36.64	0.523	- - -	1.9	1.1	17.0	-	0.058

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.2	*
08.15	2.0	**
08.30	4.9	*****
08.45	5.0	*****
09.00	2.1	**
09.15	1.3	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.2	
08.15	0.3	
08.30	0.6	*
08.45	0.7	*
09.00	0.3	
09.15	0.2	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.6	*
08.15	1.2	*
08.30	11.0	**********
08.45	17.0	**********
09.00	1.3	*
09.15	0.6	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.1	*
08.15	1.7	**
08.30	3.7	****
08.45	3.8	****
09.00	1.9	**
09.15	1.1	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	3061.2	2040.8	241.6	0.08	241.6	0.08
B	371.6	247.8	34.5	0.09	34.5	0.09
C	596.0	397.3	403.3	0.68	403.3	0.68
D	2101.8	1401.2	194.0	0.09	194.0	0.09
ALL	6130.6	4087.1	873.5	0.14	873.5	0.14

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

END OF JOB

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

Printed at 11:07:59 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27Fontwell\FontwellPM.vai" (drive-on-the-left) at 13:03:47 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
ARM B	10.000
ARM C	3.000
ARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2015 PM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	22.66	33.99	22.66
ARM B	15.00	45.00	75.00	1.91	2.87	1.91
ARM C	15.00	45.00	75.00	4.31	6.47	4.31
ARM D	15.00	45.00	75.00	23.21	34.82	23.21

DEMAND SET TITLE: Fontwell Rbt 2015 PM Base

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.025	0.221	0.753
		0.0	46.0	401.0	1366.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.275	0.000	0.281	0.444
		42.0	0.0	43.0	68.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.713	0.049	0.000	0.238
		246.0	17.0	0.0	82.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.850	0.045	0.086	0.020
		1578.0	83.0	159.0	37.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	22.75	50.03	0.455	- - -	0.0	0.8	12.2	-	0.037
ARM B	1.92	22.92	0.084	- - -	0.0	0.1	1.3	-	0.048
ARM C	4.33	18.98	0.228	- - -	0.0	0.3	4.3	-	0.068
ARM D	23.30	37.23	0.626	- - -	0.0	1.7	23.8	-	0.071

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									
ARM A	27.16	49.42	0.550	- - -	0.8	1.2	17.8	-	0.045
ARM B	2.29	20.25	0.113	- - -	0.1	0.1	1.9	-	0.056
ARM C	5.17	16.95	0.305	- - -	0.3	0.4	6.4	-	0.085
ARM D	27.82	36.62	0.760	- - -	1.7	3.1	43.4	-	0.111

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									
ARM A	33.27	48.65	0.684	- - -	1.2	2.1	30.9	-	0.065
ARM B	2.81	16.64	0.169	- - -	0.1	0.2	3.0	-	0.072
ARM C	6.33	14.19	0.446	- - -	0.4	0.8	11.5	-	0.126
ARM D	34.08	35.81	0.952	- - -	3.1	12.9	149.8	-	0.351

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									
ARM A	33.27	48.59	0.685	- - -	2.1	2.2	32.2	-	0.065
ARM B	2.81	16.58	0.169	- - -	0.2	0.2	3.0	-	0.073
ARM C	6.33	14.16	0.447	- - -	0.8	0.8	12.0	-	0.128
ARM D	34.08	35.79	0.952	- - -	12.9	15.1	212.7	-	0.472

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)
17.45-18.00									
ARM A	27.16	49.31	0.551	- - -	2.2	1.2	19.0	-	0.045
ARM B	2.29	20.16	0.114	- - -	0.2	0.1	2.0	-	0.056
ARM C	5.17	16.90	0.306	- - -	0.8	0.4	6.9	-	0.086
ARM D	27.82	36.60	0.760	- - -	15.1	3.3	62.3	-	0.137

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)
18.00-18.15									
ARM A	22.75	50.00	0.455	- - -	1.2	0.8	12.8	-	0.037
ARM B	1.92	22.87	0.084	- - -	0.1	0.1	1.4	-	0.048
ARM C	4.33	18.94	0.229	- - -	0.4	0.3	4.6	-	0.069
ARM D	23.30	37.21	0.626	- - -	3.3	1.7	26.4	-	0.073

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.2	*
17.30	2.1	**
17.45	2.2	**
18.00	1.2	*
18.15	0.8	*

QUEUE AT ARM B

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

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.8	*
17.45	0.8	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.7	**
17.15	3.1	***
17.30	12.9	**********
17.45	15.1	**********
18.00	3.3	***
18.15	1.7	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	2495.5	1663.6	124.9	0.05	124.9	0.05
B	210.6	140.4	12.6	0.06	12.6	0.06
C	474.9	316.6	45.5	0.10	45.5	0.10
D	2556.0	1704.0	518.5	0.20	518.5	0.20
ALL	5736.9	3824.6	701.5	0.12	701.6	0.12

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

END OF JOB

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

Printed at 13:04:26 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27Fontwell\FontwellPM.vai" (drive-on-the-left) at 13:05:38 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
ARM B	10.000
ARM C	3.000
ARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2015 with Scheme

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	22.89	34.33	22.89
ARM B	15.00	45.00	75.00	1.91	2.87	1.91
ARM C	15.00	45.00	75.00	4.56	6.84	4.56
ARM D	15.00	45.00	75.00	23.46	35.19	23.46

DEMAND SET TITLE: Fontwell Rbt 2015 with Scheme

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.025	0.229	0.746
		0.0	46.0	419.0	1366.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.275	0.000	0.281	0.444
		42.0	0.0	43.0	68.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.701	0.047	0.000	0.252
		256.0	17.0	0.0	92.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.841	0.044	0.095	0.020
		1578.0	83.0	178.0	38.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	22.97	49.82	0.461	- - -	0.0	0.9	12.5	-	0.037
ARM B	1.92	22.66	0.085	- - -	0.0	0.1	1.4	-	0.048
ARM C	4.58	18.97	0.241	- - -	0.0	0.3	4.6	-	0.069
ARM D	23.55	37.13	0.634	- - -	0.0	1.7	24.6	-	0.072

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									
ARM A	27.43	49.17	0.558	- - -	0.9	1.3	18.4	-	0.046
ARM B	2.29	19.94	0.115	- - -	0.1	0.1	1.9	-	0.057
ARM C	5.47	16.94	0.323	- - -	0.3	0.5	6.9	-	0.087
ARM D	28.12	36.50	0.770	- - -	1.7	3.2	45.7	-	0.116

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									
ARM A	33.60	48.37	0.695	- - -	1.3	2.2	32.4	-	0.067
ARM B	2.81	16.27	0.173	- - -	0.1	0.2	3.1	-	0.074
ARM C	6.70	14.19	0.472	- - -	0.5	0.9	12.7	-	0.133
ARM D	34.44	35.66	0.966	- - -	3.2	15.2	169.8	-	0.395

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									
ARM A	33.60	48.29	0.696	- - -	2.2	2.3	33.9	-	0.068
ARM B	2.81	16.20	0.173	- - -	0.2	0.2	3.1	-	0.075
ARM C	6.70	14.15	0.473	- - -	0.9	0.9	13.3	-	0.134
ARM D	34.44	35.65	0.966	- - -	15.2	18.6	256.3	-	0.569

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)
17.45-18.00									
ARM A	27.43	49.02	0.560	- - -	2.3	1.3	19.7	-	0.047
ARM B	2.29	19.82	0.116	- - -	0.2	0.1	2.0	-	0.057
ARM C	5.47	16.89	0.324	- - -	0.9	0.5	7.5	-	0.088
ARM D	28.12	36.48	0.771	- - -	18.6	3.5	72.6	-	0.154

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)
18.00-18.15									
ARM A	22.97	49.79	0.461	- - -	1.3	0.9	13.1	-	0.037
ARM B	1.92	22.60	0.085	- - -	0.1	0.1	1.4	-	0.048
ARM C	4.58	18.93	0.242	- - -	0.5	0.3	4.9	-	0.070
ARM D	23.55	37.10	0.635	- - -	3.5	1.8	27.5	-	0.075

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.9	*
17.15	1.3	*
17.30	2.2	**
17.45	2.3	**
18.00	1.3	*
18.15	0.9	*

QUEUE AT ARM B

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

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.9	*
17.45	0.9	*
18.00	0.5	
18.15	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.7	**
17.15	3.2	***
17.30	15.2	***************
17.45	18.6	******************
18.00	3.5	***
18.15	1.8	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	2520.2	1680.2	130.1	0.05	130.1	0.05
B	210.6	140.4	12.9	0.06	12.9	0.06
C	502.4	334.9	49.9	0.10	49.9	0.10
D	2583.6	1722.4	596.5	0.23	596.6	0.23
ALL	5816.8	3877.9	789.3	0.14	789.4	0.14

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

END OF JOB

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

Printed at 13:06:13 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:- "C:\Westergate\A27Fontwell\FontwellAM.vai" (drive-on-the-left) at 11:03:43 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
ARM B	10.000
ARM C	3.000
ARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2025 AM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	32.24	48.36	32.24
ARM B	15.00	45.00	75.00	3.92	5.89	3.92
ARM C	15.00	45.00	75.00	5.74	8.61	5.74
ARM D	15.00	45.00	75.00	22.09	33.13	22.09

DEMAND SET TITLE: Fontwell Rbt 2025 AM Base

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.45 - 09.15	ARM A	0.000	0.022	0.117	0.861
		0.0	56.0	303.0	2220.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.223	0.000	0.175	0.602
		70.0	0.0	55.0	189.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.664	0.046	0.000	0.290
		305.0	21.0	0.0	133.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.829	0.052	0.109	0.011
		1464.0	92.0	192.0	19.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	32.36	49.74	0.651	- - -	0.0	1.8	26.6	-	0.057
ARM B	3.94	17.59	0.224	- - -	0.0	0.3	4.2	-	0.073
ARM C	5.76	12.27	0.469	- - -	0.0	0.9	12.3	-	0.151
ARM D	22.17	36.33	0.610	- - -	0.0	1.5	22.3	-	0.070

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)
08.00-08.15									
ARM A	38.64	49.07	0.787	- - -	1.8	3.6	50.9	-	0.094
ARM B	4.70	13.89	0.339	- - -	0.3	0.5	7.4	-	0.109
ARM C	6.88	8.94	0.769	- - -	0.9	3.0	38.2	-	0.430
ARM D	26.47	35.61	0.743	- - -	1.5	2.8	40.0	-	0.107

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)
08.15-08.30									
ARM A	47.33	48.31	0.980	- - -	3.6	20.1	217.7	-	0.368
ARM B	5.76	9.33	0.618	- - -	0.5	1.5	21.2	-	0.270
ARM C	8.42	4.83	1.742	- - -	3.0	57.3	454.9	-	6.860
ARM D	32.43	36.53	0.888	- - -	2.8	7.0	91.6	-	0.216

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)
08.30-08.45									
ARM A	47.33	48.29	0.980	- - -	20.1	25.6	346.9	-	0.563
ARM B	5.76	8.92	0.646	- - -	1.5	1.7	25.3	-	0.313
ARM C	8.42	4.46	1.886	- - -	57.3	116.7	1305.3	-	14.212
ARM D	32.43	36.71	0.883	- - -	7.0	7.2	106.9	-	0.230

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)
08.45-09.00									
ARM A	38.64	48.97	0.789	- - -	25.6	3.9	88.7	-	0.131
ARM B	4.70	13.02	0.361	- - -	1.7	0.6	9.1	-	0.122
ARM C	6.88	8.16	0.843	- - -	116.7	98.5	1614.1	-	11.416
ARM D	26.47	34.82	0.760	- - -	7.2	3.3	53.2	-	0.127

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)
09.00-09.15									
ARM A	32.36	49.47	0.654	- - -	3.9	1.9	29.7	-	0.059
ARM B	3.94	17.44	0.226	- - -	0.6	0.3	4.5	-	0.074
ARM C	5.76	12.13	0.475	- - -	98.5	4.7	774.2	-	4.406
ARM D	22.17	32.74	0.677	- - -	3.3	2.1	33.5	-	0.096

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.8	**
08.15	3.6	****
08.30	20.1	********************
08.45	25.6	*************************
09.00	3.9	****
09.15	1.9	**

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.5	*
08.30	1.5	**
08.45	1.7	**
09.00	0.6	*
09.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.9	*
08.15	3.0	***
08.30	57.3	**********
08.45	116.7	**********
09.00	98.5	**********
09.15	4.7	*****

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.5	**
08.15	2.8	***
08.30	7.0	*******
08.45	7.2	*******
09.00	3.3	***
09.15	2.1	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	3549.8	2366.5	760.6	0.21	760.6	0.21
B	432.2	288.1	71.6	0.17	71.6	0.17
C	631.8	421.2	4198.9	6.65	4199.9	6.65
D	2432.1	1621.4	347.5	0.14	347.6	0.14
ALL	7045.9	4697.3	5378.6	0.76	5379.7	0.76

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

END OF JOB

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

Printed at 11:05:16 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27Fontwell\FontwellAM.vai" (drive-on-the-left) at 11:08:12 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
ARM B	10.000
ARM C	3.000
ARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	32.31	48.47	32.31
ARM B	15.00	45.00	75.00	3.92	5.89	3.92
ARM C	15.00	45.00	75.00	6.20	9.30	6.20
ARM D	15.00	45.00	75.00	22.17	33.26	22.17

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.45 - 09.15	ARM A	0.000	0.022	0.120	0.859
		0.0	56.0	309.0	2220.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.223	0.000	0.175	0.602
		70.0	0.0	55.0	189.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.651	0.042	0.000	0.306
		323.0	21.0	0.0	152.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.825	0.052	0.112	0.011
		1464.0	92.0	199.0	19.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	32.44	49.66	0.653	- - -	0.0	1.9	26.9	-	0.057
ARM B	3.94	17.50	0.225	- - -	0.0	0.3	4.2	-	0.074
ARM C	6.22	12.27	0.507	- - -	0.0	1.0	14.2	-	0.162
ARM D	22.26	36.16	0.616	- - -	0.0	1.6	22.8	-	0.071

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)
08.00-08.15									
ARM A	38.73	48.99	0.791	- - -	1.9	3.7	51.8	-	0.095
ARM B	4.70	13.79	0.341	- - -	0.3	0.5	7.5	-	0.110
ARM C	7.43	8.94	0.831	- - -	1.0	4.0	49.8	-	0.532
ARM D	26.58	35.43	0.750	- - -	1.6	2.9	41.3	-	0.111

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)
08.15-08.30									
ARM A	47.44	48.22	0.984	- - -	3.7	21.3	227.5	-	0.383
ARM B	5.76	9.24	0.624	- - -	0.5	1.6	21.6	-	0.277
ARM C	9.10	4.87	1.869	- - -	4.0	67.9	541.2	-	8.043
ARM D	32.55	36.57	0.890	- - -	2.9	7.2	93.4	-	0.219

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)
08.30-08.45									
ARM A	47.44	48.19	0.984	- - -	21.3	27.7	371.9	-	0.601
ARM B	5.76	8.82	0.654	- - -	1.6	1.8	26.0	-	0.324
ARM C	9.10	4.49	2.025	- - -	67.9	137.0	1536.7	-	23.105
ARM D	32.55	36.76	0.886	- - -	7.2	7.4	109.3	-	0.235

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)
08.45-09.00									
ARM A	38.73	48.90	0.792	- - -	27.7	3.9	95.4	-	0.138
ARM B	4.70	12.84	0.367	- - -	1.8	0.6	9.3	-	0.125
ARM C	7.43	8.10	0.918	- - -	137.0	127.9	1986.9	-	15.988
ARM D	26.58	34.96	0.760	- - -	7.4	3.3	53.3	-	0.127

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)
09.00-09.15									
ARM A	32.44	49.43	0.656	- - -	3.9	1.9	30.0	-	0.060
ARM B	3.94	17.35	0.227	- - -	0.6	0.3	4.5	-	0.075
ARM C	6.22	12.13	0.513	- - -	127.9	40.7	1264.7	-	7.062
ARM D	22.26	32.88	0.677	- - -	3.3	2.1	33.4	-	0.096

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.9	**
08.15	3.7	****
08.30	21.3	**********
08.45	27.7	**********
09.00	3.9	****
09.15	1.9	**

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.5	*
08.30	1.6	**
08.45	1.8	**
09.00	0.6	*
09.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.0	*
08.15	4.0	****
08.30	67.9	**********
08.45	137.0	**********
09.00	127.9	**********
09.15	40.7	**********

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.6	**
08.15	2.9	***
08.30	7.2	*******
08.45	7.4	*******
09.00	3.3	***
09.15	2.1	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	3558.1	2372.0	803.6	0.23	803.7	0.23
B	432.2	288.1	73.2	0.17	73.2	0.17
C	682.7	455.1	5393.4	7.90	5461.8	8.00
D	2441.8	1627.9	353.6	0.14	353.6	0.14
ALL	7114.7	4743.2	6623.8	0.93	6692.2	0.94

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

END OF JOB

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

Printed at 11:09:47 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27Fontwell\FontwellAM.vai" (drive-on-the-left) at 11:10:06 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
ARM B	10.000
ARM C	3.000
ARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme 50/50 sensitivity

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	32.31	48.47	32.31
ARM B	15.00	45.00	75.00	3.92	5.89	3.92
ARM C	15.00	45.00	75.00	6.11	9.17	6.11
ARM D	15.00	45.00	75.00	22.14	33.21	22.14

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme 50/50 sensitivity

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.45 - 09.15	ARM A	0.000	0.022	0.120	0.859
		0.0	56.0	309.0	2220.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.223	0.000	0.175	0.602
		70.0	0.0	55.0	189.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.661	0.043	0.000	0.297
		323.0	21.0	0.0	145.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.827	0.052	0.111	0.011
		1464.0	92.0	196.0	19.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	32.44	49.69	0.653	- - -	0.0	1.9	26.9	-	0.057
ARM B	3.94	17.52	0.225	- - -	0.0	0.3	4.2	-	0.073
ARM C	6.14	12.27	0.500	- - -	0.0	1.0	13.8	-	0.160
ARM D	22.22	36.16	0.615	- - -	0.0	1.6	22.7	-	0.071

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)
08.00-08.15									
ARM A	38.73	49.02	0.790	- - -	1.9	3.7	51.6	-	0.095
ARM B	4.70	13.81	0.341	- - -	0.3	0.5	7.4	-	0.110
ARM C	7.33	8.94	0.819	- - -	1.0	3.8	47.3	-	0.510
ARM D	26.53	35.43	0.749	- - -	1.6	2.9	41.1	-	0.110

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)
08.15-08.30									
ARM A	47.44	48.26	0.983	- - -	3.7	21.0	225.5	-	0.379
ARM B	5.76	9.26	0.622	- - -	0.5	1.6	21.5	-	0.275
ARM C	8.97	4.86	1.846	- - -	3.8	65.9	524.4	-	7.821
ARM D	32.50	36.54	0.889	- - -	2.9	7.1	92.9	-	0.218

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)
08.30-08.45									
ARM A	47.44	48.23	0.983	- - -	21.0	27.3	366.5	-	0.591
ARM B	5.76	8.84	0.652	- - -	1.6	1.8	25.9	-	0.322
ARM C	8.97	4.49	2.000	- - -	65.9	133.2	1492.7	-	15.780
ARM D	32.50	36.72	0.885	- - -	7.1	7.3	108.6	-	0.233

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)
08.45-09.00									
ARM A	38.73	48.94	0.791	- - -	27.3	3.9	93.9	-	0.136
ARM B	4.70	12.88	0.365	- - -	1.8	0.6	9.3	-	0.125
ARM C	7.33	8.11	0.903	- - -	133.2	122.3	1915.9	-	15.588
ARM D	26.53	34.89	0.761	- - -	7.3	3.3	53.4	-	0.128

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)
09.00-09.15									
ARM A	32.44	49.45	0.656	- - -	3.9	1.9	30.0	-	0.060
ARM B	3.94	17.37	0.227	- - -	0.6	0.3	4.5	-	0.075
ARM C	6.14	12.13	0.506	- - -	122.3	33.8	1171.1	-	6.554
ARM D	22.22	32.79	0.678	- - -	3.3	2.1	33.6	-	0.096

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.9	**
08.15	3.7	****
08.30	21.0	**********
08.45	27.3	**********
09.00	3.9	****
09.15	1.9	**

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.5	*
08.30	1.6	**
08.45	1.8	**
09.00	0.6	*
09.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.0	*
08.15	3.8	****
08.30	65.9	**********
08.45	133.2	**********
09.00	122.3	**********
09.15	33.8	**********

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.6	**
08.15	2.9	***
08.30	7.1	*******
08.45	7.3	*******
09.00	3.3	***
09.15	2.1	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	3558.1	2372.0	794.4	0.22	794.4	0.22
B	432.2	288.1	72.8	0.17	72.8	0.17
C	673.1	448.7	5165.3	7.67	5212.5	7.74
D	2437.7	1625.1	352.2	0.14	352.3	0.14
ALL	7101.0	4734.0	6384.7	0.90	6432.0	0.91

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

END OF JOB

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

Printed at 11:11:16 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27Fontwell\FontwellAM.vai" (drive-on-the-left) at 11:11:30 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
IARM B	10.000
IARM C	3.000
IARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme 80/20 sensitivity

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	32.31	48.47	32.31
ARM B	15.00	45.00	75.00	3.95	5.93	3.95
ARM C	15.00	45.00	75.00	6.05	9.08	6.05
ARM D	15.00	45.00	75.00	22.13	33.19	22.13

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme 80/20 sensitivity

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
07.45 - 09.15	ARM A	0.000	0.022	0.120	0.859
		0.0	56.0	309.0	2220.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.225	0.000	0.174	0.601
		71.0	0.0	55.0	190.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.667	0.045	0.000	0.287
		323.0	22.0	0.0	139.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.828	0.052	0.110	0.011
		1465.0	92.0	194.0	19.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	32.44	49.70	0.653	- - -	0.0	1.9	26.9	-	0.057
ARM B	3.97	17.54	0.226	- - -	0.0	0.3	4.2	-	0.073
ARM C	6.07	12.26	0.496	- - -	0.0	1.0	13.6	-	0.159
ARM D	22.21	36.14	0.615	- - -	0.0	1.6	22.7	-	0.071

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)
08.00-08.15									
ARM A	38.73	49.04	0.790	- - -	1.9	3.7	51.6	-	0.095
ARM B	4.73	13.83	0.342	- - -	0.3	0.5	7.5	-	0.110
ARM C	7.25	8.93	0.812	- - -	1.0	3.7	45.9	-	0.499
ARM D	26.52	35.40	0.749	- - -	1.6	2.9	41.1	-	0.110

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)
08.15-08.30									
ARM A	47.44	48.28	0.982	- - -	3.7	20.9	224.5	-	0.376
ARM B	5.80	9.28	0.625	- - -	0.5	1.6	21.8	-	0.276
ARM C	8.88	4.84	1.835	- - -	3.7	64.7	514.9	-	7.729
ARM D	32.48	36.50	0.890	- - -	2.9	7.1	93.1	-	0.219

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)
08.30-08.45									
ARM A	47.44	48.26	0.983	- - -	20.9	27.1	363.8	-	0.590
ARM B	5.80	8.86	0.655	- - -	1.6	1.8	26.2	-	0.323
ARM C	8.88	4.46	1.990	- - -	64.7	131.0	1467.8	-	15.609
ARM D	32.48	36.69	0.885	- - -	7.1	7.3	108.9	-	0.234

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)
08.45-09.00									
ARM A	38.73	48.95	0.791	- - -	27.1	3.9	93.3	-	0.136
ARM B	4.73	12.90	0.367	- - -	1.8	0.6	9.3	-	0.125
ARM C	7.25	8.10	0.895	- - -	131.0	119.2	1876.2	-	15.380
ARM D	26.52	34.82	0.762	- - -	7.3	3.3	53.7	-	0.129

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)
09.00-09.15									
ARM A	32.44	49.45	0.656	- - -	3.9	1.9	30.0	-	0.060
ARM B	3.97	17.39	0.228	- - -	0.6	0.3	4.6	-	0.075
ARM C	6.07	12.12	0.501	- - -	119.2	30.0	1118.9	-	6.274
ARM D	22.21	32.70	0.679	- - -	3.3	2.2	33.8	-	0.097

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.9	**
08.15	3.7	****
08.30	20.9	**********
08.45	27.1	**********
09.00	3.9	****
09.15	1.9	**

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.5	*
08.30	1.6	**
08.45	1.8	**
09.00	0.6	*
09.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.0	*
08.15	3.7	****
08.30	64.7	**********
08.45	131.0	**********
09.00	119.2	**********
09.15	30.0	**********

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.6	**
08.15	2.9	***
08.30	7.1	*******
08.45	7.3	*******
09.00	3.3	***
09.15	2.2	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	3558.1	2372.0	790.0	0.22	790.0	0.22
B	435.0	290.0	73.6	0.17	73.6	0.17
C	666.2	444.1	5037.2	7.56	5074.4	7.62
D	2436.3	1624.2	353.4	0.15	353.5	0.15
ALL	7095.5	4730.3	6254.2	0.88	6291.4	0.89

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

END OF JOB

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

Printed at 11:14:15 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:- "C:\Westergate\A27Fontwell\FontwellPM.vai" (drive-on-the-left) at 13:04:44 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
ARM B	10.000
ARM C	3.000
ARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2025 PM Base

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	26.55	39.82	26.55
ARM B	15.00	45.00	75.00	2.25	3.38	2.25
ARM C	15.00	45.00	75.00	5.05	7.58	5.05
ARM D	15.00	45.00	75.00	27.21	40.82	27.21

DEMAND SET TITLE: Fontwell Rbt 2025 PM Base

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.025	0.221	0.754
		0.0	54.0	469.0	1601.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.278	0.000	0.283	0.439
		50.0	0.0	51.0	79.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.713	0.050	0.000	0.238
		288.0	20.0	0.0	96.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.849	0.045	0.086	0.020
		1849.0	97.0	187.0	44.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	26.65	49.49	0.539	- - -	0.0	1.2	17.0	-	0.044
ARM B	2.26	20.59	0.110	- - -	0.0	0.1	1.8	-	0.055
ARM C	5.07	17.20	0.295	- - -	0.0	0.4	6.0	-	0.082
ARM D	27.32	36.70	0.744	- - -	0.0	2.8	39.7	-	0.102

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									
ARM A	31.82	48.80	0.652	- - -	1.2	1.9	27.0	-	0.059
ARM B	2.70	17.47	0.154	- - -	0.1	0.2	2.7	-	0.068
ARM C	6.05	14.83	0.408	- - -	0.4	0.7	9.9	-	0.113
ARM D	32.62	35.99	0.906	- - -	2.8	8.2	104.2	-	0.246

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									
ARM A	38.98	48.41	0.805	- - -	1.9	4.0	56.0	-	0.103
ARM B	3.30	13.50	0.245	- - -	0.2	0.3	4.7	-	0.098
ARM C	7.41	11.66	0.636	- - -	0.7	1.7	23.2	-	0.229
ARM D	39.95	35.06	1.139	- - -	8.2	84.5	707.4	-	1.452

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									
ARM A	38.98	48.39	0.805	- - -	4.0	4.1	60.6	-	0.106
ARM B	3.30	13.42	0.246	- - -	0.3	0.3	4.9	-	0.099
ARM C	7.41	11.60	0.639	- - -	1.7	1.7	25.6	-	0.238
ARM D	39.95	35.02	1.141	- - -	84.5	158.7	1824.6	-	3.543

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)
17.45-18.00									
ARM A	31.82	48.35	0.658	- - -	4.1	1.9	30.3	-	0.062
ARM B	2.70	17.17	0.157	- - -	0.3	0.2	2.9	-	0.069
ARM C	6.05	14.71	0.412	- - -	1.7	0.7	11.1	-	0.117
ARM D	32.62	35.94	0.908	- - -	158.7	112.3	2032.8	-	3.801

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)
18.00-18.15									
ARM A	26.65	48.54	0.549	- - -	1.9	1.2	18.8	-	0.046
ARM B	2.26	20.08	0.112	- - -	0.2	0.1	1.9	-	0.056
ARM C	5.07	17.06	0.297	- - -	0.7	0.4	6.6	-	0.084
ARM D	27.32	36.67	0.745	- - -	112.3	3.2	708.4	-	1.331

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.2	*
17.15	1.9	**
17.30	4.0	****
17.45	4.1	****
18.00	1.9	**
18.15	1.2	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.1	
17.15	0.2	
17.30	0.3	
17.45	0.3	
18.00	0.2	
18.15	0.1	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.7	*
17.30	1.7	**
17.45	1.7	**
18.00	0.7	*
18.15	0.4	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	2.8	***
17.15	8.2	********
17.30	84.5	**********
17.45	158.7	**********
18.00	112.3	**********
18.15	3.2	***

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	2923.5	1949.0	209.7	0.07	209.7	0.07
B	247.8	165.2	18.8	0.08	18.8	0.08
C	556.1	370.7	82.5	0.15	82.5	0.15
D	2996.5	1997.7	5417.1	1.81	5417.2	1.81
ALL	6723.8	4482.6	5728.1	0.85	5728.3	0.85

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

END OF JOB

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

Printed at 13:05:24 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27Fontwell\FontwellPM.vai" (drive-on-the-left) at 13:06:26 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
ARM B	10.000
ARM C	3.000
ARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	26.77	40.16	26.77
ARM B	15.00	45.00	75.00	2.25	3.38	2.25
ARM C	15.00	45.00	75.00	5.30	7.95	5.30
ARM D	15.00	45.00	75.00	27.45	41.18	27.45

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.025	0.227	0.747
		0.0	54.0	487.0	1601.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.278	0.000	0.283	0.439
		50.0	0.0	51.0	79.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.703	0.047	0.000	0.250
		298.0	20.0	0.0	106.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.842	0.044	0.094	0.020
		1849.0	97.0	206.0	44.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	26.88	49.29	0.545	- - -	0.0	1.2	17.4	-	0.044
ARM B	2.26	20.33	0.111	- - -	0.0	0.1	1.8	-	0.055
ARM C	5.32	17.20	0.309	- - -	0.0	0.4	6.5	-	0.084
ARM D	27.55	36.60	0.753	- - -	0.0	3.0	41.4	-	0.106

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									
ARM A	32.09	48.56	0.661	- - -	1.2	1.9	28.0	-	0.060
ARM B	2.70	17.17	0.157	- - -	0.1	0.2	2.7	-	0.069
ARM C	6.35	14.83	0.428	- - -	0.4	0.7	10.7	-	0.117
ARM D	32.90	35.87	0.917	- - -	3.0	9.1	113.3	-	0.268

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									
ARM A	39.31	48.21	0.815	- - -	1.9	4.3	59.3	-	0.108
ARM B	3.30	13.18	0.251	- - -	0.2	0.3	4.8	-	0.101
ARM C	7.78	11.67	0.667	- - -	0.7	1.9	26.2	-	0.247
ARM D	40.30	34.92	1.154	- - -	9.1	92.2	769.9	-	1.580

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									
ARM A	39.31	48.19	0.816	- - -	4.3	4.3	64.5	-	0.113
ARM B	3.30	13.09	0.252	- - -	0.3	0.3	5.0	-	0.102
ARM C	7.78	11.60	0.671	- - -	1.9	2.0	29.3	-	0.261
ARM D	40.30	34.87	1.156	- - -	92.2	173.8	1995.3	-	3.878

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)
17.45-18.00									
ARM A	32.09	48.15	0.667	- - -	4.3	2.0	31.6	-	0.064
ARM B	2.70	16.86	0.160	- - -	0.3	0.2	2.9	-	0.071
ARM C	6.35	14.71	0.432	- - -	2.0	0.8	12.2	-	0.122
ARM D	32.90	35.81	0.919	- - -	173.8	133.2	2302.7	-	4.312

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)
18.00-18.15									
ARM A	26.88	48.12	0.559	- - -	2.0	1.3	19.6	-	0.047
ARM B	2.26	19.71	0.115	- - -	0.2	0.1	2.0	-	0.057
ARM C	5.32	17.05	0.312	- - -	0.8	0.5	7.1	-	0.086
ARM D	27.55	36.57	0.754	- - -	133.2	4.3	1015.9	-	1.931

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.2	*
17.15	1.9	**
17.30	4.3	****
17.45	4.3	****
18.00	2.0	**
18.15	1.3	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.1	
17.15	0.2	
17.30	0.3	
17.45	0.3	
18.00	0.2	
18.15	0.1	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.7	*
17.30	1.9	**
17.45	2.0	**
18.00	0.8	*
18.15	0.5	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	3.0	***
17.15	9.1	*********
17.30	92.2	**********
17.45	173.8	**********
18.00	133.2	**********
18.15	4.3	****

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	2948.3	1965.5	220.5	0.07	220.5	0.07
B	247.8	165.2	19.3	0.08	19.3	0.08
C	583.6	389.1	91.9	0.16	91.9	0.16
D	3022.6	2015.1	6238.4	2.06	6238.6	2.06
ALL	6802.3	4534.9	6570.0	0.97	6570.3	0.97

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

END OF JOB

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

Printed at 13:07:17 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:- "C:\Westergate\A27Fontwell\FontwellPM.vai" (drive-on-the-left) at 13:07:38 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
ARM B	10.000
ARM C	3.000
ARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme PM Sensitivity 5050

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	26.77	40.16	26.77
ARM B	15.00	45.00	75.00	2.25	3.38	2.25
ARM C	15.00	45.00	75.00	5.26	7.89	5.26
ARM D	15.00	45.00	75.00	27.36	41.04	27.36

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme PM Sensitivity 5050

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.025	0.227	0.747
		0.0	54.0	487.0	1601.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.278	0.000	0.283	0.439
		50.0	0.0	51.0	79.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.708	0.048	0.000	0.245
		298.0	20.0	0.0	103.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.845	0.044	0.091	0.020
		1849.0	97.0	199.0	44.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	26.88	49.36	0.544	- - -	0.0	1.2	17.4	-	0.044
ARM B	2.26	20.38	0.111	- - -	0.0	0.1	1.8	-	0.055
ARM C	5.28	17.20	0.307	- - -	0.0	0.4	6.4	-	0.083
ARM D	27.47	36.60	0.750	- - -	0.0	2.9	40.9	-	0.105

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									
ARM A	32.09	48.65	0.660	- - -	1.2	1.9	27.9	-	0.060
ARM B	2.70	17.23	0.157	- - -	0.1	0.2	2.7	-	0.069
ARM C	6.31	14.83	0.425	- - -	0.4	0.7	10.6	-	0.117
ARM D	32.80	35.87	0.914	- - -	2.9	8.8	110.7	-	0.262

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									
ARM A	39.31	48.29	0.814	- - -	1.9	4.2	58.8	-	0.108
ARM B	3.30	13.24	0.250	- - -	0.2	0.3	4.8	-	0.101
ARM C	7.73	11.67	0.662	- - -	0.7	1.9	25.7	-	0.244
ARM D	40.17	34.92	1.150	- - -	8.8	90.2	753.2	-	1.545

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									
ARM A	39.31	48.27	0.814	- - -	4.2	4.3	64.0	-	0.111
ARM B	3.30	13.15	0.251	- - -	0.3	0.3	5.0	-	0.101
ARM C	7.73	11.60	0.666	- - -	1.9	1.9	28.7	-	0.257
ARM D	40.17	34.87	1.152	- - -	90.2	169.8	1950.3	-	3.793

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)
17.45-18.00									
ARM A	32.09	48.23	0.665	- - -	4.3	2.0	31.4	-	0.063
ARM B	2.70	16.92	0.159	- - -	0.3	0.2	2.9	-	0.070
ARM C	6.31	14.71	0.429	- - -	1.9	0.8	12.0	-	0.121
ARM D	32.80	35.81	0.916	- - -	169.8	127.8	2232.1	-	4.180

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)
18.00-18.15									
ARM A	26.88	48.25	0.557	- - -	2.0	1.3	19.4	-	0.047
ARM B	2.26	19.79	0.114	- - -	0.2	0.1	2.0	-	0.057
ARM C	5.28	17.05	0.310	- - -	0.8	0.5	7.0	-	0.085
ARM D	27.47	36.57	0.751	- - -	127.8	3.7	929.0	-	1.770

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.2	*
17.15	1.9	**
17.30	4.2	****
17.45	4.3	****
18.00	2.0	**
18.15	1.3	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.1	
17.15	0.2	
17.30	0.3	
17.45	0.3	
18.00	0.2	
18.15	0.1	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.7	*
17.30	1.9	**
17.45	1.9	**
18.00	0.8	*
18.15	0.5	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	2.9	***
17.15	8.8	*********
17.30	90.2	**********
17.45	169.8	**********
18.00	127.8	**********
18.15	3.7	****

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	2948.3	1965.5	219.0	0.07	219.0	0.07
B	247.8	165.2	19.2	0.08	19.2	0.08
C	579.5	386.3	90.4	0.16	90.4	0.16
D	3013.0	2008.7	6016.3	2.00	6016.4	2.00
ALL	6788.5	4525.7	6344.9	0.93	6345.1	0.93

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

END OF JOB

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

Printed at 13:08:12 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\A27Fontwell\FontwellPM.vai" (drive-on-the-left) at 13:08:28 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: A27/A29 Fontwell Avenue Junction
LOCATION: Westergate
DATE: 12/04/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A27 North
ARM B - Arundel Road
ARM C - Fontwell Avenue
ARM D - A27 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)	
ARM A	10.00	11.00	6.00	33.00	56.00	39.0	0.844	53.150	
ARM B	4.50	6.20	5.50	23.00	56.00	37.0	0.555	36.557	*
ARM C	3.75	7.40	10.00	19.00	56.00	41.0	0.546	29.322	*
ARM D	9.00	12.00	10.00	22.00	56.00	47.0	0.801	40.279	*

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING One or more intercept values (flagged * in the table)
have been adjusted according to local input values
from a previous run and listed below -

T6

	ADJUSTMENT TO INTERCEPT (PCU/MIN)
IARM B	10.000
IARM C	3.000
IARM D	-10.000

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

ARUN DISTRICT COUNCIL AL/3/19/PL

T13

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

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme pm sensitivity 8020

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	26.77	40.16	26.77
ARM B	15.00	45.00	75.00	2.25	3.38	2.25
ARM C	15.00	45.00	75.00	5.21	7.82	5.21
ARM D	15.00	45.00	75.00	27.27	40.91	27.27

DEMAND SET TITLE: Fontwell Rbt 2025 with Scheme pm sensitivity 8020

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.025	0.227	0.747
		0.0	54.0	487.0	1601.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM B	0.278	0.000	0.283	0.439
		50.0	0.0	51.0	79.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.715	0.048	0.000	0.237
		298.0	20.0	0.0	99.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.847	0.044	0.088	0.020
		1849.0	97.0	192.0	44.0
		(0.0)	(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	26.88	49.44	0.544	- - -	0.0	1.2	17.3	-	0.044
ARM B	2.26	20.43	0.111	- - -	0.0	0.1	1.8	-	0.055
ARM C	5.23	17.20	0.304	- - -	0.0	0.4	6.3	-	0.083
ARM D	27.38	36.60	0.748	- - -	0.0	2.9	40.4	-	0.104

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									
ARM A	32.09	48.74	0.659	- - -	1.2	1.9	27.7	-	0.060
ARM B	2.70	17.28	0.156	- - -	0.1	0.2	2.7	-	0.069
ARM C	6.25	14.83	0.421	- - -	0.4	0.7	10.4	-	0.116
ARM D	32.69	35.87	0.911	- - -	2.9	8.6	108.3	-	0.256

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									
ARM A	39.31	48.37	0.813	- - -	1.9	4.2	58.4	-	0.107
ARM B	3.30	13.29	0.249	- - -	0.2	0.3	4.8	-	0.100
ARM C	7.65	11.67	0.656	- - -	0.7	1.8	25.1	-	0.240
ARM D	40.04	34.92	1.147	- - -	8.6	88.1	736.7	-	1.519

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									
ARM A	39.31	48.35	0.813	- - -	4.2	4.3	63.5	-	0.110
ARM B	3.30	13.20	0.250	- - -	0.3	0.3	5.0	-	0.101
ARM C	7.65	11.60	0.660	- - -	1.8	1.9	27.9	-	0.252
ARM D	40.04	34.87	1.148	- - -	88.1	165.9	1905.7	-	3.705

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)
17.45-18.00									
ARM A	32.09	48.31	0.664	- - -	4.3	2.0	31.3	-	0.063
ARM B	2.70	16.98	0.159	- - -	0.3	0.2	2.9	-	0.070
ARM C	6.25	14.71	0.425	- - -	1.9	0.7	11.8	-	0.120
ARM D	32.69	35.81	0.913	- - -	165.9	122.3	2161.8	-	4.051

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)
18.00-18.15									
ARM A	26.88	48.39	0.555	- - -	2.0	1.3	19.3	-	0.047
ARM B	2.26	19.87	0.114	- - -	0.2	0.1	2.0	-	0.057
ARM C	5.23	17.05	0.307	- - -	0.7	0.4	6.9	-	0.085
ARM D	27.38	36.57	0.749	- - -	122.3	3.5	847.1	-	1.616

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.2	*
17.15	1.9	**
17.30	4.2	****
17.45	4.3	****
18.00	2.0	**
18.15	1.3	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.1	
17.15	0.2	
17.30	0.3	
17.45	0.3	
18.00	0.2	
18.15	0.1	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.7	*
17.30	1.8	**
17.45	1.9	**
18.00	0.7	*
18.15	0.4	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	2.9	***
17.15	8.6	*********
17.30	88.1	**********
17.45	165.9	**********
18.00	122.3	**********
18.15	3.5	***

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	2948.3	1965.5	217.5	0.07	217.5	0.07
B	247.8	165.2	19.2	0.08	19.2	0.08
C	574.0	382.6	88.5	0.15	88.5	0.15
D	3003.4	2002.2	5800.0	1.93	5800.2	1.93
ALL	6773.4	4515.6	6125.1	0.90	6125.3	0.90

* 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.
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END OF JOB

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

Printed at 13:09:05 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\Warmemorial\WarmemorialAM.vai" (drive-on-the-left) at 11:52:02 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: Westergate A29 Fontwell Avenue/B2233 War Memorial Roundabout
LOCATION: Westergate
DATE: 25/03/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29 Westergate St West
ARM B - A29 Fontwell Ave North
ARM C - B2233 Barnham Road South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	6.50	30.00	42.00	25.00	19.0	0.740	33.030
ARM B	4.00	4.00	0.00	12.00	25.00	54.0	0.496	17.859
ARM C	3.25	6.00	9.00	11.00	25.00	7.0	0.625	24.367

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

ARUN DISTRICT COUNCIL AL/3/13/PL

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2013 Base AM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	10.86	16.29	10.86
ARM B	15.00	45.00	75.00	6.46	9.69	6.46
ARM C	15.00	45.00	75.00	8.59	12.88	8.59

DEMAND SET TITLE: 2013 Base AM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.018	0.552	0.429
		16.0	480.0	373.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.733	0.000	0.267
		379.0	0.0	138.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.825	0.170	0.004
		567.0	117.0	3.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	10.90	31.92	0.342	- - -	0.0	0.5	7.6	-	0.047
ARM B	6.49	15.43	0.421	- - -	0.0	0.7	10.3	-	0.111
ARM C	8.62	21.29	0.405	- - -	0.0	0.7	9.8	-	0.078
08.00-08.15									
ARM A	13.02	31.70	0.411	- - -	0.5	0.7	10.2	-	0.053
ARM B	7.75	14.95	0.518	- - -	0.7	1.1	15.2	-	0.138
ARM C	10.29	20.68	0.498	- - -	0.7	1.0	14.3	-	0.096
08.15-08.30									
ARM A	15.95	31.41	0.508	- - -	0.7	1.0	15.0	-	0.065
ARM B	9.49	14.29	0.664	- - -	1.1	1.9	26.6	-	0.204
ARM C	12.61	19.86	0.635	- - -	1.0	1.7	24.2	-	0.136

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)
08.30-08.45									
ARM A	15.95	31.40	0.508	- - -	1.0	1.0	15.4	-	0.065
ARM B	9.49	14.29	0.664	- - -	1.9	1.9	28.8	-	0.208
ARM C	12.61	19.84	0.636	- - -	1.7	1.7	25.7	-	0.138

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)
08.45-09.00									
ARM A	13.02	31.69	0.411	- - -	1.0	0.7	10.7	-	0.054
ARM B	7.75	14.94	0.519	- - -	1.9	1.1	17.3	-	0.141
ARM C	10.29	20.64	0.499	- - -	1.7	1.0	15.7	-	0.098

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)
09.00-09.15									
ARM A	10.90	31.91	0.342	- - -	0.7	0.5	7.9	-	0.048
ARM B	6.49	15.41	0.421	- - -	1.1	0.7	11.4	-	0.113
ARM C	8.62	21.26	0.406	- - -	1.0	0.7	10.6	-	0.079

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	*
08.15	0.7	*
08.30	1.0	*
08.45	1.0	*
09.00	0.7	*
09.15	0.5	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.7	*
08.15	1.1	*
08.30	1.9	**
08.45	1.9	**
09.00	1.1	*
09.15	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.7	*
08.15	1.0	*
08.30	1.7	**
08.45	1.7	**
09.00	1.0	*
09.15	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1196.1	797.4	66.8	0.06	66.9	0.06
B	711.6	474.4	109.7	0.15	109.7	0.15
C	945.6	630.4	100.2	0.11	100.2	0.11
ALL	2853.3	1902.2	276.7	0.10	276.8	0.10

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

END OF JOB

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

Printed at 11:52:28 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\Warmemorial\WarmemorialAM.vai" (drive-on-the-left) at 11:52:45 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: Westergate A29 Fontwell Avenue/B2233 War Memorial Roundabout
LOCATION: Westergate
DATE: 25/03/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29 Westergate St West
ARM B - A29 Fontwell Ave North
ARM C - B2233 Barnham Road South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	6.50	30.00	42.00	25.00	19.0	0.740	33.030
ARM B	4.00	4.00	0.00	12.00	25.00	54.0	0.496	17.859
ARM C	3.25	6.00	9.00	11.00	25.00	7.0	0.625	24.367

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2015 Base AM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	10.95	16.42	10.95
ARM B	15.00	45.00	75.00	6.51	9.77	6.51
ARM C	15.00	45.00	75.00	8.66	12.99	8.66

DEMAND SET TITLE: 2015 Base AM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.018	0.553	0.429
		16.0	484.0	376.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.733	0.000	0.267
		382.0	0.0	139.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.825	0.170	0.004
		572.0	118.0	3.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	10.99	31.91	0.344	- - -	0.0	0.5	7.7	-	0.048
ARM B	6.54	15.41	0.424	- - -	0.0	0.7	10.5	-	0.111
ARM C	8.70	21.27	0.409	- - -	0.0	0.7	10.0	-	0.079
08.00-08.15									
ARM A	13.13	31.69	0.414	- - -	0.5	0.7	10.4	-	0.054
ARM B	7.81	14.92	0.523	- - -	0.7	1.1	15.5	-	0.140
ARM C	10.38	20.65	0.503	- - -	0.7	1.0	14.5	-	0.097
08.15-08.30									
ARM A	16.07	31.39	0.512	- - -	0.7	1.0	15.2	-	0.065
ARM B	9.56	14.27	0.670	- - -	1.1	2.0	27.3	-	0.207
ARM C	12.72	19.83	0.641	- - -	1.0	1.7	24.8	-	0.139

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)
08.30-08.45									
ARM A	16.07	31.39	0.512	- - -	1.0	1.0	15.6	-	0.065
ARM B	9.56	14.26	0.670	- - -	2.0	2.0	29.6	-	0.212
ARM C	12.72	19.80	0.642	- - -	1.7	1.8	26.4	-	0.141

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)
08.45-09.00									
ARM A	13.13	31.68	0.414	- - -	1.0	0.7	10.9	-	0.054
ARM B	7.81	14.92	0.523	- - -	2.0	1.1	17.6	-	0.143
ARM C	10.38	20.61	0.504	- - -	1.8	1.0	16.0	-	0.099

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)
09.00-09.15									
ARM A	10.99	31.90	0.345	- - -	0.7	0.5	8.0	-	0.048
ARM B	6.54	15.40	0.425	- - -	1.1	0.7	11.6	-	0.114
ARM C	8.70	21.23	0.410	- - -	1.0	0.7	10.8	-	0.080

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	*
08.15	0.7	*
08.30	1.0	*
08.45	1.0	*
09.00	0.7	*
09.15	0.5	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.7	*
08.15	1.1	*
08.30	2.0	**
08.45	2.0	**
09.00	1.1	*
09.15	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.7	*
08.15	1.0	*
08.30	1.7	**
08.45	1.8	**
09.00	1.0	*
09.15	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1205.7	803.8	67.9	0.06	67.9	0.06
B	717.1	478.1	112.2	0.16	112.2	0.16
C	953.9	635.9	102.5	0.11	102.5	0.11
ALL	2876.7	1917.8	282.6	0.10	282.6	0.10

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

END OF JOB

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

Printed at 11:53:12 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\Warmemorial\WarmemorialAM.vai" (drive-on-the-left) at 11:52:08 on Monday, 1 July 2013

FILE PROPERTIES

RUN TITLE: Westergate A29 Fontwell Avenue/B2233 War Memorial Roundabout
LOCATION: Westergate
DATE: 25/03/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29 Westergate St West
ARM B - A29 Fontwell Ave North
ARM C - B2233 Barnham Road South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	6.50	30.00	42.00	25.00	19.0	0.740	33.030
ARM B	4.00	4.00	0.00	12.00	25.00	54.0	0.496	17.859
ARM C	3.25	6.00	9.00	11.00	25.00	7.0	0.625	24.367

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

ARUN DISTRICT COUNCIL AL/3/19/PL

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2015 + Dvt AM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	10.96	16.44	10.96
ARM B	15.00	45.00	75.00	7.05	10.58	7.05
ARM C	15.00	45.00	75.00	8.71	13.07	8.71

DEMAND SET TITLE: 2015 + Dvt AM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.018	0.553	0.429
		16.0	485.0	376.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.730	0.000	0.270
		412.0	0.0	152.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.821	0.175	0.004
		572.0	122.0	3.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	11.00	31.88	0.345	- - -	0.0	0.5	7.7	-	0.048
ARM B	7.08	15.41	0.459	- - -	0.0	0.8	12.0	-	0.118
ARM C	8.75	21.03	0.416	- - -	0.0	0.7	10.2	-	0.081
08.00-08.15									
ARM A	13.14	31.65	0.415	- - -	0.5	0.7	10.4	-	0.054
ARM B	8.45	14.92	0.566	- - -	0.8	1.3	18.3	-	0.153
ARM C	10.44	20.37	0.513	- - -	0.7	1.0	15.1	-	0.100
08.15-08.30									
ARM A	16.09	31.34	0.514	- - -	0.7	1.0	15.3	-	0.065
ARM B	10.35	14.27	0.725	- - -	1.3	2.5	34.3	-	0.245
ARM C	12.79	19.49	0.656	- - -	1.0	1.9	26.3	-	0.147

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)
08.30-08.45									
ARM A	16.09	31.33	0.514	- - -	1.0	1.1	15.7	-	0.066
ARM B	10.35	14.26	0.726	- - -	2.5	2.6	38.1	-	0.255
ARM C	12.79	19.46	0.657	- - -	1.9	1.9	28.2	-	0.150

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)
08.45-09.00									
ARM A	13.14	31.64	0.415	- - -	1.1	0.7	10.9	-	0.054
ARM B	8.45	14.92	0.567	- - -	2.6	1.3	21.2	-	0.159
ARM C	10.44	20.32	0.514	- - -	1.9	1.1	16.7	-	0.102

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)
09.00-09.15									
ARM A	11.00	31.87	0.345	- - -	0.7	0.5	8.1	-	0.048
ARM B	7.08	15.40	0.460	- - -	1.3	0.9	13.4	-	0.121
ARM C	8.75	20.99	0.417	- - -	1.1	0.7	11.1	-	0.082

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	*
08.15	0.7	*
08.30	1.0	*
08.45	1.1	*
09.00	0.7	*
09.15	0.5	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.8	*
08.15	1.3	*
08.30	2.5	**
08.45	2.6	***
09.00	1.3	*
09.15	0.9	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.7	*
08.15	1.0	*
08.30	1.9	**
08.45	1.9	**
09.00	1.1	*
09.15	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1207.1	804.8	68.2	0.06	68.2	0.06
B	776.3	517.5	137.4	0.18	137.4	0.18
C	959.4	639.6	107.6	0.11	107.6	0.11
ALL	2942.8	1961.9	313.2	0.11	313.3	0.11

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

END OF JOB

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

Printed at 11:52:19 on 01/07/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\Warmemorial\WarmemorialAM.vai" (drive-on-the-left) at 11:20:16 on Monday, 1 July 2013

FILE PROPERTIES

RUN TITLE: Westergate A29 Fontwell Avenue/B2233 War Memorial Roundabout
LOCATION: Westergate
DATE: 25/03/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29 Westergate St West
ARM B - A29 Fontwell Ave North
ARM C - B2233 Barnham Road South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	6.50	30.00	42.00	25.00	19.0	0.740	33.030
ARM B	4.00	4.00	0.00	12.00	25.00	54.0	0.496	17.859
ARM C	3.25	6.00	9.00	11.00	25.00	7.0	0.625	24.367

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

ARUN DISTRICT COUNCIL A1/3/19/PL

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2025 Base AM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	12.74	19.11	12.74
ARM B	15.00	45.00	75.00	7.57	11.36	7.57
ARM C	15.00	45.00	75.00	10.07	15.11	10.07

DEMAND SET TITLE: 2025 Base AM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.019	0.553	0.429
		19.0	563.0	437.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.733	0.000	0.267
		444.0	0.0	162.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.825	0.170	0.005
		665.0	137.0	4.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	12.79	31.73	0.403	- - -	0.0	0.7	9.8	-	0.053
ARM B	7.60	15.00	0.507	- - -	0.0	1.0	14.3	-	0.133
ARM C	10.11	20.77	0.487	- - -	0.0	0.9	13.5	-	0.093

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)
08.00-08.15									
ARM A	15.27	31.47	0.485	- - -	0.7	0.9	13.7	-	0.062
ARM B	9.08	14.44	0.629	- - -	1.0	1.6	23.3	-	0.184
ARM C	12.08	20.05	0.602	- - -	0.9	1.5	21.3	-	0.124

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)
08.15-08.30									
ARM A	18.70	31.13	0.601	- - -	0.9	1.5	21.6	-	0.080
ARM B	11.12	13.68	0.813	- - -	1.6	3.9	50.7	-	0.351
ARM C	14.79	19.12	0.773	- - -	1.5	3.2	43.8	-	0.219

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)
08.30-08.45									
ARM A	18.70	31.12	0.601	- - -	1.5	1.5	22.4	-	0.081
ARM B	11.12	13.67	0.814	- - -	3.9	4.1	60.1	-	0.386
ARM C	14.79	19.06	0.776	- - -	3.2	3.3	49.4	-	0.233

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)
08.45-09.00									
ARM A	15.27	31.45	0.485	- - -	1.5	1.0	14.6	-	0.062
ARM B	9.08	14.43	0.629	- - -	4.1	1.8	28.7	-	0.198
ARM C	12.08	19.96	0.605	- - -	3.3	1.6	24.9	-	0.131

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)
09.00-09.15									
ARM A	12.79	31.72	0.403	- - -	1.0	0.7	10.4	-	0.053
ARM B	7.60	14.99	0.507	- - -	1.8	1.0	16.4	-	0.137
ARM C	10.11	20.71	0.488	- - -	1.6	1.0	15.0	-	0.095

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.7	*
08.15	0.9	*
08.30	1.5	*
08.45	1.5	*
09.00	1.0	*
09.15	0.7	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.0	*
08.15	1.6	**
08.30	3.9	****
08.45	4.1	****
09.00	1.8	**
09.15	1.0	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.9	*
08.15	1.5	*
08.30	3.2	***
08.45	3.3	***
09.00	1.6	**
09.15	1.0	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1402.6	935.1	92.5	0.07	92.5	0.07
B	834.1	556.1	193.6	0.23	193.6	0.23
C	1109.4	739.6	167.9	0.15	167.9	0.15
ALL	3346.1	2230.7	453.9	0.14	454.0	0.14

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

END OF JOB

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

Printed at 11:20:29 on 01/07/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\Warmemorial\WarmemorialAM.vai" (drive-on-the-left) at 11:54:53 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: Westergate A29 Fontwell Avenue/B2233 War Memorial Roundabout
LOCATION: Westergate
DATE: 25/03/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29 Westergate St West
ARM B - A29 Fontwell Ave North
ARM C - B2233 Barnham Road South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	6.50	30.00	42.00	25.00	19.0	0.740	33.030
ARM B	4.00	4.00	0.00	12.00	25.00	54.0	0.496	17.859
ARM C	3.25	6.00	9.00	11.00	25.00	7.0	0.625	24.367

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

ARUN DISTRICT COUNCIL A1/3/19/PL

TIME PERIOD BEGINS(07.45)AND ENDS(09.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2025 + Dvt AM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	12.88	19.31	12.88
ARM B	15.00	45.00	75.00	8.11	12.17	8.11
ARM C	15.00	45.00	75.00	10.13	15.19	10.13

DEMAND SET TITLE: 2025 + Dvt AM

T33

TIME	FROM/T	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.018	0.557	0.424
		19.0	574.0	437.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.730	0.000	0.270
		474.0	0.0	175.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.821	0.174	0.005
		665.0	141.0	4.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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)
07.45-08.00									
ARM A	12.92	31.69	0.408	- - -	0.0	0.7	10.0	-	0.053
ARM B	8.14	15.00	0.543	- - -	0.0	1.2	16.4	-	0.143
ARM C	10.16	20.53	0.495	- - -	0.0	1.0	13.9	-	0.095

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)
08.00-08.15									
ARM A	15.43	31.43	0.491	- - -	0.7	1.0	14.0	-	0.062
ARM B	9.72	14.44	0.673	- - -	1.2	2.0	27.8	-	0.207
ARM C	12.14	19.77	0.614	- - -	1.0	1.6	22.3	-	0.130

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)
08.15-08.30									
ARM A	18.90	31.08	0.608	- - -	1.0	1.5	22.2	-	0.082
ARM B	11.91	13.68	0.871	- - -	2.0	5.5	68.1	-	0.455
ARM C	14.86	18.82	0.790	- - -	1.6	3.5	47.3	-	0.238

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)
08.30-08.45									
ARM A	18.90	31.06	0.608	- - -	1.5	1.5	23.1	-	0.082
ARM B	11.91	13.67	0.871	- - -	5.5	6.0	86.5	-	0.534
ARM C	14.86	18.73	0.794	- - -	3.5	3.7	54.2	-	0.256

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)
08.45-09.00									
ARM A	15.43	31.40	0.491	- - -	1.5	1.0	15.0	-	0.063
ARM B	9.72	14.43	0.674	- - -	6.0	2.2	36.9	-	0.237
ARM C	12.14	19.63	0.618	- - -	3.7	1.7	26.5	-	0.138

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)
09.00-09.15									
ARM A	12.92	31.68	0.408	- - -	1.0	0.7	10.6	-	0.053
ARM B	8.14	14.99	0.543	- - -	2.2	1.2	19.2	-	0.149
ARM C	10.16	20.47	0.497	- - -	1.7	1.0	15.5	-	0.098

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.7	*
08.15	1.0	*
08.30	1.5	**
08.45	1.5	**
09.00	1.0	*
09.15	0.7	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.2	*
08.15	2.0	**
08.30	5.5	*****
08.45	6.0	******
09.00	2.2	**
09.15	1.2	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.0	*
08.15	1.6	**
08.30	3.5	****
08.45	3.7	****
09.00	1.7	**
09.15	1.0	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1417.7	945.1	94.9	0.07	95.0	0.07
B	893.3	595.5	254.9	0.29	255.0	0.29
C	1114.9	743.3	179.7	0.16	179.8	0.16
ALL	3425.9	2283.9	529.6	0.15	529.7	0.15

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

END OF JOB

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

Printed at 11:55:26 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\Warmemorial\WarmemorialPM.vai" (drive-on-the-left) at 11:58:47 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: Westergate A29 Fontwell Avenue/B2233 War Memorial Roundabout
LOCATION: Westergate
DATE: 25/03/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29 Westergate St West
ARM B - A29 Fontwell Ave North
ARM C - B2233 Barnham Road South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	6.50	30.00	42.00	25.00	19.0	0.740	33.030
ARM B	4.00	4.00	0.00	12.00	25.00	54.0	0.496	17.859
ARM C	3.25	6.00	9.00	11.00	25.00	7.0	0.625	24.367

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(16.15)AND ENDS(17.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

ARUN DISTRICT COUNCIL AL/3/13/PL

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2013 Base PM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.94	13.41	8.94
ARM B	15.00	45.00	75.00	8.52	12.79	8.52
ARM C	15.00	45.00	75.00	6.30	9.45	6.30

DEMAND SET TITLE: 2013 Base PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.015	0.359	0.625
		11.0	257.0	447.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.760	0.004	0.236
		518.0	3.0	161.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.778	0.220	0.002
		392.0	111.0	1.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	8.97	31.97	0.281	- - -	0.0	0.4	5.7	-	0.043
ARM B	8.56	15.01	0.570	- - -	0.0	1.3	18.2	-	0.151
ARM C	6.32	20.23	0.313	- - -	0.0	0.5	6.6	-	0.072
16.30-16.45									
ARM A	10.71	31.76	0.337	- - -	0.4	0.5	7.5	-	0.047
ARM B	10.22	14.45	0.707	- - -	1.3	2.3	31.9	-	0.229
ARM C	7.55	19.41	0.389	- - -	0.5	0.6	9.2	-	0.084
16.45-17.00									
ARM A	13.12	31.47	0.417	- - -	0.5	0.7	10.5	-	0.054
ARM B	12.51	13.68	0.915	- - -	2.3	7.4	87.2	-	0.568
ARM C	9.25	18.43	0.502	- - -	0.6	1.0	14.4	-	0.108

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									
ARM A	13.12	31.47	0.417	- - -	0.7	0.7	10.7	-	0.054
ARM B	12.51	13.68	0.915	- - -	7.4	8.5	120.2	-	0.729
ARM C	9.25	18.30	0.505	- - -	1.0	1.0	15.1	-	0.110

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									
ARM A	10.71	31.75	0.337	- - -	0.7	0.5	7.8	-	0.048
ARM B	10.22	14.44	0.708	- - -	8.5	2.6	47.1	-	0.286
ARM C	7.55	19.19	0.393	- - -	1.0	0.7	10.1	-	0.086

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									
ARM A	8.97	31.96	0.281	- - -	0.5	0.4	6.0	-	0.044
ARM B	8.56	15.00	0.571	- - -	2.6	1.4	21.6	-	0.159
ARM C	6.32	20.15	0.314	- - -	0.7	0.5	7.1	-	0.073

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.4	
16.45	0.5	*
17.00	0.7	*
17.15	0.7	*
17.30	0.5	*
17.45	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	1.3	*
16.45	2.3	**
17.00	7.4	*******
17.15	8.5	********
17.30	2.6	***
17.45	1.4	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	
16.45	0.6	*
17.00	1.0	*
17.15	1.0	*
17.30	0.7	*
17.45	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	984.1	656.1	48.1	0.05	48.1	0.05
B	938.7	625.8	326.2	0.35	326.3	0.35
C	693.7	462.5	62.5	0.09	62.5	0.09
ALL	2616.6	1744.4	436.8	0.17	436.9	0.17

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

END OF JOB

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

Printed at 11:59:18 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\Warmemorial\WarmemorialPM.vai" (drive-on-the-left) at 11:59:33 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: Westergate A29 Fontwell Avenue/B2233 War Memorial Roundabout
LOCATION: Westergate
DATE: 25/03/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29 Westergate St West
ARM B - A29 Fontwell Ave North
ARM C - B2233 Barnham Road South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	6.50	30.00	42.00	25.00	19.0	0.740	33.030
ARM B	4.00	4.00	0.00	12.00	25.00	54.0	0.496	17.859
ARM C	3.25	6.00	9.00	11.00	25.00	7.0	0.625	24.367

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(16.15)AND ENDS(17.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2015 Base PM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	9.01	13.52	9.01
ARM B	15.00	45.00	75.00	8.60	12.90	8.60
ARM C	15.00	45.00	75.00	6.36	9.54	6.36

DEMAND SET TITLE: 2015 Base PM

T33

TIME	FROM/T	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.015	0.359	0.626
		11.0	259.0	451.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.760	0.004	0.235
		523.0	3.0	162.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.778	0.220	0.002
		396.0	112.0	1.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	9.05	31.96	0.283	- - -	0.0	0.4	5.8	-	0.044
ARM B	8.63	14.98	0.576	- - -	0.0	1.3	18.6	-	0.153
ARM C	6.39	20.20	0.316	- - -	0.0	0.5	6.7	-	0.072
16.30-16.45									
ARM A	10.80	31.75	0.340	- - -	0.4	0.5	7.6	-	0.048
ARM B	10.31	14.42	0.715	- - -	1.3	2.4	33.0	-	0.235
ARM C	7.63	19.37	0.394	- - -	0.5	0.6	9.4	-	0.085
16.45-17.00									
ARM A	13.23	31.46	0.421	- - -	0.5	0.7	10.6	-	0.055
ARM B	12.63	13.65	0.925	- - -	2.4	8.0	92.7	-	0.601
ARM C	9.34	18.38	0.508	- - -	0.6	1.0	14.7	-	0.110

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									
ARM A	13.23	31.46	0.421	- - -	0.7	0.7	10.8	-	0.055
ARM B	12.63	13.64	0.925	- - -	8.0	9.3	131.0	-	0.792
ARM C	9.34	18.25	0.512	- - -	1.0	1.0	15.5	-	0.112

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									
ARM A	10.80	31.74	0.340	- - -	0.7	0.5	7.9	-	0.048
ARM B	10.31	14.41	0.715	- - -	9.3	2.7	50.5	-	0.302
ARM C	7.63	19.12	0.399	- - -	1.0	0.7	10.3	-	0.087

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									
ARM A	9.05	31.95	0.283	- - -	0.5	0.4	6.0	-	0.044
ARM B	8.63	14.97	0.577	- - -	2.7	1.4	22.2	-	0.162
ARM C	6.39	20.11	0.318	- - -	0.7	0.5	7.2	-	0.073

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.4	
16.45	0.5	*
17.00	0.7	*
17.15	0.7	*
17.30	0.5	*
17.45	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	1.3	*
16.45	2.4	**
17.00	8.0	********
17.15	9.3	*********
17.30	2.7	***
17.45	1.4	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	
16.45	0.6	*
17.00	1.0	*
17.15	1.0	*
17.30	0.7	*
17.45	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	992.4	661.6	48.8	0.05	48.8	0.05
B	947.0	631.3	347.9	0.37	347.9	0.37
C	700.6	467.1	63.9	0.09	63.9	0.09
ALL	2640.0	1760.0	460.5	0.17	460.6	0.17

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

END OF JOB

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

Printed at 12:00:06 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\Warmemorial\WarmemorialPM.vai" (drive-on-the-left) at 12:01:00 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: Westergate A29 Fontwell Avenue/B2233 War Memorial Roundabout
LOCATION: Westergate
DATE: 25/03/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29 Westergate St West
ARM B - A29 Fontwell Ave North
ARM C - B2233 Barnham Road South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	6.50	30.00	42.00	25.00	19.0	0.740	33.030
ARM B	4.00	4.00	0.00	12.00	25.00	54.0	0.496	17.859
ARM C	3.25	6.00	9.00	11.00	25.00	7.0	0.625	24.367

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(16.15)AND ENDS(17.45)

ARUN DISTRICT COUNCIL AL/3/19/PL

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2015 + Dvt PM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	9.38	14.06	9.38
ARM B	15.00	45.00	75.00	8.89	13.33	8.89
ARM C	15.00	45.00	75.00	6.53	9.79	6.53

DEMAND SET TITLE: 2015 + Dvt PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.015	0.384	0.601
		11.0	288.0	451.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.758	0.004	0.238
		539.0	3.0	169.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.759	0.239	0.002
		396.0	125.0	1.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	9.41	31.84	0.296	- - -	0.0	0.4	6.2	-	0.045
ARM B	8.92	14.98	0.595	- - -	0.0	1.4	20.1	-	0.160
ARM C	6.55	20.07	0.326	- - -	0.0	0.5	7.0	-	0.074
16.30-16.45									
ARM A	11.24	31.60	0.356	- - -	0.4	0.5	8.1	-	0.049
ARM B	10.65	14.42	0.739	- - -	1.4	2.7	36.6	-	0.254
ARM C	7.82	19.22	0.407	- - -	0.5	0.7	9.9	-	0.088
16.45-17.00									
ARM A	13.76	31.29	0.440	- - -	0.5	0.8	11.5	-	0.057
ARM B	13.05	13.65	0.956	- - -	2.7	10.1	111.8	-	0.712
ARM C	9.58	18.26	0.525	- - -	0.7	1.1	15.7	-	0.115

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									
ARM A	13.76	31.28	0.440	- - -	0.8	0.8	11.7	-	0.057
ARM B	13.05	13.64	0.956	- - -	10.1	12.6	171.8	-	1.020
ARM C	9.58	18.10	0.529	- - -	1.1	1.1	16.6	-	0.117

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									
ARM A	11.24	31.59	0.356	- - -	0.8	0.6	8.5	-	0.049
ARM B	10.65	14.41	0.739	- - -	12.6	3.0	65.2	-	0.375
ARM C	7.82	18.88	0.414	- - -	1.1	0.7	11.0	-	0.091

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									
ARM A	9.41	31.83	0.296	- - -	0.6	0.4	6.4	-	0.045
ARM B	8.92	14.97	0.596	- - -	3.0	1.5	24.2	-	0.171
ARM C	6.55	19.98	0.328	- - -	0.7	0.5	7.5	-	0.075

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.4	
16.45	0.5	*
17.00	0.8	*
17.15	0.8	*
17.30	0.6	*
17.45	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	1.4	*
16.45	2.7	***
17.00	10.1	**********
17.15	12.6	**********
17.30	3.0	***
17.45	1.5	**

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	
16.45	0.7	*
17.00	1.1	*
17.15	1.1	*
17.30	0.7	*
17.45	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1032.3	688.2	52.4	0.05	52.4	0.05
B	978.6	652.4	429.6	0.44	429.7	0.44
C	718.5	479.0	67.8	0.09	67.8	0.09
ALL	2729.5	1819.6	549.7	0.20	549.8	0.20

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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END OF JOB

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

Printed at 12:01:27 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\Warmemorial\WarmemorialPM.vai" (drive-on-the-left) at 12:00:19 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: Westergate A29 Fontwell Avenue/B2233 War Memorial Roundabout
LOCATION: Westergate
DATE: 25/03/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29 Westergate St West
ARM B - A29 Fontwell Ave North
ARM C - B2233 Barnham Road South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	6.50	30.00	42.00	25.00	19.0	0.740	33.030
ARM B	4.00	4.00	0.00	12.00	25.00	54.0	0.496	17.859
ARM C	3.25	6.00	9.00	11.00	25.00	7.0	0.625	24.367

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

TIME PERIOD BEGINS(16.15)AND ENDS(17.45)

LENGTH OF TIME PERIOD -(90) MINUTES

ARUN DISTRICT COUNCIL A1/3/19/PL

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2025 Base PM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	10.56	15.84	10.56
ARM B	15.00	45.00	75.00	10.07	15.11	10.07
ARM C	15.00	45.00	75.00	7.44	11.16	7.44

DEMAND SET TITLE: 2025 Base PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.015	0.360	0.625
		13.0	304.0	528.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.759	0.005	0.236
		612.0	4.0	190.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.778	0.220	0.002
		463.0	131.0	1.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	10.60	31.77	0.334	- - -	0.0	0.5	7.3	-	0.047
ARM B	10.11	14.49	0.698	- - -	0.0	2.2	29.9	-	0.215
ARM C	7.47	19.50	0.383	- - -	0.0	0.6	8.9	-	0.083

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									
ARM A	12.66	31.53	0.402	- - -	0.5	0.7	9.8	-	0.053
ARM B	12.08	13.83	0.873	- - -	2.2	5.6	69.7	-	0.459
ARM C	8.91	18.58	0.480	- - -	0.6	0.9	13.2	-	0.103

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									
ARM A	15.51	31.20	0.497	- - -	0.7	1.0	14.4	-	0.064
ARM B	14.79	12.93	1.144	- - -	5.6	36.3	323.1	-	1.897
ARM C	10.92	18.13	0.602	- - -	0.9	1.5	21.2	-	0.137

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									
ARM A	15.51	31.19	0.497	- - -	1.0	1.0	14.7	-	0.064
ARM B	14.79	12.92	1.145	- - -	36.3	64.8	759.3	-	4.064
ARM C	10.92	18.06	0.605	- - -	1.5	1.5	22.5	-	0.140

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									
ARM A	12.66	31.51	0.402	- - -	1.0	0.7	10.3	-	0.053
ARM B	12.08	13.82	0.874	- - -	64.8	41.8	799.8	-	3.937
ARM C	8.91	17.74	0.503	- - -	1.5	1.0	15.9	-	0.114

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									
ARM A	10.60	31.75	0.334	- - -	0.7	0.5	7.7	-	0.047
ARM B	10.11	14.48	0.698	- - -	41.8	2.6	230.9	-	1.144
ARM C	7.47	18.18	0.411	- - -	1.0	0.7	10.9	-	0.094

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	
16.45	0.7	*
17.00	1.0	*
17.15	1.0	*
17.30	0.7	*
17.45	0.5	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	2.2	**
16.45	5.6	******
17.00	36.3	************************************
17.15	64.8	**
17.30	41.8	***
17.45	2.6	***

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.6	*
16.45	0.9	*
17.00	1.5	*
17.15	1.5	**
17.30	1.0	*
17.45	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1163.1	775.4	64.3	0.06	64.3	0.06
B	1109.4	739.6	2212.7	1.99	2213.0	1.99
C	819.0	546.0	92.7	0.11	92.7	0.11
ALL	3091.5	2061.0	2369.7	0.77	2369.9	0.77

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

END OF JOB

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

Printed at 12:00:47 on 20/06/2013]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "C:\Westergate\Warmemorial\WarmemorialPM.vai" (drive-on-the-left) at 12:01:41 on Thursday, 20 June 2013

FILE PROPERTIES

RUN TITLE: Westergate A29 Fontwell Avenue/B2233 War Memorial Roundabout
LOCATION: Westergate
DATE: 25/03/13
CLIENT:
ENUMERATOR: Administrator [TNT-LAPTOP]
JOB NUMBER:
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A29 Westergate St West
ARM B - A29 Fontwell Ave North
ARM C - B2233 Barnham Road South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	6.50	30.00	42.00	25.00	19.0	0.740	33.030
ARM B	4.00	4.00	0.00	12.00	25.00	54.0	0.496	17.859
ARM C	3.25	6.00	9.00	11.00	25.00	7.0	0.625	24.367

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

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

ARUN DISTRICT COUNCIL A1/3/19/PL

TIME PERIOD BEGINS(16.15)AND ENDS(17.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: 2025 + Dvt PM

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	10.93	16.39	10.93
ARM B	15.00	45.00	75.00	10.36	15.54	10.36
ARM C	15.00	45.00	75.00	7.60	11.40	7.60

DEMAND SET TITLE: 2025 + Dvt PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.015	0.381	0.604
		13.0	333.0	528.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.758	0.005	0.238
		628.0	4.0	197.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.762	0.237	0.002
		463.0	144.0	1.0
		(0.0)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

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									
ARM A	10.97	31.65	0.346	- - -	0.0	0.5	7.7	-	0.048
ARM B	10.40	14.49	0.718	- - -	0.0	2.4	32.4	-	0.228
ARM C	7.63	19.38	0.394	- - -	0.0	0.6	9.3	-	0.085
16.30-16.45									
ARM A	13.10	31.38	0.417	- - -	0.5	0.7	10.5	-	0.055
ARM B	12.42	13.83	0.898	- - -	2.4	6.6	80.1	-	0.521
ARM C	9.11	18.46	0.494	- - -	0.6	1.0	14.0	-	0.107
16.45-17.00									
ARM A	16.04	31.02	0.517	- - -	0.7	1.1	15.5	-	0.067
ARM B	15.21	12.93	1.177	- - -	6.6	42.9	378.1	-	2.181
ARM C	11.16	18.12	0.616	- - -	1.0	1.6	22.4	-	0.142

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									
ARM A	16.04	31.02	0.517	- - -	1.1	1.1	16.0	-	0.067
ARM B	15.21	12.92	1.177	- - -	42.9	77.6	904.1	-	4.775
ARM C	11.16	18.07	0.618	- - -	1.6	1.6	23.7	-	0.145

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									
ARM A	13.10	31.37	0.417	- - -	1.1	0.7	11.0	-	0.055
ARM B	12.42	13.82	0.899	- - -	77.6	59.2	1026.0	-	5.006
ARM C	9.11	17.74	0.514	- - -	1.6	1.1	16.7	-	0.117

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									
ARM A	10.97	31.63	0.347	- - -	0.7	0.5	8.1	-	0.048
ARM B	10.40	14.48	0.718	- - -	59.2	3.6	457.2	-	2.271
ARM C	7.63	17.54	0.435	- - -	1.1	0.8	12.0	-	0.101

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.5	*
16.45	0.7	*
17.00	1.1	*
17.15	1.1	*
17.30	0.7	*
17.45	0.5	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	2.4	**
16.45	6.6	*******
17.00	42.9	**********
17.15	77.6	**********
17.30	59.2	**********
17.45	3.6	****

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.6	*
16.45	1.0	*
17.00	1.6	**
17.15	1.6	**
17.30	1.1	*
17.45	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1203.0	802.0	68.9	0.06	68.9	0.06
B	1141.1	760.7	2878.0	2.52	2878.4	2.52
C	836.9	557.9	98.1	0.12	98.1	0.12
ALL	3180.9	2120.6	3045.0	0.96	3045.4	0.96

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

END OF JOB

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