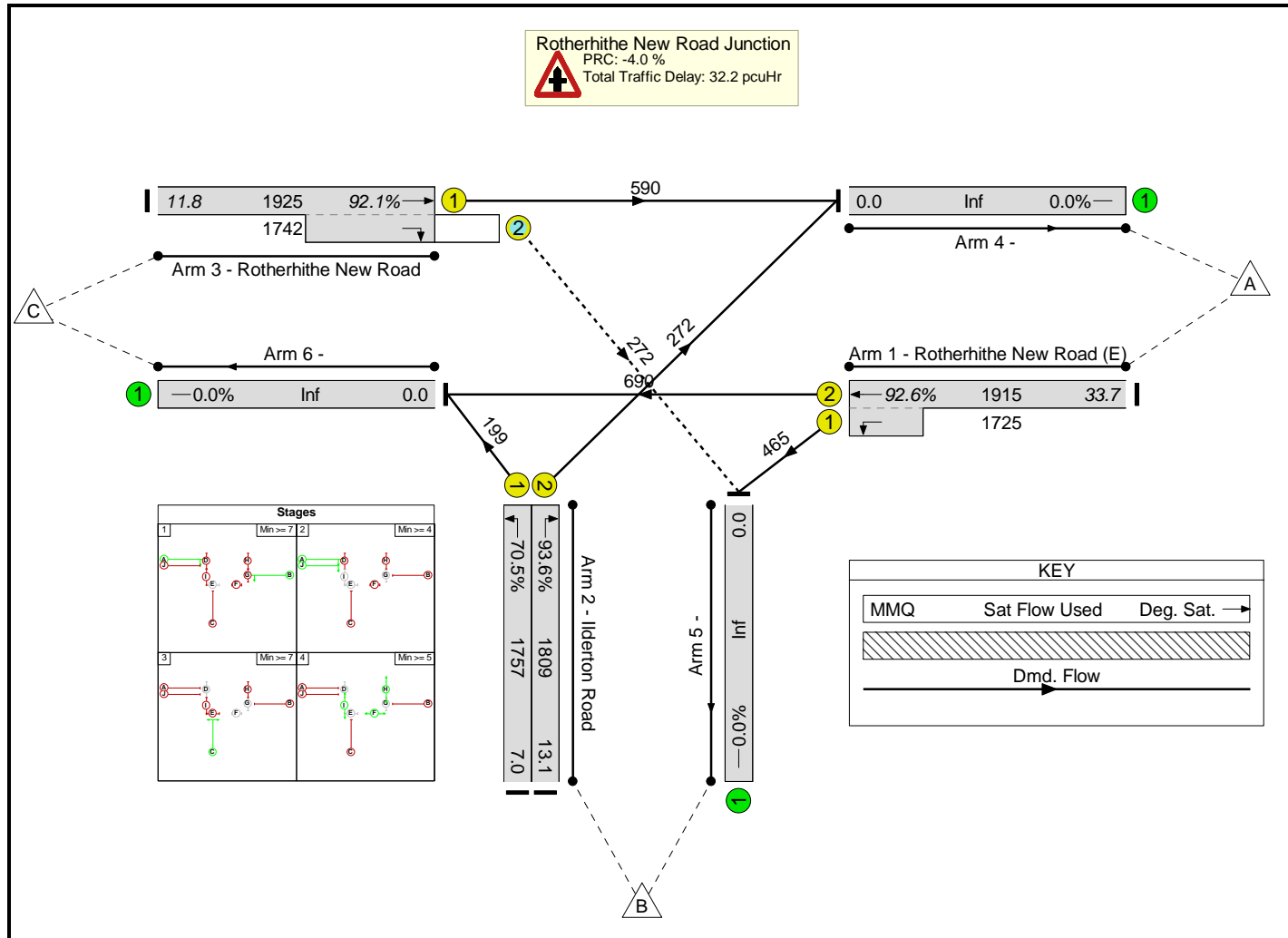


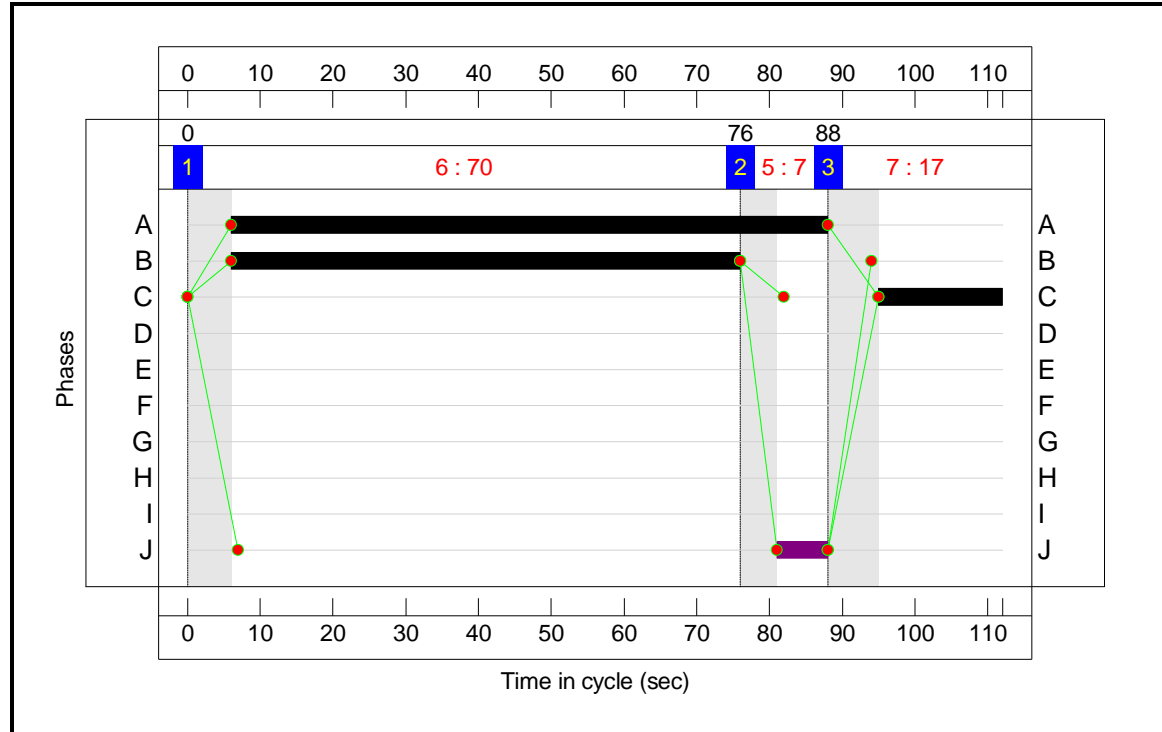
# Junction: Rotherhithe New Road / Ilderton Road

Scenario 5: 'PM Forecast Base' (FG5: 'PM Forecast Base', Plan 1: 'No Peds')

## Network Layout Diagram



## Signal Timings Diagram

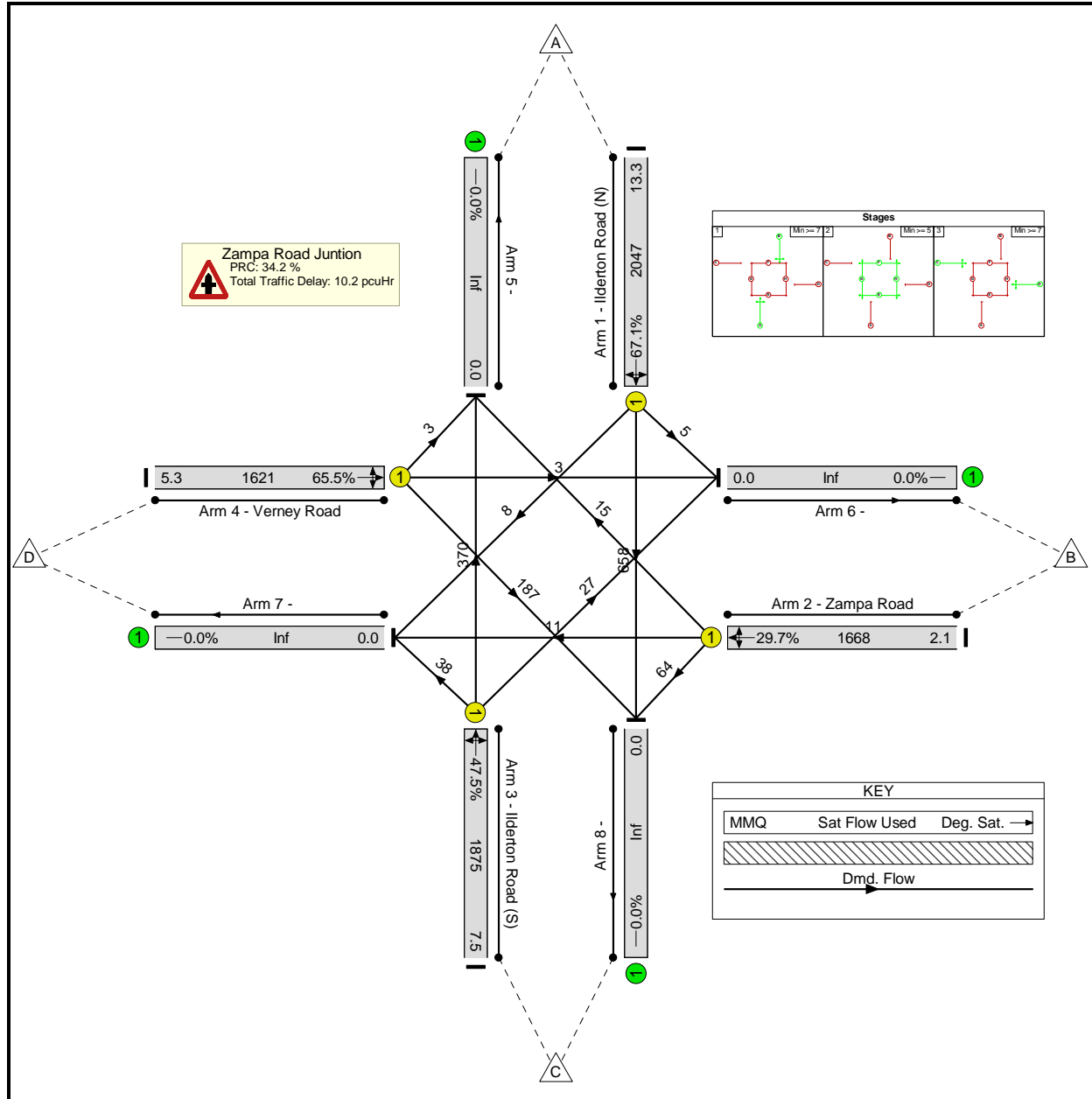


## Network Results

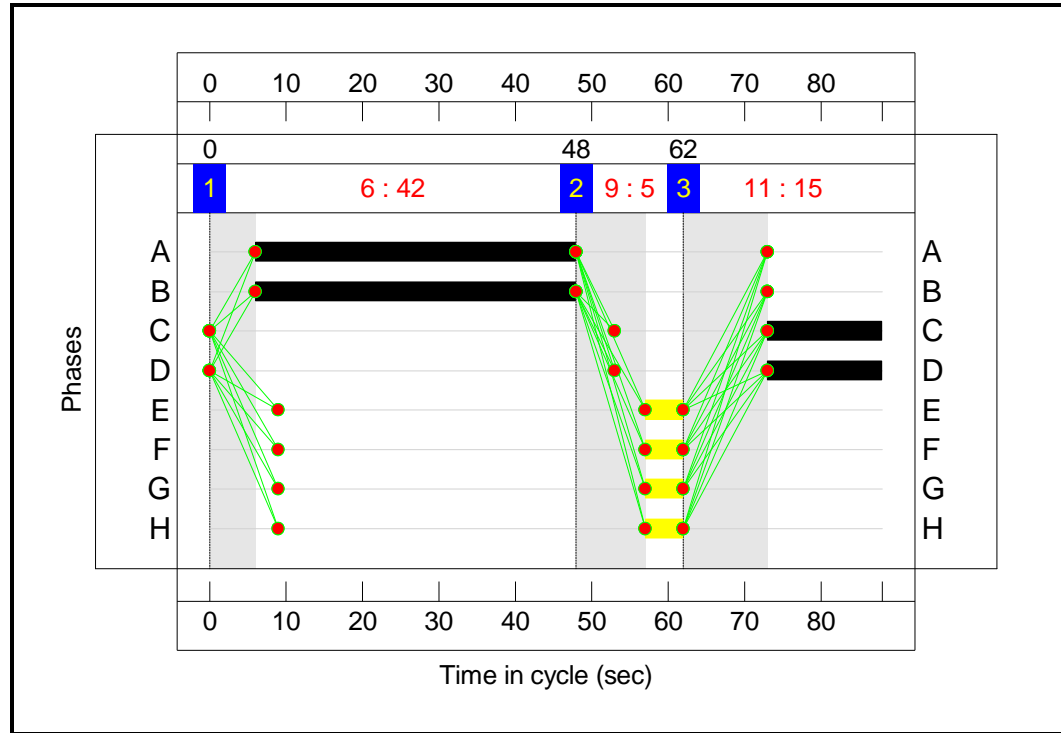
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
1/2+1/1	Rotherhithe New Road (E) Left Ahead	U	B		1	70	-	1155	1915:1725	1247	92.6%	10.7	33.4	33.7
2/1	Ilderton Road Left	U	C		1	17	-	199	1757	282	70.5%	3.6	65.5	7.0
2/2	Ilderton Road Right	U	C		1	17	-	272	1809	291	93.6%	8.3	110.0	13.1
3/1+3/2	Rotherhithe New Road Ahead Right	U+O	A	J	1	82	-	862	1925:1742	936	92.1%	9.6	40.2	11.8
		C1	PRC for Signalled Lanes (%):		-4.0		Total Delay for Signalled Lanes (pcuHr):		32.25					
			PRC Over All Lanes (%):		-4.0		Total Delay Over All Lanes(pcuHr):		32.25		Cycle Time (s):		112	

# Junction: Ilderton Road / Zampa Road / Verney Road

Scenario 5: 'PM Forecast Base ' (FG5: 'PM Forecast Base', Plan 1: 'Peds every cycle')  
 Network Layout Diagram



## Signal Timings Diagram



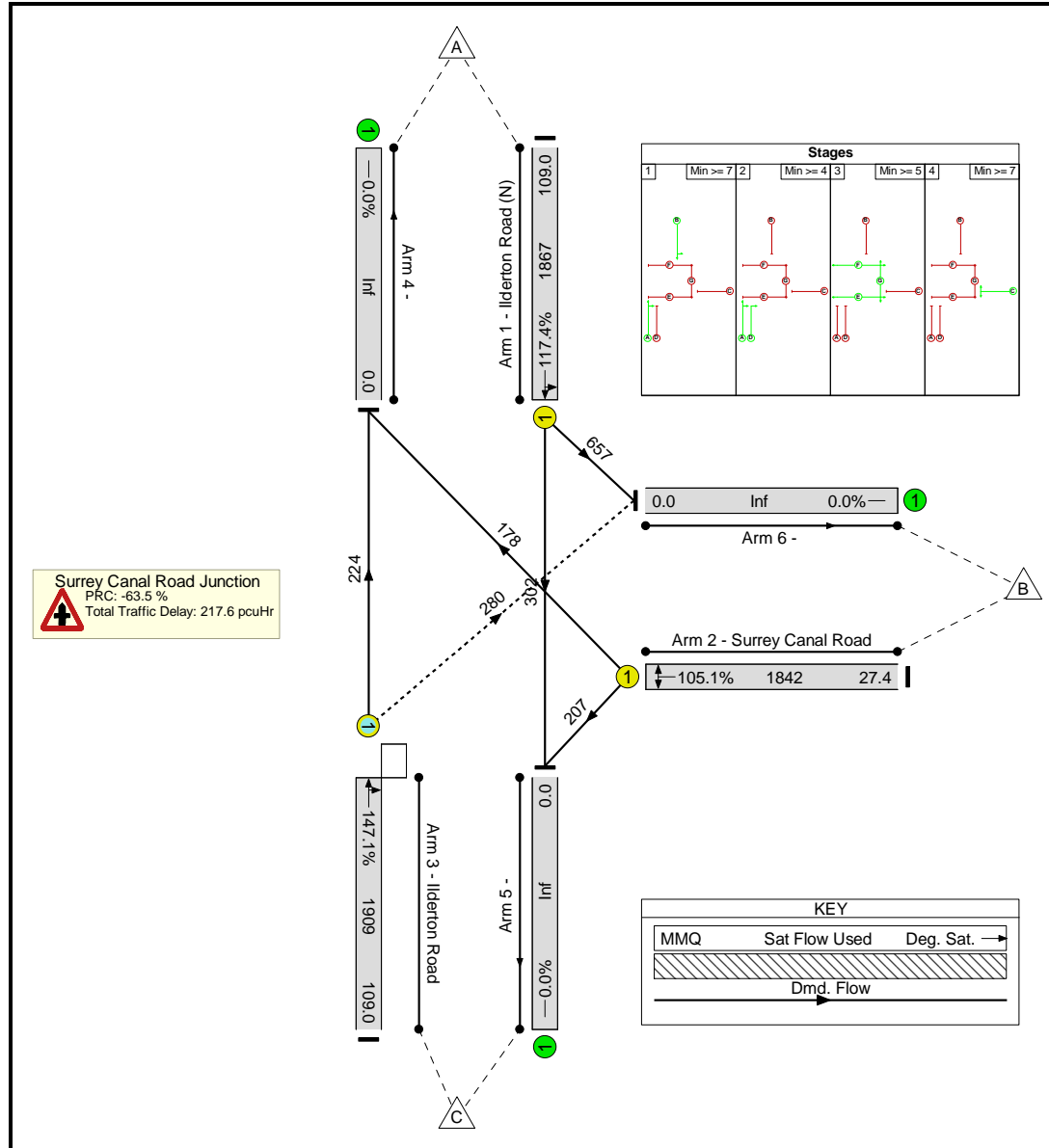
## Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
1/1	Ilderton Road (N) Left Right Ahead	U	B		1	42	-	671	2047	1000	67.1%	4.2	22.6	13.3
2/1	Zampa Road Right Ahead Left	U	D		1	15	-	90	1668	303	29.7%	1.0	39.6	2.1
3/1	Ilderton Road (S) Ahead Right Left	U	A		1	42	-	435	1875	916	47.5%	2.3	18.7	7.5
4/1	Verney Road Left Ahead Right	U	C		1	15	-	193	1621	295	65.5%	2.7	50.8	5.3
C1						PRC for Signalled Lanes (%):	34.2	Total Delay for Signalled Lanes (pcuHr):			10.18			
						PRC Over All Lanes (%):	34.2	Total Delay Over All Lanes (pcuHr):			10.18	Cycle Time (s): 88		

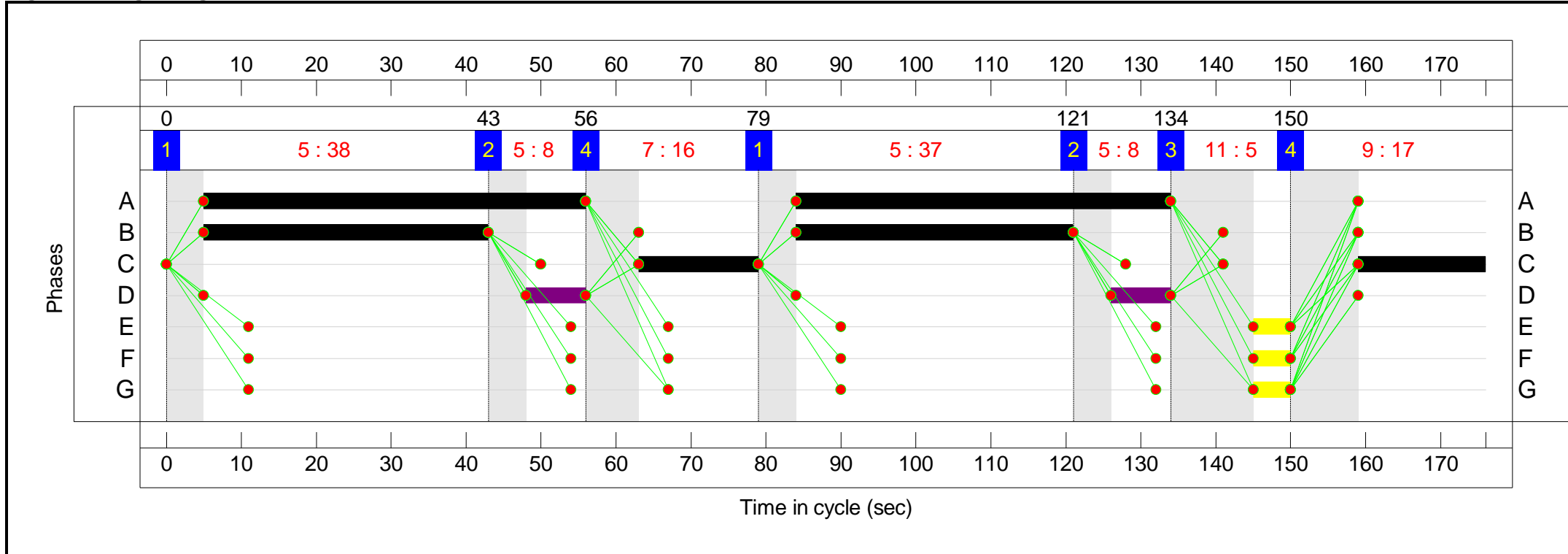
# Junction: Ilderton Road / Surrey Canal Road

Scenario 6: 'PM Forecast Base' (FG6: 'PM Forecast Base', Plan 3: 'Peds every other cycle')

## Network Layout Diagram



## Signal Timings Diagram



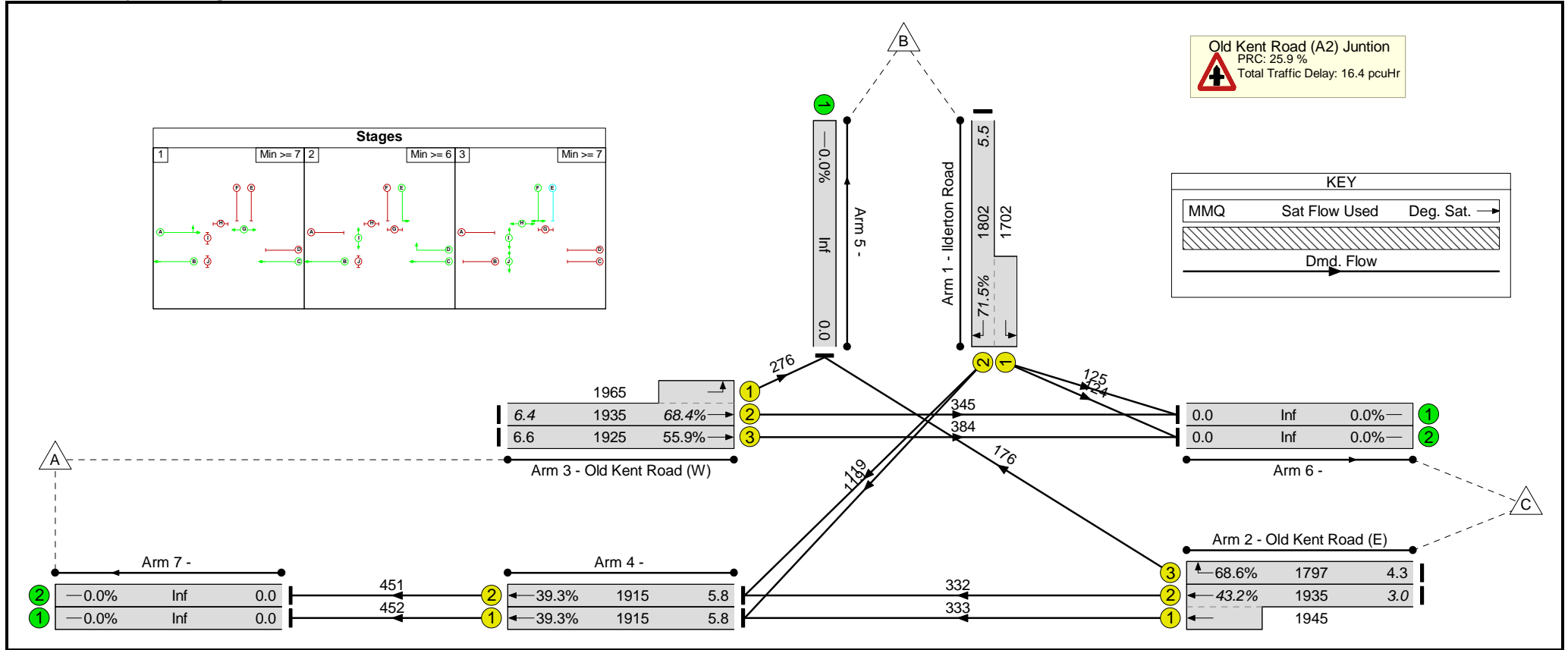
## Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
1/1	Ilderton Road (N) Ahead Left	U	B		2	75	-	959	1867	817	117.4%	94.5	354.8	109.0
2/1	Surrey Canal Road Right Left	U	C		2	33	-	385	1842	366	105.1%	21.3	199.5	27.4
3/1	Ilderton Road Ahead Right	O	A	D	2	101	16	504	1909	343	147.1%	101.7	726.6	109.0
C1					PRC for Signalled Lanes (%):		-63.5	Total Delay for Signalled Lanes (pcuHr):		217.59				
					PRC Over All Lanes (%):		-63.5	Total Delay Over All Lanes (pcuHr):		217.59		Cycle Time (s): 176		

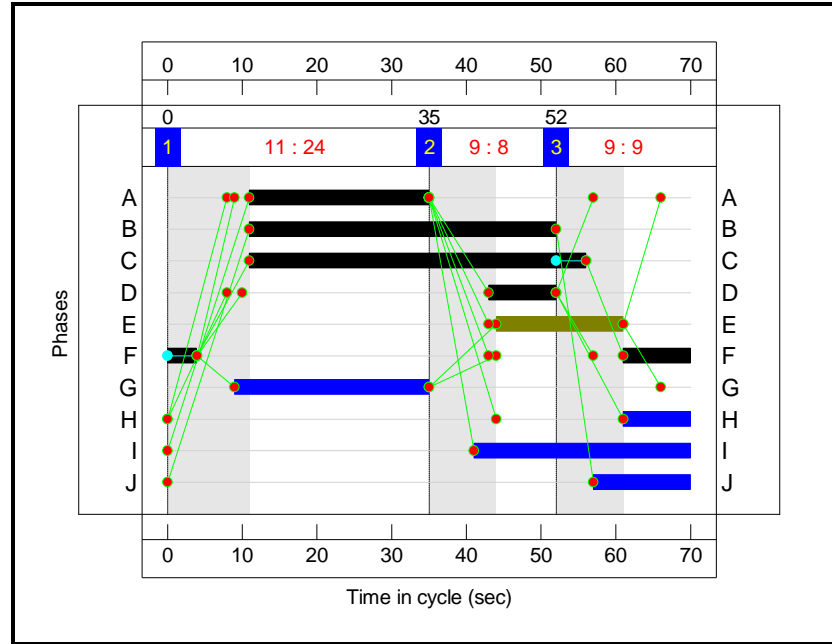
# Junction: Old Kent Road / Ilderton Road

Scenario 5: 'PM Forecast Base' (FG5: 'PM Forecast Base', Plan 1: 'Standard Plan')

## Network Layout Diagram



## Signal Timings Diagram



## Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
1/2+1/1	Ilderton Road Right Left	U	F	E	1	13:30	-	487	1802:1702	681	71.5%	3.8	28.3	5.5
2/2+2/1	Old Kent Road (E) Ahead	U	C		1	45	-	665	1935:1945	1539	43.2%	1.3	7.0	3.0
2/3	Old Kent Road (E) Right	U	D		1	9	-	176	1797	257	68.6%	2.5	50.3	4.3
3/2+3/1	Old Kent Road (W) Left Ahead	U	A		1	24	-	621	1935:1965	908	68.4%	4.1	23.5	6.4
3/3	Old Kent Road (W) Ahead	U	A		1	24	-	384	1925	687	55.9%	2.6	24.0	6.6
4/1	Ahead	U	B		1	41	-	452	1915	1149	39.3%	1.1	8.8	5.8
4/2	Ahead	U	B		1	41	-	451	1915	1149	39.3%	1.1	8.8	5.8
C1						PRC for Signalled Lanes (%): 25.9	Total Delay for Signalled Lanes (pcuHr): 16.39			16.39				
						PRC Over All Lanes (%): 25.9	Total Delay Over All Lanes (pcuHr): 16.39			16.39	Cycle Time (s): 70			



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

PICADY 5.1 ANALYSIS PROGRAM  
RELEASE 4.0 (SEPT 2008)

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TRL SOFTWARE BUREAU  
TEL: CROWTHORNE (01344) 770758, FAX: 770356  
EMAIL: Software@trl.co.uk  
-----

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Run with file:-  
"J:\17004\Transport\Working Documents\Junction Analysis\PICADY\Site 4 - Ilderton Road\_Stockholm Road\  
Ilderton Rd\_Stockholm Rd.vpi"  
(drive-on-the-left) at 15:27:26 on Friday, 28 January 2011

RUN INFORMATION  
\*\*\*\*\*

RUN TITLE : Ilderton Road / Stockholm Road  
LOCATION : Site 4  
DATE : 18/08/10  
CLIENT :  
ENUMERATOR : drevans [CBH-DSK-228]  
JOB NUMBER : 17004  
STATUS :  
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY  
\*\*\*\*\*

INPUT DATA  
-----

```

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

ARM A IS Ilderton Road (N)  
ARM B IS Stockholm Road  
ARM C IS Ilderton Road (S)

STREAM LABELLING CONVENTION  
-----

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

GEOMETRIC DATA  
-----

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I ( W )	7.50 M.	I
I	CENTRAL RESERVE WIDTH	I (WCR )	0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I (WC-B)	2.20 M.	I
I	- VISIBILITY	I (VC-B)	90.00 M.	I
I	- BLOCKS TRAFFIC	I	YES	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I (VB-C)	22.0 M.	I
I	- VISIBILITY TO RIGHT	I (VB-A)	18.0 M.	I
I	- LANE 1 WIDTH	I (WB-C)	3.30 M.	I
I	- LANE 2 WIDTH	I (WB-A)	0.00 M.	I

SLOPES AND INTERCEPT

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

I	Intercept For I STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I
I	654.35	0.24	0.09	I

I	Intercept For I 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	I
I	508.41	0.22	0.09	0.14	0.31	I

I	Intercept For I STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I
I	626.08	0.23	0.23	I

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

TRAFFIC DEMAND DATA

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

Demand set: Ilderton Road / Stockholm Rd\_Forecast Base PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN I FLOW STARTS I TO RISE	I	TOP OF PEAK I IS REACHED	I	FLOW STOPS I FALLING	I	RATE OF FLOW (VEH/MIN) I BEFORE I PEAK	I	AT TOP I OF PEAK	I	AFTER I PEAK	I
I	ARM A	I	15.00	I	45.00	I	75.00	I	11.38	I	17.06	I	11.38	I
I	ARM B	I	15.00	I	45.00	I	75.00	I	0.08	I	0.11	I	0.08	I
I	ARM C	I	15.00	I	45.00	I	75.00	I	5.28	I	7.91	I	5.28	I

Demand set: Ilderton Road / Stockholm Rd\_Forecast Base PM

I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
I	16.45 - 17.00	I	ARM A	I	0.000	I	0.001	I	0.999	I		I	
I		I		I	0.0	I	1.0	I	909.0	I		I	
I		I		I	( 0.0)	I	( 0.0)	I	( 0.0)	I		I	
I		I	ARM B	I	0.833	I	0.000	I	0.167	I		I	
I		I		I	5.0	I	0.0	I	1.0	I		I	
I		I		I	( 0.0)	I	( 0.0)	I	( 0.0)	I		I	
I		I	ARM C	I	0.979	I	0.021	I	0.000	I		I	
I		I		I	413.0	I	9.0	I	0.0	I		I	
I		I		I	( 0.0)	I	( 0.0)	I	( 0.0)	I		I	

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Ilderton Road / Stockholm Rd\_Forecast Base PM  
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.08	5.56	0.014		0.00	0.01	0.2		0.18
C-AB	0.11	7.85	0.014		0.00	0.01	0.2		0.13
A-B	0.01								
A-C	11.41								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.09	4.93	0.018		0.01	0.02	0.3		0.21
C-AB	0.13	7.34	0.018		0.01	0.02	0.3		0.14
A-B	0.01								
A-C	13.62								

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	0.11	4.04	0.027		0.02	0.03	0.4		0.25
C-AB	0.17	6.65	0.025		0.02	0.03	0.4		0.15
A-B	0.02								
A-C	16.68								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.11	4.04	0.027		0.03	0.03	0.4		0.25
C-AB	0.17	6.65	0.025		0.03	0.03	0.4		0.15
A-B	0.02								
A-C	16.68								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/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									
B-AC	0.09	4.93	0.018		0.03	0.02	0.3		0.21
C-AB	0.13	7.34	0.018		0.03	0.02	0.3		0.14
A-B	0.01								
A-C	13.62								

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)
18.00-18.15									
B-AC	0.08	5.56	0.014		0.02	0.01	0.2		0.18
C-AB	0.11	7.85	0.014		0.02	0.01	0.2		0.13
A-B	0.01								
A-C	11.41								

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

-----  
 QUEUE FOR STREAM B-AC  
 -----

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

-----  
 QUEUE FOR STREAM C-AB  
 -----

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

-----  
 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD  
 -----

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I						
I	I	I	I	I	* DELAY *	I	* DELAY *	I						
I	I	I	I	I	I	I	I	I						
I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)						
I	B-AC	I	8.3	I	5.5	I	1.8	I	0.22	I	1.8	I	0.22	I
I	C-AB	I	12.4	I	8.3	I	1.8	I	0.14	I	1.8	I	0.14	I
I	A-B	I	1.4	I	0.9	I		I		I		I		I
I	A-C	I	1251.2	I	834.1	I		I		I		I		I
I	ALL	I	1841.7	I	1227.8	I	3.6	I	0.00	I	3.6	I	0.00	I

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

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

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

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

PICADY 5.1 ANALYSIS PROGRAM  
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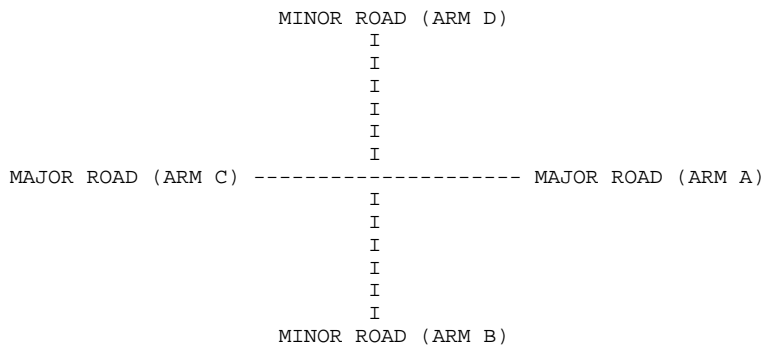
Run with file:-  
"J:\17004\Transport\Working Documents\Junction Analysis\PICADY\Site 11 - Ilderton Road\_Penarth St\_Rollins St\  
Ilderton Rd\_Penarth St\_Rollins St.vpi"  
(drive-on-the-left) at 09:27:05 on Wednesday, 22 December 2010

RUN INFORMATION  
\*\*\*\*\*

RUN TITLE : Ilderton Road / Penarth Street / Rollins Street  
LOCATION : Site 11  
DATE : 18/08/10  
CLIENT :  
ENUMERATOR : drevans [CBH-DSK-228]  
JOB NUMBER : 17004  
STATUS :  
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY  
\*\*\*\*\*

INPUT DATA  
-----



ARM A IS Ilderton Road (N)  
ARM B IS Rollins Street  
ARM C IS Ilderton Road (S)  
ARM D IS Penarth Street

STREAM LABELLING CONVENTION  
-----

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

-----  
 GEOMETRIC DATA  
 -----

I	DATA ITEM	I	MINOR ROAD B	I	MINOR ROAD D	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I	( W ) 7.40 M.	I	( W ) 7.40 M.	I
I	CENTRAL RESERVE WIDTH	I	( WCR ) 0.00 M.	I	( WCR ) 0.00 M.	I
I		I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	( WC-B ) 2.20 M.	I	( WA-D ) 2.20 M.	I
I	- VISIBILITY	I	( VC-B ) 90.00 M.	I	( VA-D ) 90.00 M.	I
I	- BLOCKS TRAFFIC	I	YES	I	YES	I
I		I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I	( VB-C ) 25.0 M.	I	( VD-A ) 26.0 M.	I
I	- VISIBILITY TO RIGHT	I	( VB-A ) 16.0 M.	I	( VD-C ) 22.0 M.	I
I	- LANE 1 WIDTH	I	( WB-C ) 4.00 M.	I	( WD-A ) 4.00 M.	I
I	- LANE 2 WIDTH	I	( WB-A ) 0.00 M.	I	( WD-C ) 0.00 M.	I

-----  
 .SLOPES AND INTERCEPT  
 -----

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

STREAM B-C

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM A-C	STREAM A-C	STREAM A-B	STREAM A-B	I
I	697.48	0.25		0.10		I

STREAM D-A

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM D-A	STREAM C-A	STREAM C-A	STREAM C-D	STREAM C-D	I
I	701.64	0.26		0.10		I

STREAM B-A

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM A-C	STREAM A-C	STREAM A-D	STREAM A-D	STREAM D-A	STREAM D-A	STREAM D-B	STREAM D-B	I
I	542.98	0.23		0.23		0.23		0.23		I

I	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM A-B	STREAM A-B	STREAM C-A	STREAM C-A	STREAM C-B	STREAM C-B	STREAM D-C	STREAM D-C	I
I	0.09		0.15		0.34		0.12		I

STREAM D-C

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM D-C	STREAM C-A	STREAM C-A	STREAM C-B	STREAM C-B	STREAM B-C	STREAM B-C	STREAM B-D	STREAM B-D	I
I	546.57	0.24		0.24		0.24		0.24		I

I	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-D	STREAM C-D	STREAM A-C	STREAM A-C	STREAM A-D	STREAM A-D	STREAM B-A	STREAM B-A	I
I	0.09		0.15		0.34		0.12		I

STREAM C-B

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM A-C	STREAM A-C	STREAM A-D	STREAM A-D	I
I	626.08	0.23		0.33		I

STREAM A-D

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM A-D	STREAM C-A	STREAM C-A	STREAM C-B	STREAM C-B	I
I	626.08	0.23		0.33		I

I	Intercept For I STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B	I
I	542.98	0.23	0.23	0.09	0.34	I

I	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing	I
I	0.15	0.15			I

B-D Stream From Right Hand Lane

I	Intercept For I STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B	I
I	542.98	0.23	0.23	0.09	0.34	I

I	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing	I
I	0.15	0.15			I

D-B Stream From Left Hand Lane

I	Intercept For I STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-D	I
I	546.57	0.24	0.24	0.09	0.34	I

I	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing	I
I	0.15	0.15			I

D-B Stream From Right Hand Lane

I	Intercept For I STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D	I
I	546.57	0.24	0.24	0.09	0.34	I

I	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing	I
I	0.15	0.15			I

TRAFFIC DEMAND DATA

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

Demand set: Ilderton Road / Penarth Street / Rollins Street\_Forecast Base PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	I	NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)			I
		I	I	I	I	I	I	
I	ARM	FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER	I
I		TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK	I
I	I	I	I	I	I	I	I	I
I	ARM A	15.00	45.00	75.00	6.06	9.09	6.06	I
I	ARM B	15.00	45.00	75.00	0.88	1.31	0.88	I
I	ARM C	15.00	45.00	75.00	6.44	9.66	6.44	I
I	ARM D	15.00	45.00	75.00	0.94	1.41	0.94	I

Demand set: Ilderton Road / Penarth Street / Rollins Street\_Forecast Base PM

		TURNING PROPORTIONS														
		TURNING COUNTS														
		(PERCENTAGE OF H.V.S)														
I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I	ARM	D	I
I	16.45 - 17.00	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
I		I	ARM A	I	0.000	I	0.012	I	0.963	I	0.025	I	0.025	I	0.000	I
I		I		I	0.0	I	6.0	I	467.0	I	12.0	I	12.0	I	0.0	I
I		I		I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I
I		I		I		I		I		I		I		I		I
I		I	ARM B	I	0.443	I	0.000	I	0.486	I	0.071	I	0.071	I	0.000	I
I		I		I	31.0	I	0.0	I	34.0	I	5.0	I	5.0	I	0.0	I
I		I		I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I
I		I		I		I		I		I		I		I		I
I		I	ARM C	I	0.930	I	0.047	I	0.000	I	0.023	I	0.023	I	0.000	I
I		I		I	479.0	I	24.0	I	0.0	I	12.0	I	12.0	I	0.0	I
I		I		I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I
I		I		I		I		I		I		I		I		I
I		I	ARM D	I	0.773	I	0.040	I	0.187	I	0.000	I	0.000	I	0.000	I
I		I		I	58.0	I	3.0	I	14.0	I	0.0	I	0.0	I	0.0	I
I		I		I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I	( 0.0)	I
I		I		I		I		I		I		I		I		I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Ilderton Road / Penarth Street / Rollins Street\_Forecast Base PM  
AND FOR TIME PERIOD 2

I	TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY	AVERAGE DELAY	I
I		(VEH/MIN)	(VEH/MIN)	CAPACITY	FLOW	QUEUE	QUEUE	(VEH.MIN/	(VEH.MIN/	PER ARRIVING	I
I				(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)	I
I	16.45-17.00										I
I	B-ACD	0.88	7.84	0.112		0.00	0.12	1.8		0.14	I
I	A-BCD	0.15	8.93	0.017		0.00	0.02	0.3		0.11	I
I	D-ABC	0.94	9.02	0.104		0.00	0.12	1.7		0.12	I
I	C-ABD	0.30	9.03	0.033		0.00	0.03	0.5		0.11	I

I	TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY	AVERAGE DELAY	I
I		(VEH/MIN)	(VEH/MIN)	CAPACITY	FLOW	QUEUE	QUEUE	(VEH.MIN/	(VEH.MIN/	PER ARRIVING	I
I				(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-ACD	1.05	7.37	0.142		0.12	0.16	2.4		0.16	I
I	A-BCD	0.18	8.64	0.021		0.02	0.02	0.3		0.12	I
I	D-ABC	1.12	8.62	0.130		0.12	0.15	2.2		0.13	I
I	C-ABD	0.36	8.76	0.041		0.03	0.04	0.7		0.12	I

I	TIME	DEMAND	CAPACITY	DEMAND/	PEDESTRIAN	START	END	DELAY	GEOMETRIC DELAY	AVERAGE DELAY	I
I		(VEH/MIN)	(VEH/MIN)	CAPACITY	FLOW	QUEUE	QUEUE	(VEH.MIN/	(VEH.MIN/	PER ARRIVING	I
I				(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-ACD	1.28	6.71	0.192		0.16	0.23	3.4		0.18	I
I	A-BCD	0.22	8.24	0.027		0.02	0.03	0.4		0.12	I
I	D-ABC	1.38	8.04	0.171		0.15	0.20	3.0		0.15	I
I	C-ABD	0.44	8.39	0.053		0.04	0.06	0.9		0.13	I

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-ACD	1.28	6.71	0.192		0.23	0.24	3.5		0.18
A-BCD	0.22	8.24	0.027		0.03	0.03	0.4		0.12
D-ABC	1.38	8.04	0.171		0.20	0.21	3.1		0.15
C-ABD	0.44	8.39	0.053		0.06	0.06	0.9		0.13

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)
17.45-18.00									
B-ACD	1.05	7.37	0.142		0.24	0.17	2.6		0.16
A-BCD	0.18	8.64	0.021		0.03	0.02	0.3		0.12
D-ABC	1.12	8.62	0.130		0.21	0.15	2.3		0.13
C-ABD	0.36	8.76	0.041		0.06	0.04	0.7		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-ACD	0.88	7.84	0.112		0.17	0.13	2.0		0.14
A-BCD	0.15	8.93	0.017		0.02	0.02	0.3		0.11
D-ABC	0.94	9.02	0.104		0.15	0.12	1.8		0.12
C-ABD	0.30	9.03	0.033		0.04	0.04	0.5		0.11

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

QUEUE FOR STREAM B-ACD

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

QUEUE FOR STREAM A-BCD

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

QUEUE FOR STREAM D-ABC

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	0.2
18.15	0.1

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND		I	* QUEUEING * * DELAY *		I	* INCLUSIVE QUEUEING * * DELAY *		I
I	I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	I	(MIN)	(MIN/VEH)	I
I	B-ACD	I	96.3	64.2	I	15.7	0.16	I	15.7	0.16	I
I	A-BCD	I	16.5	11.0	I	2.0	0.12	I	2.0	0.12	I
I	D-ABC	I	103.2	68.8	I	14.0	0.14	I	14.0	0.14	I
I	C-ABD	I	33.0	22.0	I	4.1	0.13	I	4.1	0.13	I
I	ALL	I	1576.0	1050.7	I	35.8	0.02	I	35.8	0.02	I

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

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

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 GEOMETRIC DATA  
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I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I	( W ) 7.50 M.	I
I	CENTRAL RESERVE WIDTH	I	( WCR ) 0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	( WC-B ) 2.20 M.	I
I	- VISIBILITY	I	( VC-B ) 90.00 M.	I
I	- BLOCKS TRAFFIC	I	YES	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I	( VB-C ) 20.0 M.	I
I	- VISIBILITY TO RIGHT	I	( VB-A ) 14.0 M.	I
I	- LANE 1 WIDTH	I	( WB-C ) 2.20 M.	I
I	- LANE 2 WIDTH	I	( WB-A ) 0.00 M.	I

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

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	582.07		0.21		0.08	I

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM	C-B	I
I	451.67		0.19		0.08		0.12		0.28	I

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	626.08		0.23		0.23	I

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

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 TRAFFIC DEMAND DATA  
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I	ARM	I	FLOW SCALE (%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: Surrey Canal Road / Excelsior Ind Estate Access\_Forecast Base PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.

LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I								
I	I	I	FLOW STARTS I TOP OF PEAK I FLOW STOPS	I	I BEFORE I AT TOP I AFTER	I								
I	I	I	I TO RISE I IS REACHED I FALLING	I	I PEAK I OF PEAK I PEAK	I								
I	I	I	I	I	I	I								
I	ARM A	I	15.00	I	45.00	I	75.00	I	11.71	I	17.57	I	11.71	I
I	ARM B	I	15.00	I	45.00	I	75.00	I	0.22	I	0.34	I	0.22	I
I	ARM C	I	15.00	I	45.00	I	75.00	I	4.80	I	7.20	I	4.80	I



TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	0.27	6.29	0.043		0.06	0.05	0.7		0.17
C-AB	0.09	7.25	0.012		0.02	0.01	0.2		0.14
A-B	0.03								
A-C	14.01								

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)
18.00-18.15									
B-AC	0.23	6.81	0.033		0.05	0.03	0.5		0.15
C-AB	0.08	7.77	0.010		0.01	0.01	0.1		0.13
A-B	0.03								
A-C	11.73								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL CAPACITY (VEH/H)	* QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN)
B-AC	24.8	16.5	4.2	0.17
C-AB	8.3	5.5	1.2	0.14
A-B	2.8	1.8		
A-C	1287.0	858.0		
ALL	1843.0	1228.7	5.4	0.00

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

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

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