



Unit 23 The Maltings
Stanstead Abbots
Herts SG12 8HG

BY EMAIL

Dear Rob,

Land rear of Woodcock Close and St Georges Way, Impington. Highway Access and Transport Initial Review.

Further to my email of 18th May, please find attached drawings of our highway access layout/s and information supporting development at the rear of Woodcock Close and St Georges Way, Impington.

The land associated with the development is located to the east of St Georges Way and Woodcock Close. There are two distinct plots formed by a northern and a southern field, adjoined by a narrow strip of land. I have attached a location plan for ease of reference.

The northern field has a total area of 1.157 hectares and the southern field has a total area of 1.83 hectares. The total area is therefore just under 3Ha. In addition to the two plots it is understood that the client has ownership of the surrounding fields part of which could if necessary be utilised to ensure any necessary infrastructure can be accommodated but which are not part of the area highlighted for potential development.

St Georges Way

There is an existing access off St Georges Way to a veterinary surgery within the developable area. This is a single lane access with no pedestrian facilities or passing places. It is not unreasonable to expect that some residential development could be approved utilising this access but generally the rule of thumb is that just 6 units are suitable from a single lane and point of access.

Whilst the car movements may be greater for a vets and some offset of trips could be considered, the access does not safely allow for pedestrians or cyclists and so in sustainability terms is limited. I foresee that this access would be better utilised as an emergency access serving a wider development (with a pedestrian and cycle link) and with the primary access off Woodcock Close.

Woodcock Close

We have prepared an access proposal (SK01 attached) utilising the existing route through to the potential development site from the end of the existing T junction in Woodcock Close.

The actual available width of this route is circa 8.7m. We have prepared a layout showing a 1.8m continuous footway and a 4.8m carriageway and a curtailed footway on the south side; with 4.5m radius at the entry.

As the access for a refuse vehicle is straight these slightly smaller 4.5m radii would work in practice. Note that the visibility splay to the left on exit is to the centre of the road. The 'Y' distance is shown at 25m and avoids the neighbouring garden as shown but would cross it if drawn to the ideal standard.

A 25m 'Y' distance is suitable for a 20mph residential road, ideally we would prove that the speed is lower than this and reduce the length of the visibility splay in this direction so that it can meet closer to the

kerbline which would be more agreeable to the local highway authority. As can be seen the footway on the south side of the access road is curtailed before the junction with Woodcock Close as the actual footway width required cannot be achieved, however I have proposed that a full width flat topped road hump is installed so that pedestrians can cross easily to ensure a continuous pedestrian route.

In general I would expect that despite slight deficiencies in the layout and geometry we would be able to reach an agreement with the highway authority for some development.

Development Quantum (road hierarchy)

As Woodcock Close currently has a 5.5m access road it could serve circa 100 units as a cul de sac. However, by installation of an emergency access via the vets access point the level of development that is theoretically possible would increase to circa 200 units. It should then be considered that a significant uplift in development off Woodcock Close could be achieved in road hierarchy terms transport terms.

Linking the sites

A suitable link between the two sites will be key to developing the northern plot. As the SuDs and drainage report has highlighted this will require a bridged structure of some form.

A road bridge with approximate dimensions between the two land plots is shown on drawing SK03. In planning terms this will entail a convoluted process (to bridge the water course) but is a generally a possible option.

Highway capacity

In terms of the highway capacity, all traffic would enter and exit via St Georges Way onto Milton Road. We have undertaken turning flow counts at this junction and prepared a baseline PICADY capacity model of the junction (initial model output attached). I can confirm that there are no capacity issues and a development of upto 100 units would not cause a capacity issue at this junction point based on the weekday AM peak hour traffic flows obtained in April 2018.

However, should a development of any size come forward over say 50 units then off-site junctions may also need to be considered and in particular the signalised junction of Impington Lane and Water Lane.

Issues to be considered

Finally, please note that the OS mapping seems marginally erroneous and so a review of the actual existing kerblines and layout of the access points would need to be undertaken to ensure the proposed access was accurate for planning purposes. I would suggest that a topographical survey is completed of the existing access points for certainty.

I would also suggest that early consultation with the highway authority takes place to agree the slightly sub standard proposed junction layout.

Conclusion

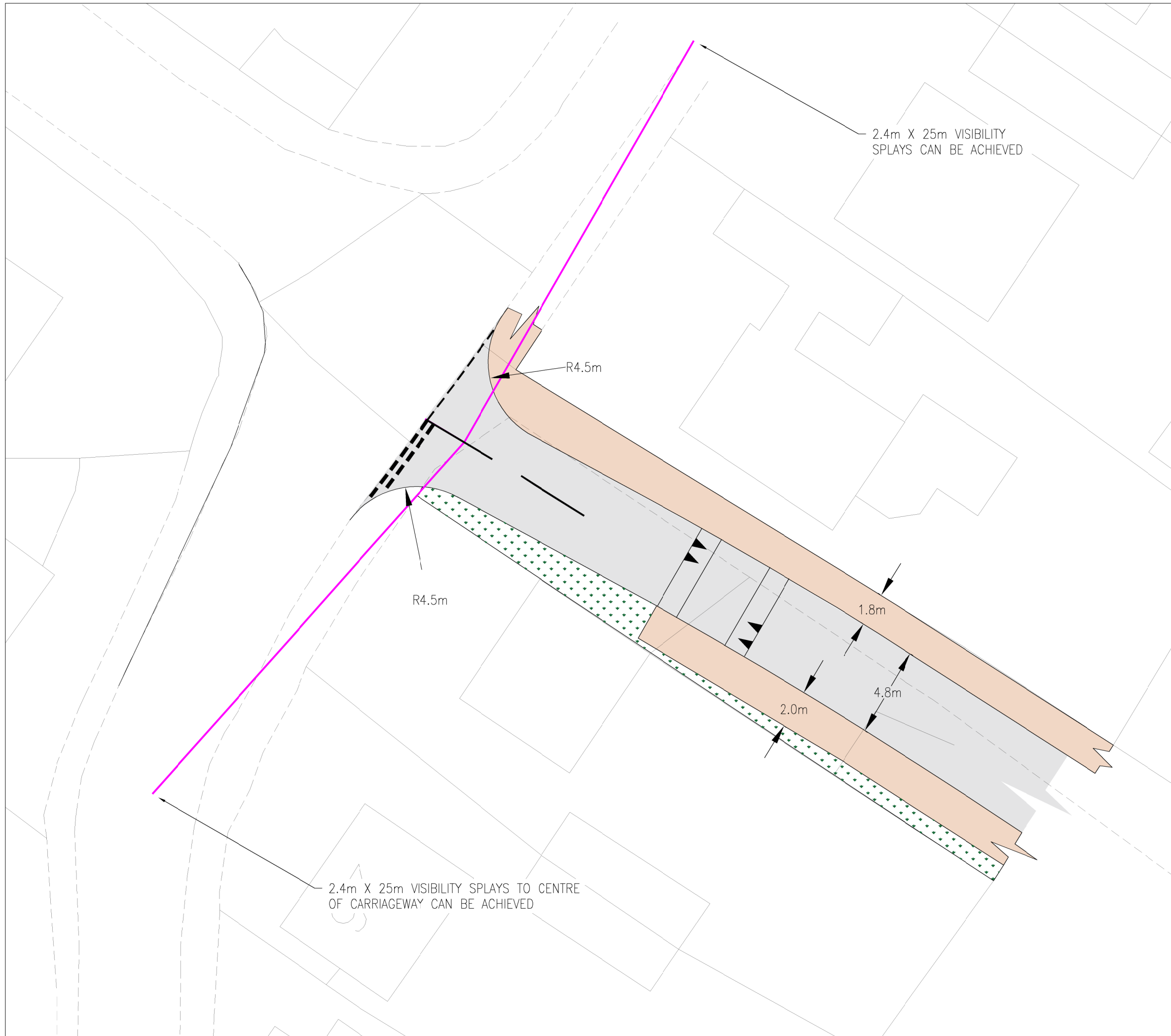
In transport terms I would expect that some development could come forward at this site, and I would suggest that the upper numbers based on housing capacity and land area would be a realistic starting point for discussion with the relevant authorities.

Should you have any questions please do not hesitate to contact me.

Yours Sincerely

Patrick Eggenton
Director

Enc: SK01 – indicative access arrangement, Woodcock Close
SK03 – Link between north and south plots, with indicative dimensions.
Baseline AM peak hour PICADY report



2.4m X 25m VISIBILITY
SPLAYS CAN BE ACHIEVED

R4.5m

R4.5m

1.8m

2.0m

4.8m

2.4m X 25m VISIBILITY SPLAYS TO CENTRE
OF CARRIAGEWAY CAN BE ACHIEVED

REV	DATE	BY	DESCRIPTION	CHK	APD
-----	------	----	-------------	-----	-----

DRAWING STATUS:



Unit 23, The Maltings, Stanstead Abbots, Hertfordshire, SG12 8HG
Tel: 01920 871777
www.eastp.co.uk

CLIENT:

ARCHITECT:

PROJECT:

**LAND REAR OF WOODCOCK CLOSE
IMPINGTON**

TITLE:

**INDICATIVE ACCESS ARRANGEMENT FROM
WOODCOCK CLOSE**

SCALE @ A3: 1:200	DESIGN-DRAWN: EC	DATE: 18/05/2018
-----------------------------	----------------------------	----------------------------

PROJECT No:	DRAWING No: SK01
-------------	----------------------------



Existing access could serve only 6 units but would still require amendment. Therefore best option is to utilise as emergency access and pedestrian/cycle route only.

4,8m carriageway,
2 x 2m footways,
1m allowance for structure on each side.
Total bridge width shown is 10.8m

See SK01 for detail of this access

REV	DATE	BY	DESCRIPTION	CHK	APD
-----	------	----	-------------	-----	-----

DRAWING STATUS:



Unit 23, The Maltings, Stanstead Abbots, Hertfordshire, SG12 8HG
Tel: 01920 871777
www.eastp.co.uk

CLIENT:

ARCHITECT:

PROJECT:
**LAND REAR OF WOODCOCK CLOSE
IMPINGTON**

TITLE:
**LINK BETWEEN PLOTS AND
INDICATIVE ACCESS ARRANGEMENT FROM
WOODCOCK CLOSE**

SCALE @ A3: 1:1000	DESIGN-DRAWN: EC	DATE: 18/05/2018
------------------------------	----------------------------	----------------------------

PROJECT No:	DRAWING No: SK03
-------------	----------------------------

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.2.5947 © Copyright TRL Limited, 2017
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Baseline AM.j9

Path: \\EASSERVE1\Company\EAS\Current Projects\South Cambs, Impington, Land Rear of Woodcock Close and rear of St Georges Way\Analysis\PICADY

Report generation date: 18/05/2018 13:20:39

«2018, AM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2018			
Stream B-C	0.0	5.97	0.01	A
Stream B-A	0.0	9.15	0.01	A
Stream C-AB	0.0	6.83	0.01	A

There are warnings associated with this model run - see the 'Data Errors and Warnings' tables.

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	17/05/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-M6EABD2\EAS
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018	AM	ONE HOUR	07:45	09:15	15

2018, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Milton Road S - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Milton Road N		Major
B	Woodcock Close		Minor
C	Milton Road S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Milton Road S	4.60			53.0	✓	1.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Woodcock Close	One lane plus flare	10.00	4.50	3.90	3.70	3.50	✓	1.00	41	18

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	512	0.099	0.250	0.157	0.357
1	B-C	699	0.114	0.287	-	-
1	C-B	605	0.249	0.249	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Milton Road N		✓	90	100.000
B - Woodcock Close		✓	9	100.000
C - Milton Road S		✓	297	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - Milton Road N	B - Woodcock Close	C - Milton Road S
A - Milton Road N	0	3	87
B - Woodcock Close	3	0	6
C - Milton Road S	294	3	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - Milton Road N	B - Woodcock Close	C - Milton Road S
A - Milton Road N	10	10	10
B - Woodcock Close	10	10	10
C - Milton Road S	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	5.97	0.0	A
B-A	0.01	9.15	0.0	A
C-AB	0.01	6.83	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	5	679	0.007	4	0.0	5.870	A
B-A	2	460	0.005	2	0.0	8.651	A
C-AB	2	589	0.004	2	0.0	6.745	A
C-A	221			221			
A-B	2			2			
A-C	65			65			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	5	675	0.008	5	0.0	5.913	A
B-A	3	450	0.006	3	0.0	8.855	A
C-AB	3	587	0.005	3	0.0	6.781	A
C-A	264			264			
A-B	3			3			
A-C	78			78			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	7	670	0.010	7	0.0	5.972	A
B-A	3	436	0.008	3	0.0	9.155	A
C-AB	3	583	0.006	3	0.0	6.830	A
C-A	324			324			
A-B	3			3			
A-C	96			96			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	7	670	0.010	7	0.0	5.972	A
B-A	3	436	0.008	3	0.0	9.154	A
C-AB	3	583	0.006	3	0.0	6.830	A
C-A	324			324			
A-B	3			3			
A-C	96			96			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	5	675	0.008	5	0.0	5.913	A
B-A	3	450	0.006	3	0.0	8.857	A
C-AB	3	587	0.005	3	0.0	6.782	A
C-A	264			264			
A-B	3			3			
A-C	78			78			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	5	679	0.007	5	0.0	5.874	A
B-A	2	460	0.005	2	0.0	8.652	A
C-AB	2	589	0.004	2	0.0	6.748	A
C-A	221			221			
A-B	2			2			
A-C	65			65			