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South West Bicester
Commercial Area Access Technical Note

Countryside Properties (Bicester) Ltd

July 2011

QM

Issue/revision	Issue 1	Revision 1	Revision 2	Revision 3
Remarks	Final			
Date	July 2011			
Prepared by	David Dixon			
Signature				
Checked by	Mark Foyle			
Signature				
Authorised by	Kevin Kay			
Signature				
Project number	11011546			
File reference	n:\south west bicester\#commercial land parcel\text\reports\110706 commercial area technical note.doc			

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Contents

1 Introduction

1.1 INTRODUCTION

1.1.1 WSP have been commissioned by Countryside Properties (Bicester) Ltd to provide a Technical Note on the Commercial Area Access Strategy within the Kingsmere development, South West Bicester which was granted outline planning permission in 2006 (06/00967/OUT). .

1.1.2 The development site was granted outline planning permission for 1,546 residential units, 20,000 sqm of B1/B2 employment land, a hotel, a health village, a local centre and associated amenities, open space and community facilities including primary school(s) and secondary school provision.

1.1.3 The transport implications of the commercial area were considered alongside the full development within the submitted 2006 Transport Assessment (TA) for the full Outline Planning Application (OPA).

1.1.4 This report has been produced to determine the access arrangement (junction type, size and layout) into the proposed commercial area of the site from the spine road, considering the likely trip generation from the employment uses and hotel located in this area.

1.2 THE DEVELOPMENT

1.2.1 The commercial area is located adjacent to the A41 Oxford Road, lying to the north-west of the proposed main access into Kingsmere. The alignment of the new development spine road dictates the southern boundary of the commercial area and leads to a new signalised junction onto the A41

1.3 ACCESS STRATEGY

1.3.1 The overall access strategy has been considered in some detail within the TA submitted in support of the Kingsmere development.

1.3.2 The commercial area will be accessible from the spine road via a new signalised junction onto the A41. The spine road will connect the A41 to the B4030 Middleton Stoney Road by a torturous route. The commercial area is accessible from the spine road approximately 100m north west of the signal junction with the A41.

1.3.3 The spine road has been designed using the principles enshrined in the Government's Manual for Streets (MfS), which aims to reconcile the 'movement' and 'place-making' function of streets, and in accordance with the Kingsmere Design Code.

1.3.4 The intention is for the development spine road, along with other primary infrastructure to be phased in advance or alongside with the development areas which they will serve. Detailed designs have been prepared and submitted to Oxfordshire County Council (OCC) for this with a view to obtaining Technical Approval for each of the infrastructure elements.

1.3.5 Recent discussions have taken place on the configuration of the main entrance from the A41/development spine road junction. However, to date, very little has been presented in respect of the junction that will serve the commercial area.

1.3.6 As such, this report considers the configuration of the junction arrangement required to serve the commercial area within the scope of the original permission.

1.4 REPORT STRUCTURE

1.4.1 The trip generation and trip assignment characteristics of the development have been used to derive turning movement for the proposed commercial area access junction. This is covered in **Section 2**.

1.4.2 **Section 3** covers the rationale for the design of the junction. An indicative design has been included showing the internal layout of the road network providing access to the commercial area.

Junction capacity tests have also been presented for the peak period, alongside Autotrack analysis showing HGV access into the commercial area.

1.4.3 **Section 4** will summarise the finding of this technical note.

2 Transport Characteristics of the Development

2.1 COMMERCIAL PROPOSALS

2.1.1 The commercial area has been assessed within the 2006 TA for 15,000sqm of B1 office space and 5,000sqm of B2 office space. In addition, the TA included the provision of a 100 room hotel. The assessments below have been based upon the vehicular trip generation set out in the TA.

2.1.2 The vehicular trip generation for this commercial area has therefore been extracted from the 2006 TA in order to understand the level of traffic demand which the proposed access would need to accommodate.

2.1.3 Table 2.1 below shows the number of vehicular trips predicted for the commercial area.

Table 2.1: Trip Generation for the Commercial Area

	Arrivals	Departures	Total
AM Peak Hour (0800-0900)	207	39	246
PM Peak Hour (1700-1800)	37	164	201

Source: Consultant Calculated

2.2 TRIP DISTRIBUTION AND ASSIGNMENT

2.2.1 The development trip distribution has been extracted from the 2006 TA and this has been used to derive turning movement at the proposed access location. This was carried out for a 2014 assessment year based on the combination of background traffic and development related traffic. This assessment accords with that assessed in the OPA approved TA.

2.2.2 The turning flows at the proposed employment area are presented on Figure 1.

2.3 IMPLICATIONS

2.3.1 The above information shows a relatively modest loading of traffic from the commercial area onto the spine road. There is roughly an 80%/20% split between vehicles turning left and right out of the commercial area.

3 Junction Design

3.1 RATIONALE

3.1.1 The following considerations have been taken into account in developing a suitable junction configuration to serve the commercial area:

- A junction form that fits with the overall Manual for Streets principles for the development and is commensurate with the overall network hierarchy and Design Code.
- A design which is keeping with DMRB guidance.
- The requirement for suitable HGV access into the commercial area.
- Sufficient vehicular capacity to meet demand.
- Satisfactory road safety, subject to carrying out a Road Safety Audit (RSA).

3.1.2 The junction arrangement for the commercial access, taking into account the use and location, could be one of the following:

- Priority Junction – no right turn provision;
- Priority Junction – with right turning provision; or
- Mini-roundabout.

3.1.3 This note will consider the junction types in the order as above in the following section.

3.2 PRIORITY JUNCTION – NO RIGHT TURN PROVISION

3.2.1 A priority junction with no right turn provision can be delivered on-line with relatively less impact on the current alignment of the development spine road compared to the other junction arrangement options. WSP Drawing 1546/SK/024-A shows the proposed arrangement.

3.2.2 In junction capacity terms, the test results below show that a priority junction would have sufficient capacity to accommodate the traffic being generated by the commercial area.

Table 3.1 Junction Capacity Test Results for a Priority Junction

Approach	AM Peak Hour (0800-0900)		PM Peak Hour (1700-1800)	
	Max RFC	Max Queue	Max RFC	Max Queue
Commercial Area Access	0.076	0	0.315	1
Spine Road	0.313	1	0.068	0

Source: PICADY

3.2.3 The provision of a priority junction does mean that any northbound traffic on the spine road seeking to turn right into the commercial area would impede the movement of straight-on traffic, owing to the requirements to give way to opposing southbound traffic. However, the junction capacity tests show that the impact of this would not be significant with a maximum queue of 1 vehicles recorded in the AM peak.

3.2.4 A similar queue is recorded for the commercial area access in the PM peak associated with vehicles waiting to exit onto the development spine road.

3.2.5 Priority junctions could be designed to accommodate a right-turn ghost island lane to remove the delay to northbound traffic on the spine road created by right-turning vehicles into the commercial area. However, this would require greater land-take but would only give rise to marginal improvements over the results presented in Table 3.1. It can be concluded that the inclusion of a right-turn lane would offer no significant capacity or performance benefit and would represent an over provision.

3.2.6 It is also felt that the road surface treatments required to delineate a ghost-island arrangement may not be in keeping with or tie in very well with the 'shared square' arrangement being promoted by CDC/OCC at the A41 main access junction.

3.2.7 Following the assessments of a priority junction with no right-turn provision, it is concluded that this type of junction is suitable and therefore, no review on the other junction types has been taken forward.

3.3 AUTOTRACK

3.3.1 The commercial area access junction has been designed to accommodate HGV vehicular movements such that they are serviceable for deliveries. Autotrack software has been used as part of the design process and the information contained in WSP Drawing 1546/ATR/01-A shows that the commercial area can be satisfactorily accessed by HGVs.

3.3.2 No Autotrack analysis has been carried of the internal network as it has been assumed that this layout will be subject to change to incorporate the specifics of each development parcel, such as car parking, service access, gate controls, etc.

4 Summary

4.1 SUMMARY

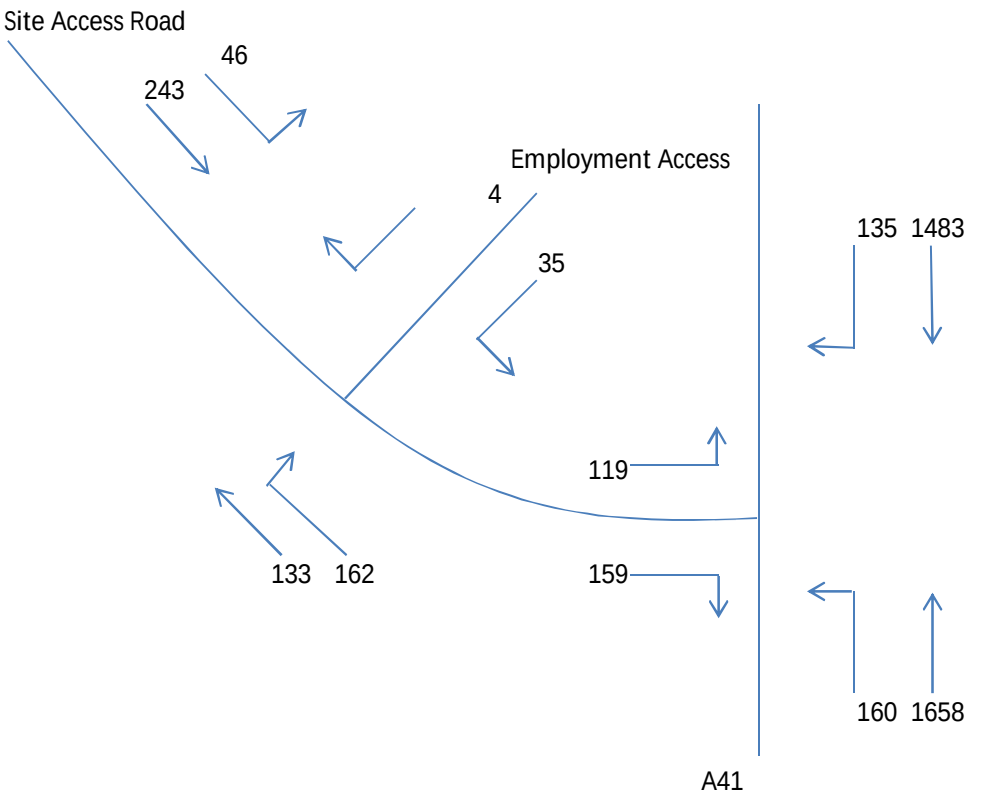
4.1.1 WSP has been commissioned by Countryside Properties (Bicester) Ltd to develop an access strategy for the commercial area of the Kingsmere development.

4.1.2 Through the preparation on this access strategy note, the following conclusions have been reached:

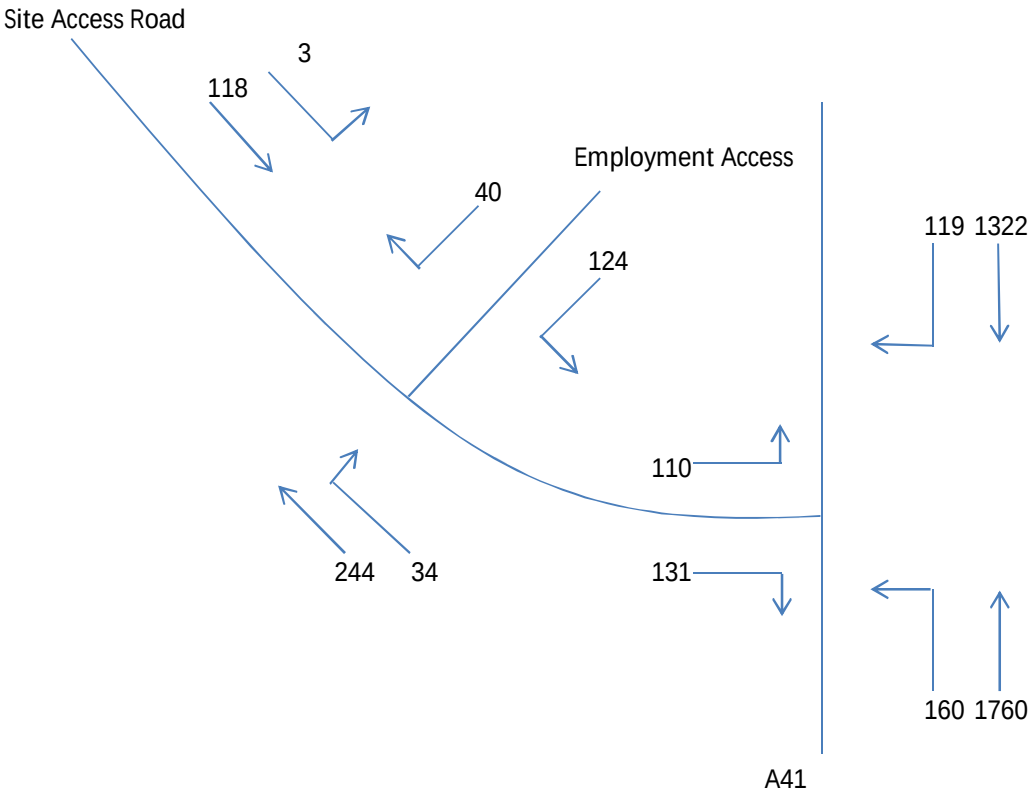
- The trip generation and trip distribution for the commercial area have been taken from the 2006 TA for the Kingsmere OPA (06/00967/OYT) and have been used to derive turning traffic flows suitable for designing a junction off the main development spine road.
- The provision of an access to the commercial area has been shown to be satisfactory resolved through the introduction of a priority junction, the specifications for which have been shown on WSP Drawing 1546/SK/024-A.
- Using the trip generation approved in the OPA TA a priority junction without a right-turn lane has spare capacity and could, if required, accommodate an increase in movements between the commercial area and spine road.

Appendices, Figures & Tables

2014 Base + Dev AM Peak



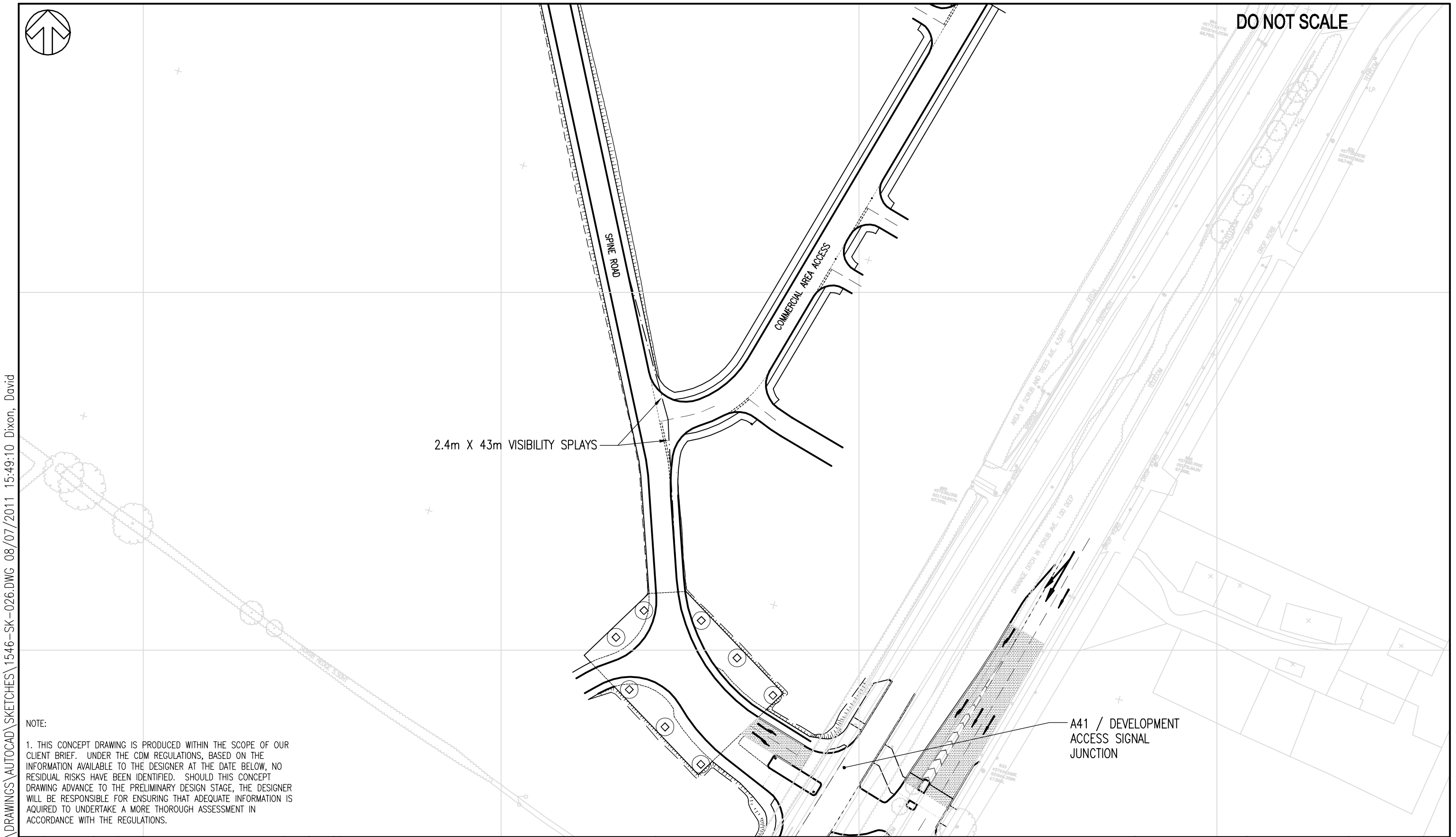
2014 Base + Dev PM Peak



WSP	TITLE SOUTH WEST BICESTER FLOWS 2014 BASE + DEVELOPMENT AM AND PM PEAK HOURS	FIGURE No: 1

N:\South West Bicester\ANALYSIS\SPREADSHEETS\XLS Alphanumeric\\Hotel Access

DO NOT SCALE



NOTE:

1. THIS CONCEPT DRAWING IS PRODUCED WITHIN THE SCOPE OF OUR CLIENT BRIEF. UNDER THE CDM REGULATIONS, BASED ON THE INFORMATION AVAILABLE TO THE DESIGNER AT THE DATE BELOW, NO RESIDUAL RISKS HAVE BEEN IDENTIFIED. SHOULD THIS CONCEPT DRAWING ADVANCE TO THE PRELIMINARY DESIGN STAGE, THE DESIGNER WILL BE RESPONSIBLE FOR ENSURING THAT ADEQUATE INFORMATION IS AQUIRED TO UNDERTAKE A MORE THOROUGH ASSESSMENT IN ACCORDANCE WITH THE REGULATIONS.

REV	DATE	BY	DESCRIPTION	CHK	APD
A	06/07/11	DDD	ISSUED	MF	KK

DRAWING STATUS: FOR INFORMATION ONLY

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CLIENT: COUNTRYSIDE PROPERTIES (BICESTER) LTD

ARCHITECT: HARRIS PARTNERSHIP

PROJECT: SOUTH WEST BICESTER

TITLE: PROPOSED ACCESS INTO COMMERCIAL AREA

SCALE @ A3:	CHECKED:	APPROVED:
1:1000	MF	KK
CAD FILE:	DESIGN-DRAWN:	DATE:
1546-SK-026	DDD	July 2011
PROJECT No:	DRAWING No:	REV:
11011546	1546/SK/026	A

N:\SOUTH WEST BICESTER\DRAWINGS\AUTOCAD\SKETCHES\1546-SK-026.DWG 08/07/2011 15:49:10 Dixon, David

PROJECT: SOUTH WEST BICESTER			DRAWING STATUS: FOR INFORMATION ONLY	
DATE: MARCH 2011 BY: DDD CHECKED: KK		PROJECT No: 11011546	DRAWING NO: 1546/ATR/01	REV: B
REVISIONS: A	A 03/03/11 FIRST ISSUE B 08/07/11 AMENDED TEXT			

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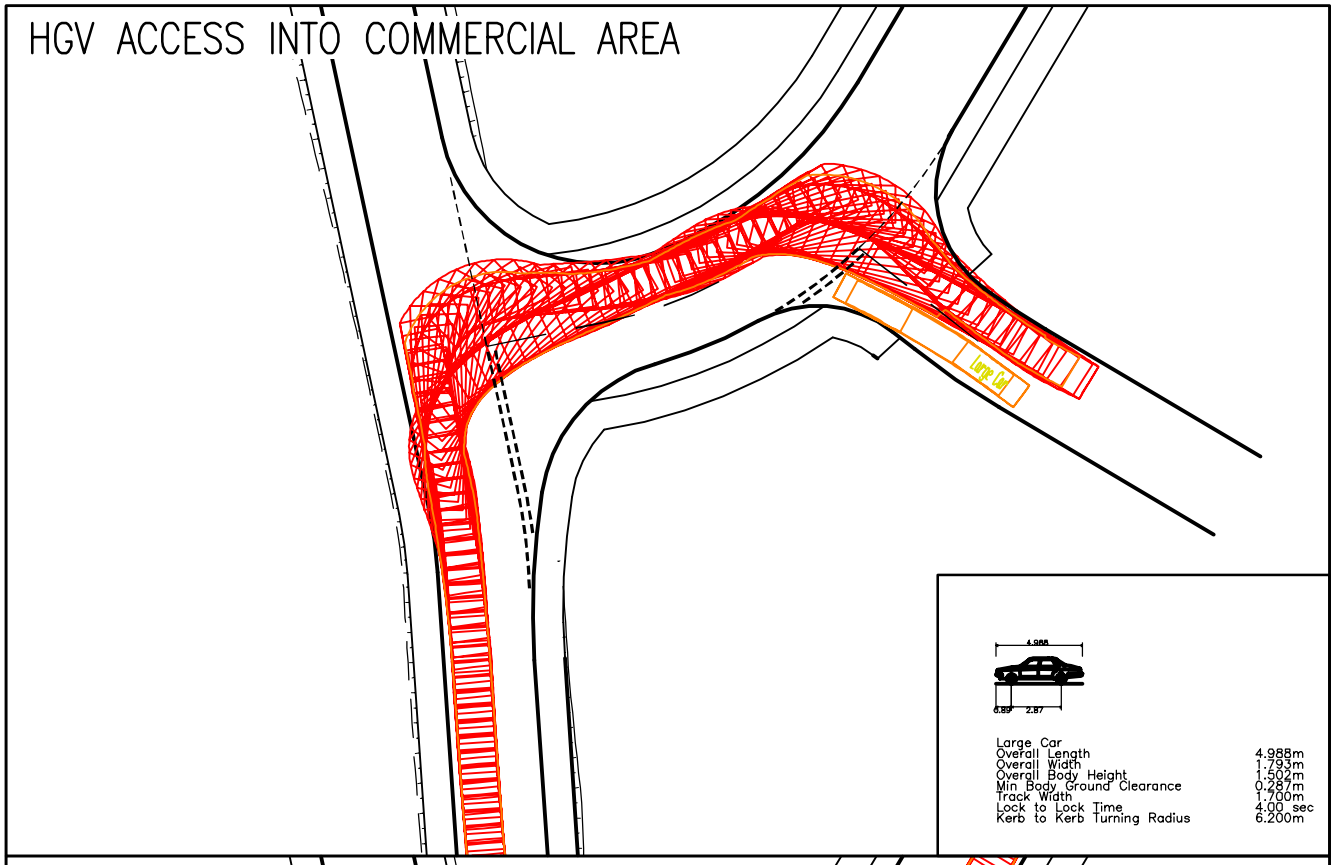
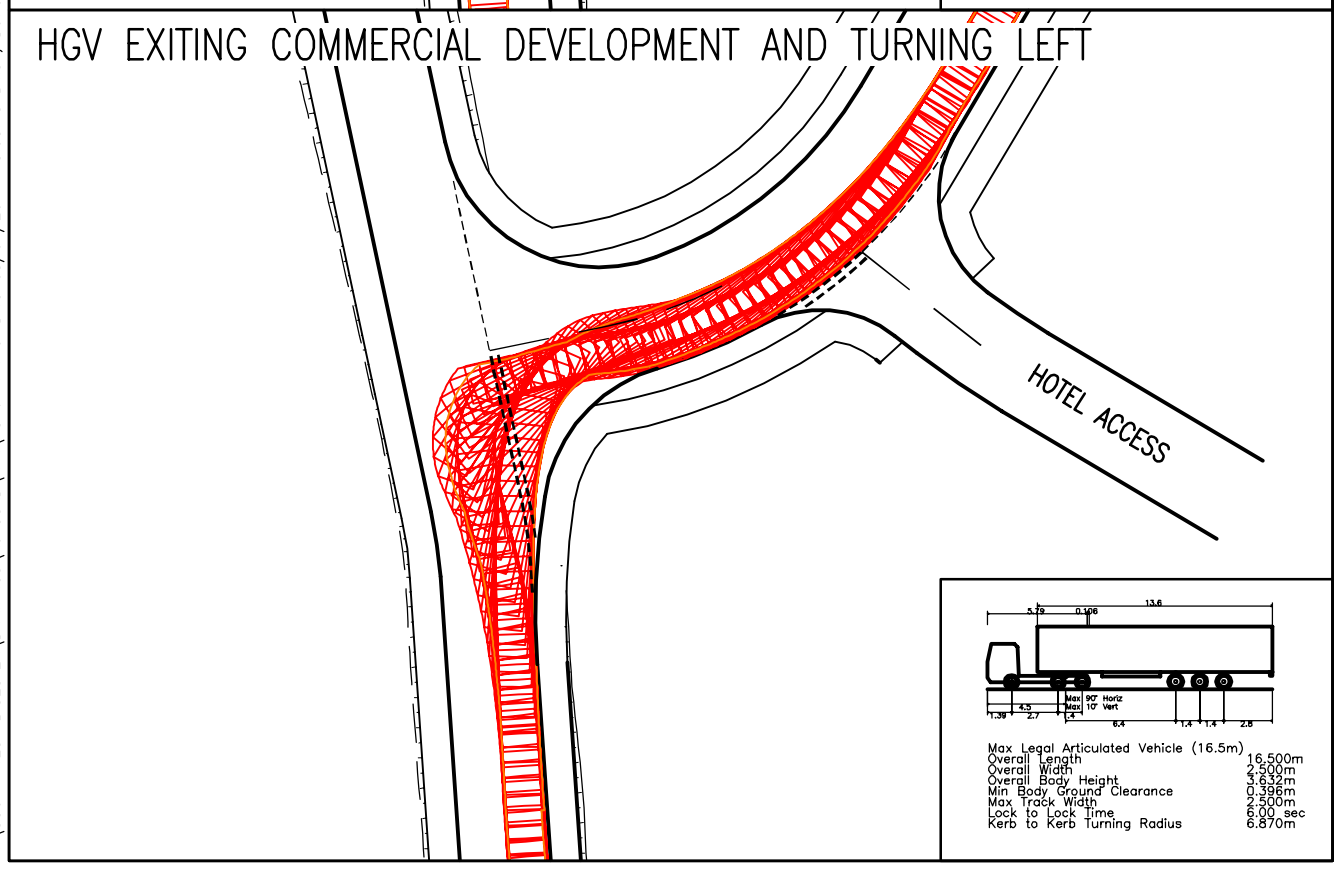
TITLE: AUTOTRACK ANALYSIS OF COMMERCIAL AREA ACCESS

HGV ACCESS INTO COMMERCIAL AREA



Large Car	
Overall Length	4.988m
Overall Width	1.793m
Overall Body Height	1.502m
Min Body Ground Clearance	0.287m
Track Width	1.700m
Lock to Lock Time	4.00 sec
Kerb to Kerb Turning Radius	6.200m

HGV EXITING COMMERCIAL DEVELOPMENT AND TURNING LEFT



Max Legal Articulated Vehicle (16.5m)	
Overall Length	16.500m
Overall Width	2.500m
Overall Body Height	3.632m
Min Body Ground Clearance	0.396m
Max Track Width	2.500m
Lock to Lock Time	6.00 sec
Kerb to Kerb Turning Radius	6.870m

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Appendix A Junction Capacity Tests

PICADY

GUI Version: 5.1 AD
Analysis Program Release: 4.0 (SEPT 2008)

For sales and distribution information, program advice and maintenance, contact:

TRL Limited
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E-mail: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run Analysis

Parameter	Values
File Run	N:\..\2011 Employment Access Junction\Employment Access Junction.vpi
Date Run	03 March 2011
Time Run	11:33:59
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	Development road (EB)	100
Arm B	Employment Access	100
Arm C	Development Road (WB)	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Emplomet Access - Bicester New Town
Location	Bicester
Date	02 March 2011
Enumerator	ukddd001 [ZW0465BAS1UK]
Job Number	-
Status	-
Client	-
Description	-

Geometric Data

Geometric Parameters

Parameter	Minor Arm B
Major Road Carriageway Width (m)	6.00
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	2.20
Minor Road First Lane Width (m)	3.50
Minor Road Visibility To Right (m)	23
Minor Road Visibility To Left (m)	33
Major Road Right Turn Visibility (m)	155
Major Road Right Turn Blocks Traffic	Yes

Slope and Intercept Values

Stream	Intercept for Stream B-A	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	524.588	0.096	0.242	0.152	0.345
B-C	670.374	0.103	0.260	-	-
C-B	663.725	0.257	0.257	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	07:45-09:15	90	15
Second Modelling Period	16:45-18:15	90	15

ODTAB Turning Counts

Demand Set: 2014 Base + Dev AM Peak
Modelling Period: 07:45-09:15

From / To	Arm A	Arm B	Arm C
Arm A	0.0	46.0	243.0
Arm B	4.0	0.0	35.0
Arm C	33.0	162.0	0.0

Demand Set: 2014 Base + Dev PM Peak
Modelling Period: 16:45-18:15

From / To	Arm A	Arm B	Arm C
Arm A	0.0	3.0	118.0
Arm B	40.0	0.0	124.0
Arm C	244.0	34.0	0.0

ODTAB Synthesised Flows

Demand Set: 2014 Base + Dev AM Peak
Modelling Period: 07:45-09:15

Arm	Rising Time	Rising Flow (veh / min)	Peak Time	Peak Flow (veh / min)	Falling Time	Falling Flow (veh / min)
Arm A	08:00	3.612	08:30	5.419	09:00	3.612
Arm B	08:00	0.488	08:30	0.731	09:00	0.488
Arm C	08:00	2.438	08:30	3.656	09:00	2.438

Heavy Vehicles Percentages

Demand Set: 2014 Base + Dev AM Peak
Modelling Period: 07:45-09:15

From / To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2014 Base + Dev PM Peak
Modelling Period: 16:45-18:15

From / To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Queues & Delays

Demand Set: 2014 Base + Dev AM Peak
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh / min)	Capacity (veh / min)	RFC	Ped. Flow (ped / min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min / segment)	Delay (veh.min / segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	0.49	9.88	0.050	-	0.00	0.05	-	0.8	0.11
	C-AB	2.12	10.40	0.203	-	0.00	0.26	-	3.9	0.12
	C-A	0.33	-	-	-	-	-	-	-	-
	A-B	0.58	-	-	-	-	-	-	-	-
	A-C	3.05	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh / min)	Capacity (veh / min)	RFC	Ped. Flow (ped / min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min / segment)	Delay (veh.min / segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	0.58	9.68	0.060	-	0.05	0.06	-	0.9	0.11
	C-AB	2.55	10.28	0.248	-	0.26	0.34	-	5.1	0.13
	C-A	0.37	-	-	-	-	-	-	-	-
	A-B	0.69	-	-	-	-	-	-	-	-
	A-C	3.64	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh / min)	Capacity (veh / min)	RFC	Ped. Flow (ped / min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min / segment)	Delay (veh.min / segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	0.72	9.41	0.076	-	0.06	0.08	-	1.2	0.11
	C-AB	3.16	10.11	0.313	-	0.34	0.47	-	7.1	0.14
	C-A	0.42	-	-	-	-	-	-	-	-
	A-B	0.84	-	-	-	-	-	-	-	-
	A-C	4.46	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh / min)	Capacity (veh / min)	RFC	Ped. Flow (ped / min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min / segment)	Delay (veh.min / segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	0.72	9.41	0.076	-	0.08	0.08	-	1.2	0.12
	C-AB	3.16	10.11	0.313	-	0.47	0.47	-	7.1	0.14
	C-A	0.42	-	-	-	-	-	-	-	-
	A-B	0.84	-	-	-	-	-	-	-	-
	A-C	4.46	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh / min)	Capacity (veh / min)	RFC	Ped. Flow (ped / min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min / segment)	Delay (veh.min / segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	0.58	9.68	0.060	-	0.08	0.06	-	1.0	0.11
	C-AB	2.55	10.28	0.248	-	0.47	0.35	-	5.2	0.13
	C-A	0.37	-	-	-	-	-	-	-	-
	A-B	0.69	-	-	-	-	-	-	-	-
	A-C	3.64	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh / min)	Capacity (veh / min)	RFC	Ped. Flow (ped / min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min / segment)	Delay (veh.min / segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	0.49	9.88	0.050	-	0.06	0.05	-	0.8	0.11
	C-AB	2.12	10.40	0.204	-	0.35	0.27	-	4.0	0.12
	C-A	0.33	-	-	-	-	-	-	-	-
	A-B	0.58	-	-	-	-	-	-	-	-
	A-C	3.05	-	-	-	-	-	-	-	-

Demand Set: 2014 Base + Dev PM Peak
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh / min)	Capacity (veh / min)	RFC	Ped. Flow (ped / min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min / segment)	Delay (veh.min / segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	2.06	9.85	0.209	-	0.00	0.26	-	3.8	0.13
	C-AB	0.56	12.63	0.044	-	0.00	0.06	-	0.9	0.08
	C-A	2.93	-	-	-	-	-	-	-	-
	A-B	0.04	-	-	-	-	-	-	-	-
	A-C	1.48	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh / min)	Capacity (veh / min)	RFC	Ped. Flow (ped / min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min / segment)	Delay (veh.min / segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	2.46	9.73	0.253	-	0.26	0.33	-	4.9	0.14
	C-AB	0.70	12.93	0.054	-	0.06	0.08	-	1.3	0.08
	C-A	3.47	-	-	-	-	-	-	-	-
	A-B	0.04	-	-	-	-	-	-	-	-
	A-C	1.77	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh / min)	Capacity (veh / min)	RFC	Ped. Flow (ped / min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min / segment)	Delay (veh.min / segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	3.01	9.56	0.315	-	0.33	0.45	-	6.6	0.15
	C-AB	0.91	13.35	0.068	-	0.08	0.12	-	1.8	0.08
	C-A	4.19	-	-	-	-	-	-	-	-
	A-B	0.06	-	-	-	-	-	-	-	-
	A-C	2.17	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh / min)	Capacity (veh / min)	RFC	Ped. Flow (ped / min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min / segment)	Delay (veh.min / segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	3.01	9.56	0.315	-	0.45	0.46	-	6.8	0.15
	C-AB	0.91	13.35	0.069	-	0.12	0.12	-	1.8	0.08
	C-A	4.19	-	-	-	-	-	-	-	-
	A-B	0.06	-	-	-	-	-	-	-	-

	A-C	2.17	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	2.46	9.73	0.253	-	0.46	0.34	-	5.3	0.14
	C-AB	0.70	12.93	0.054	-	0.12	0.09	-	1.3	0.08
	C-A	3.47	-	-	-	-	-	-	-	-
	A-B	0.04	-	-	-	-	-	-	-	-
	A-C	1.77	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	2.06	9.85	0.209	-	0.34	0.27	-	4.1	0.13
	C-AB	0.56	12.63	0.044	-	0.09	0.07	-	1.0	0.08
	C-A	2.93	-	-	-	-	-	-	-	-
	A-B	0.04	-	-	-	-	-	-	-	-
	A-C	1.48	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: 2014 Base + Dev AM Peak
Modelling Period: 07:45-09:15

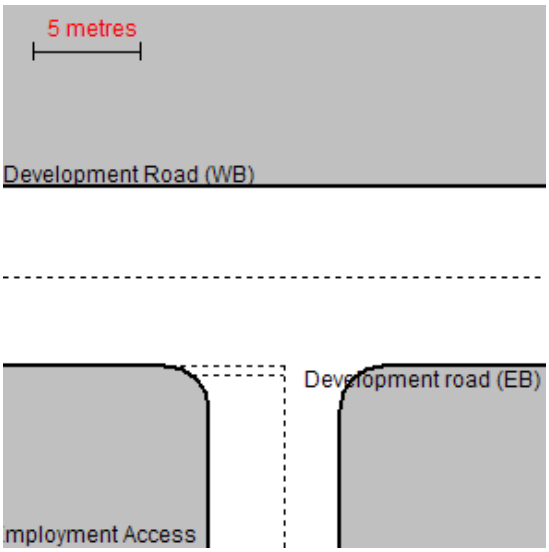
Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	53.7	35.8	5.9	0.1	5.9	0.1
C-AB	234.9	156.6	32.4	0.1	32.4	0.1
C-A	33.5	22.3	-	-	-	-
A-B	63.3	42.2	-	-	-	-
A-C	334.5	223.0	-	-	-	-
All	719.9	479.9	38.3	0.1	38.3	0.1

Demand Set: 2014 Base + Dev PM Peak
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	225.7	150.5	31.5	0.1	31.5	0.1
C-AB	65.1	43.4	8.0	0.1	8.0	0.1
C-A	317.5	211.7	-	-	-	-
A-B	4.1	2.8	-	-	-	-
A-C	162.4	108.3	-	-	-	-
All	774.9	516.6	39.5	0.1	39.5	0.1

Delay is that occurring only within the time period.
Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

Junction Diagram



PICADY 5 Run Successful