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Land adjacent to M40 Junction 10

Transport Assessment Appendices

September 2021



Land adjacent to M40 Junction 10

Transport Assessment Appendices

Prepared by:

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Albion Land

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Transport Assessment Scoping Report



Land adjacent to M40 Junction 10

Transport Assessment Scoping Report

Job No:	17213			
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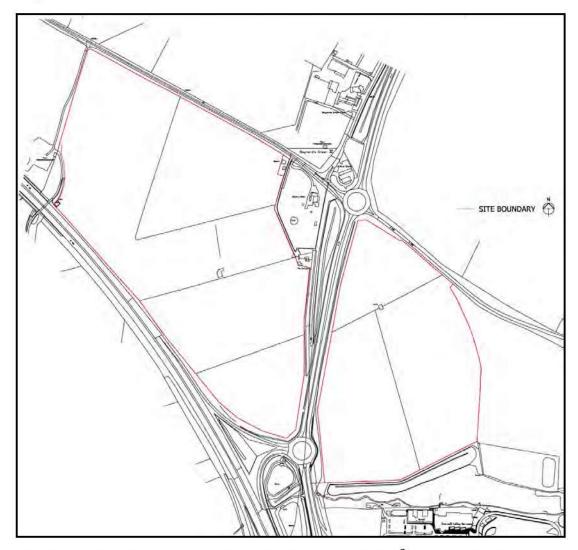
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1.0 INTRODUCTION

1.1 David Tucker Associates has been commissioned by Albion Land, to advise on the highway and transport implications of a large-scale strategic employment site to the east and west of the A43 on land adjacent to M40 Junction 10, in Cherwell District, Oxfordshire. The site location is shown on **Figure 1**.

Figure 1 Site Location



- 1.2 The site has the potential to deliver a quantum of 278,000m² of B8 employment floor space with associated ancillary office accommodation. The emerging masterplan, which subject to further development and input from environmental studies, is attached at **Appendix A**.
- 1.3 This report sets out the proposed approach with respect to the transport appraisal to support an outline application with access determined and agree the scope of the Transport Assessment and associated documents with the highway authorities.



2.0 EXISTING CONDITIONS

Site Location

2.1 The site is immediately northwest and east of Padbury roundabout at the southbound off-slip and is bisected by the A43. The larger portion of the site (Parcel A) at 42.8Ha is to the west of the A43 with the land to the east (Parcel B) being 23.8Ha.

Public Rights of Way

- 2.2 There is no foot or cycleway provision on A43 or B4100.
- 2.3 There is a bridleway 109/2/40 which runs along the western edge of the western parcel of land. This crosses the motorway at an accommodation overbridge where it turns to follow parallel to the northbound carriageway; the bridleway 109/2/10 continues to the village of Fritwell. A footpath 109/3/10 continues south from the overbridge into Fewcott.
- 2.4 There is a footpath 109/5/10 which follows the southern boundary of the western parcel of land. Approximately midway along the boundary it currently diverts into the site. It joins footpath 367/28/10 south of Baynard House. Footpath 109/5/10 is intended to be retained but diverted within the site.
- 2.5 There is a bridleway 367/21/10 which runs along the southern boundary of the eastern parcel with the Cherwell Valley Service Area.
- 2.6 A walking, cycling and horse-riding appraisal (WCHAR) will be undertaken in accordance with the requirements of GG142.

Local Highway Network

- 2.7 To the south the site is bounded by M40 motorway; a dual three lane motorway which runs between London and Birmingham. North of Junction 10, the M40 carries 92,800 vehicle per day (source: DfT Site 73855 [2019]) of which circa 12% are HGV. North of Junction 10, the M40 carries 120,800 vehicle per day (source: DfT Site 18628 [2019]) of which circa 14% are HGV.
- 2.8 The site is bisected by A43(T); a dual two lane all purpose (D2AP) road which runs between the M40 (adjacent to the site) and the M1 at Northampton. It serves the settlements of Brackley, Silverstone, Towcester and Northampton. North of the B4100 roundabout the A43 carries 37,000 vehicle per day (source: DfT Site 48791 [2019]) of which circa 12% are HGV.
- 2.9 The junction of A43 and M40 at M40 Junction 10 is a grade separated junction with an off-line motorway service area. The junction comprises a roundabout junction on the western side linking the northbound carriageway slip roads, the B430 and dual two-lane overbridges. On the eastern side of the roundabout is a partially signalised gyratory with a cut-through (which replaced linked priority roundabouts).
- 2.10 To the north the site is bounded by B4100; a single carriageway road which runs between Bicester and Banbury. The carriageway is relatively wide at 7.5m. It is unlit. The B4100 connects Bicester 5.5km to the south east of the site to Banbury 13km to



the north east. Banbury is also accessed via the M40 at Junction 11. The section to the east has a flowing alignment but within a wide highway corridor within which there is good forward visibility. Here the B4100 carries 10,400 vehicle per day (source: DfT Site 966790 [2009]) of which circa 5% are HGV.

- 2.11 The section to the west has a straighter alignment and visibility is very good. Here the B4100 carries 10,600 vehicle per day (source: DfT Site 806034 [2018]) of which circa 3% are HGV.
- 2.12 The B4100 is subject to a 60mph speed limit to the west of the A43 and 50mph to the east.
- 2.13 To the south of the M40, the A43 becomes the B430 which serves the village of Ardley, Middleton Stoney and Weston on the Green. A new strategic settlement of Heyford Park on the former Upper Heyford airbase site is also accessed from this road.
- 2.14 The junction of A43 and B4100 is a large four arm at-grade priority-controlled roundabout. The junction is lit and forward visibility on all approaches is commensurate with the posted speed limits. The roundabout has an inscribed circular diameter of 75m. The circulatory carriageway is 12m wide with lining markings to show two lanes. There are currently no flares on the A43 approaches and there is hatching on the outside of the offside lane to reduce the effective entry width to two lanes. Entry path curvature on both approaches is larger than recommended in current design guidance (CD116). The B4100 approaches are flared but the road lining does not formally show dual entry lanes. On the eastbound approach hatching significantly reduces the effective flare length. Entry path curvature of both side road approaches is in line with the recommendation in CD116. The exit width on the B4100 east arm is narrower than the recommendation in CD116.
- 2.15 There are roadside services in the north western quadrant accessed from the B4100W arm. These are served by a priority junction where the right-turn out movement is banned. There is a right turn lane for inbound movements.
- 2.16 The B4100 and B430 are the responsibility of Oxfordshire County Council with the A43 and M40 being trunk road and the responsibility of Highways England.

Traffic Patterns

- 2.17 Traffic surveys have been commissioned on the adjacent links and junctions to inform the design of the accesses and traffic appraisal. To establish the future baseline traffic flow position for the local road network confirmation of traffic models and data held by the highway authorities is sought.
- 2.18 Cumulative developments to be assessed will include traffic demand and supporting infrastructure from development at Northwest Bicester (eco-town) and consented development at Upper Heyford.
- 2.19 It has been assumed that construction would take place from 2023. It is assumed that future year operation of the road network will be considered (application year plus ten years). The future years will be agreed with the highway authorities.

Transport Assessment Scoping Report



Public Transport

2.20 There is an existing bus service which runs immediately adjacent to the site. There are no existing bus stops and provision would need to be made as part of the access works. The service is the 505 operated by Stagecoach. This service operates from Bicester Village railway station, with onward connections to Oxford and London, along the B4100, past the NW Bicester development site, to the A43 to Brackley. The service loops around Brackley covering the northern urban extension at Radstone Fields. The service currently runs hourly and provides access to two of the main local population centres. There are several options to enhance infrastructure and service provision to the site which will be considered through the TA process in conjunction with the operator and OCC.



3.0 ACCESS STRATEGY

Pedestrian and Cycle Access

- 3.1 A WCHAR is currently being prepared which will inform planning for pedestrian and cycle access to the site.
- 3.2 It is proposed that an existing footpath within the western parcel will be diverted within the site to ensure that there is no conflict between users of the path and the operations on the site.

Vehicular Access

- 3.3 The eastern parcel (also referred to below as Parcel B) will be accessed from a roundabout junction in accordance with the requirements set out in DMRB CD116 or priority-controlled junction with a right turn ghost island in accordance with the requirements set out in DMRB CD123. The location of the junction is indicatively shown (by the architect) on the masterplan. The junction will be designed for the prevailing 50mph posted speed limit. An automatic traffic counter will be commissioned to confirm parameters. Vehicle tracking will be provided based on a standard design vehicle (maximum legal articulated lorry).
- 3.4 The western parcel (also referred to below as Parcel A) will be accessed from a roundabout junction. The location of the junction is indicatively shown (by the architect) on the masterplan. The junction will be designed in accordance with the requirements set out in DMRB CD116. The junction will be designed for the prevailing derestricted speeds (60mph). An automatic traffic counter will be commissioned to confirm parameters.
- 3.5 The accesses will be subject to an Independent Road Safety Audit. The brief will be agreed with the highway authorities once the concept design has been progressed.

Public Transport

- 3.6 There are currently no bus stops in the immediate vicinity of the site although Stagecoach's 505 bus service between Bicester and Brackley runs along the B4100 site frontage before turning north up the A43.
- 3.7 The provision for bus stops in accordance with current best practice will be made in the emerging access designs. It is not envisaged that the buses would enter into the sites rather stops would be provided on the B4100 frontage. To ensure that the stops are accessible to users across the site it is envisaged that a stop will be provided to the west of the A43 roundabout with buses able to u-turn at the site access roundabout thereby minimising spur operation.



4.0 APPRAISAL METHODOLOGY

Travel Demand

- 4.1 The travel demand has been estimated from data from the TRICS database (Land Use 02 Employment and Category F Warehousing (commercial)). This database contains surveys of the vehicle and multimodal trip rates of a wide variety of sites which are classified by land use and various other attributes. DTA recently prepared several Transport Assessments for employment floorspace within the B8 land use class at Howes Lane to the west of Bicester (within the Ecotown allocation), at Skimmingdish Lane to the north of Bicester, and at Bicester Gateway/Catalyst to the south of Bicester.
- 4.2 The trip rates have been agreed in principle with the Local Highway Authority as a suitable proxy for a stand-alone site and these have therefore been used for the purposes of this assessment.
- 4.3 The resulting peak hour trip rates are summarised in **Table 1** below and the full outputs attached in **Appendix B**.

Table 1 - TRICS Warehousing Trip Rates - Per 100m²

		In			Out			Total		
		Lights	OGV	Total	Lights	OGV	Total	Lights	OGV	Total
AM Peak	0800-0900	0.058	0.013	0.071	0.032	0.015	0.047	0.090	0.028	0.118
PM Peak	1700-1800	0.021	0.010	0.031	0.069	0.010	0.079	0.090	0.020	0.110
12 Hours (AAWT)	0700-1900	0.619	0.283	0.902	0.661	0.320	0.981	1.280	0.603	1.883

4.4 **Table 2** below sets out the associated traffic generation of the site using the trip rates in **Table 1** where parcel A relates to the western part of the site (units 1-3), a GIA of 169,706m² and parcel B relates to the eastern part of the site (unit 4), a GIA of 110.575m².

Table 2 - Summary of Potential Site Traffic Generation

		In			72	Out			Total		
		Lights	OGV	Total	Lights	OGV	Total	Lights	OGV	Total	
Parcel A AM Peak	0800-0900	98	22	120	54	25	80	153	48	200	
Parcel A PM Peak	1700-1800	36	17	53	117	17	134	153	34	187	
Parcel A 12 Hr	0700-1900	1050	480	1531	1122	543	1665	2172	1023	3196	
Parcel B AM Peak	0800-0900	64	14	79	35	17	52	100	31	130	
Parcel B PM Peak	1700-1800	23	11	34	76	11	87	100	22	122	
Parcel B 12 Hr	0700-1900	684	313	997	731	354	1085	1415	667	2082	
Total Site AM Peak	0800-0900	163	36	199	90	42	132	252	78	331	
Total Site PM Peak	1700-1800	59	28	87	193	28	221	252	56	308	
Total Site 12 Hours	0700-1900	1735	793	2528	1853	897	2750	3588	1690	5278	



Trip Distribution & Assignment

- 4.5 The distribution of traffic from the site considers light (cars) and heavy (HGVs) traffic components separately. Light traffic will be distributed using 2011 journey to work census data. The 2011 journey to work census data has been interrogated.
- 4.6 The Bicester area comprises six Middle Super Output Areas (MSOA); the inner area broadly relating to development within the ring road is split into four quadrants (Cherwell 12-15), and an outer ring capturing development outside the ring road and functionally related villages is split into two (Cherwell 11 & 16).
- 4.7 The site is in Cherwell 11 which covers a broad arc around the north of Bicester. The pattern for Cherwell 13, the northeastern quadrant of Bicester, has also been reviewed as this contains more jobs overall and large-scale warehouses. The differential is not large as shown in **Table 3**.

Table 3	Journey to work	(home trip ends)

	Cherwell 11	Cherwell 13	Average
Bicester (Cherwell 11-16)	56%	52%	54%
Cherwell Other	9%	13%	11%
Aylesbury Vale	8%	8%	8%
South Northamptonshire	6%	5%	6%
West Oxfordshire	2%	3%	3%
South Oxfordshire	2%	2%	2%
Oxford	1%	3%	3%
Vale of White Horse	2%	2%	2%
Milton Keynes	1%	1%	1%
Northampton	0%	1%	1%
Other	12%	9%	10%

- 4.8 There are variations between the two MSOA within the Bicester grouping although this will not make a significant overall difference to the routeing on the network in the immediate vicinity of the site. The distribution of trips has therefore been based on an average of Cherwell 11 and 13.
- 4.9 There is significant planned housing growth at Bicester, where the number of households will increase by circa 60% to 2031 from 2011, planned growth at Upper Heyford (1260 households) and planned growth at Brackley. There are two elements here. First development at Upper Heyford in Cherwell 10 represents a change in the overall spatial pattern relative to 2011 and its share should increase on a pro-rata basis from 2% to 8%. Second the growth at Bicester, particular the Ecotown is likely to draw more trips from Bicester. This should lead to a more compact pattern of trips for which there are wider travel choices.
- 4.10 On a pro-rata basis this is likely to represent around 11% of trips with a drawdown from destinations outside Bicester.



- 4.11 These have been assigned onto the local road network using ESRI ArcGIS with routeings based on prevailing network conditions during typical peak periods (based on HERE data).
- 4.12 The site is located close to the intersection of multiple strategic routes and commercial traffic is likely to be balanced between these. Accordingly, OGV traffic will be distributed with 30% heading north along the A43 towards the A5 and M1 and 70% towards the M40 with an equal split travelling northwest to the Birmingham and the West Midlands and southeast to London and the Southampton. A higher proportion of the sites traffic is likely to head south due to the M40 providing more direct access to London and the M25, Birmingham and destinations to the north-west and west of the country, as well as the main airports of Birmingham, Heathrow and Gatwick.
- 4.13 The resultant assignments are summarised in **Table 4** and **Table 5** below.

Table 4 - Assignment (Census 2011)

		In			-77	Out			Total		
		Lights	OGV	Total	Lights	OGV	Total	Lights	OGV	Total	
Total Site AM Peak	0800-0900	163	36	199	90	42	132	252	78	331	
B4100W	6%	10	0	10	5	0	5	15	0	15	
A43N	10%	16	11	27	9	13	22	25	23	49	
B4100E	60%	98	0	98	54	0	54	152	0	152	
A43S	24%	39	25	64	22	29	51	61	55	115	
M40N	9%	15	13	27	8	15	23	23	27	50	
M40S	11%	18	13	31	10	15	25	28	27	55	
B430S	4%	7	0	7	4	0	4	10	0	10	
Total Site PM Peak	1700-1800	59	28	87	193	28	221	252	56	308	
B4100W	6%	4	0	4	12	0	12	15	0	15	
A43N	10%	6	8	14	19	8	28	25	17	42	
B4100E	60%	35	0	35	116	0	116	151	0	151	
A43S	24%	14	20	34	46	20	66	60	39	100	
M40N	9%	5	10	15	17	10	27	23	20	42	
M40S	11%	6	10	16	21	10	31	28	20	47	
B430S	4%	2	0	2	8	0	8	10	0	10	
Total Site 12 Hours	0700-1900	1735	793	2528	1853	897	2750	3588	1690	5278	
B4100W	6%	104	0	104	111	0	111	215	0	215	
A43N	10%	174	238	411	185	269	454	359	507	866	
B4100E	60%	1041	0	1041	1112	0	1112	2153	0	2153	
A43S	24%	416	555	972	445	628	1073	861	1183	2044	
M40N	9%	156	278	434	167	314	481	323	592	914	
M40S	11%	191	278	468	204	314	518	395	592	986	
B430S	4%	69	0	69	74	0	74	144	0	144	

Transport Assessment Scoping Report



Table 5 - Assignment (Census 2011 adjusted for growth)

		In				Out			Total		
		Lights	OGV	Total	Lights	OGV	Total	Lights	OGV	Total	
Total Site AM Peak	0800-0900	163	36	199	90	42	132	252	78	331	
B4100W	5%	8	0	8	5	0	5	13	0	13	
A43N	6%	10	11	21	5	13	18	15	23	39	
B4100E	70%	114	0	114	63	0	63	177	0	177	
A43S	19%	31	25	56	17	29	47	48	55	103	
M40N	4%	7	13	19	4	15	18	10	27	37	
M40S	7%	11	13	24	6	15	21	18	27	45	
B430S	8%	13	0	13	7	0	7	20	0	20	
Total Site PM Peak	1700-1800	59	28	87	193	28	221	252	56	308	
B4100W	5%	3	0	3	10	0	10	13	0	13	
A43N	6%	4	8	12	12	8	20	15	17	32	
B4100E	70%	41	0	41	135	0	135	176	0	176	
A43S	19%	11	20	31	37	20	56	48	39	87	
M40N	4%	2	10	12	8	10	18	10	20	30	
M40S	7%	4	10	14	14	10	23	18	20	37	
B430S	8%	5	0	5	15	0	15	20	0	20	
Total Site 12 Hours	0700-1900	1735	793	2528	1853	897	2750	3588	1690	5278	
B4100W	5%	87	0	87	93	0	93	179	0	179	
A43N	6%	104	238	342	111	269	380	215	507	722	
B4100E	70%	1215	0	1215	1297	0	1297	2512	0	2512	
A43S	19%	330	555	885	352	628	980	682	1183	1865	
M40N	4%	69	278	347	74	314	388	144	592	735	
M40S	7%	121	278	399	130	314	444	251	592	843	
B430S	8%	139	0	139	148	0	148	287	0	287	

Operational Appraisal

- 4.14 Detailed operational appraisal will be undertaken on junctions which are likely to experience a material change in their operation. These appraisals will be undertaken using industry standard tools (JUNCTIONS and LINSIG) or by microsimulation. This will be informed by the availability of existing models.
- 4.15 It is assumed that the site access junctions will be assessed as well as the A43 / B4100 roundabout junction both operationally and in relation to compliance with prevailing design standards. It is understood that there is already funding in place for works the A43/B4100 roundabout and that these works could be implemented within a similar planning horizon. The baseline layout for appraisal will be agreed with the highway authorities.
- 4.16 Additional locations, to be agreed with the highway authorities, will also be assessed.
- 4.17 Merge diverge assessments on the slip roads at Junction 10 will be undertaken in accordance with CD122.



Road Safety

- 4.18 Personal Injury Collision data (STATS19) data as published by Department of Transport will be reviewed for the most recent available five-year period. The study area will include the area within five kilometres of the site as per the requirements of GG142.
- 4.19 Detailed causality information for incidents at junctions and links which will be subjected to detailed operational appraisal will be obtained from Oxfordshire County Council. Where there are evident trends within this data the implications of the additional development demand will be considered.
- 4.20 Any changes to the geometry or arrangement of the road networks will be subject to an independent Stage 1road safety audit (RSA). A separate brief will be prepared to inform any audit and agreed with the highway authorities.

Parking

4.21 An assessment of the parking requirements will be undertaken informed by prevailing car parking standards. It is assumed that the demand will be accommodated within the site in full.

Environmental Assessment

4.22 An Environmental Statement is currently being prepared. The assumptions within the ES will be aligned with the TA.

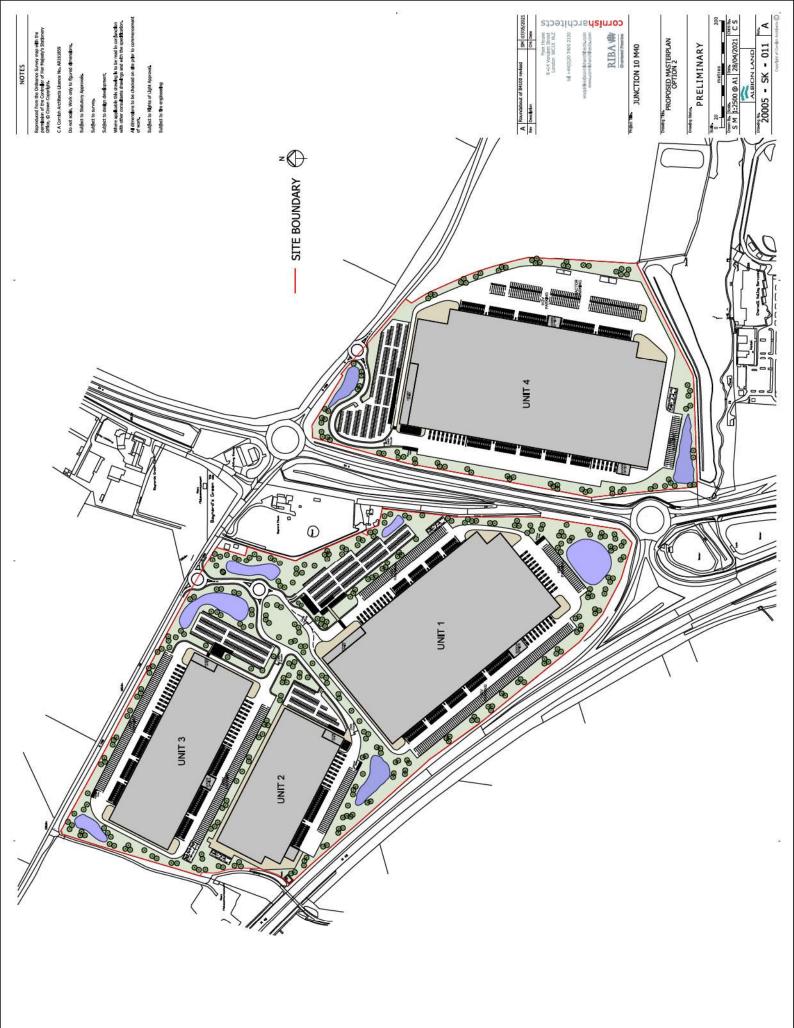
Travel Plan

4.23 A framework Green Travel Plan will be developed to set out the sites sustainable travel policies and will accompany any future planning submission. It will contain specific measures to help reduce single occupancy car borne traffic, which will include bus services, car sharing databases and personal travel planning as a minimum.

Oxfordshire Strategic Rail Freight Interchange

4.24 We are aware of the publication of a scoping report for an SRFI to the south of M40 Junction 10. This development does not have a formal planning status and hence it would not form part of the cumulative assessment.

Appendix A Emerging Masterplan



Appendix B Trics Output

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : F - WAREHOUSING (COMMERCIAL)

VEHICLES

Selected regions and areas:

SOUTH EAST 1 days HC HAMPSHIRE HF HERTFORDSHIRE 1 days SC SURREY 1 days 03 **SOUTH WEST** 1 days CW CORNWALL 04 **EAST ANGLIA** SUFFOLK 1 days 05 **EAST MIDLANDS** LN LINCOLNSHIRE 1 days 08 **NORTH WEST** LANCASHIRE LC 1 days 09 NORTH TV TEES VALLEY 2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area

Actual Range: 387 to 80066 (units: sqm)
Range Selected by User: 387 to 80066 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 11/07/13

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

 Monday
 1 days

 Tuesday
 4 days

 Wednesday
 1 days

 Thursday
 2 days

 Friday
 1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 9 days
Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre) 3
Edge of Town 6

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone 4
Commercial Zone 1
Residential Zone 1
No Sub Category 3

DTA Transportation Ltd Doctors Lane Henley in Arden

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Licence No: 623801

Filtering Stage 3 selection:

Use Class:

B8 9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000 4 days 10,001 to 15,000 5 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	6 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 CW-02-F-01 WAREHOUSING CORNWALL

A390

THREEMILESTONE NEAR TRURO Edge of Town No Sub Category

Total Gross floor area: 5150 sqm

Survey date: TUESDAY 18/09/07 Survey Type: MANUAL

2 HC-02-F-01 WAREHOUSING HAMPSHIRE

MAURETANIA ROAD

NURSLING INDUSTRIAL ESTATE

SOUTHAMPTON Edge of Town Industrial Zone

Total Gross floor area: 4000 sqm

Survey date: WEDNESDAY 21/11/07 Survey Type: MANUAL

3 HF-02-F-03 DISTRIBUTION CEN. HERTFORDSHIRE

HATFIELD BUSINESS CEN.

HATFIELD Edge of Town Commercial Zone

Total Gross floor area: 80000 sqm

Survey date: THURSDAY 10/07/08 Survey Type: MANUAL

4 LC-02-F-02 WAREHOUSING LANCASHIRE

CHORLEY ROAD WALTON-LE-DALE

PRESTON

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 1200 sqm

Survey date: FRIDAY 22/06/07 Survey Type: MANUAL

5 LN-02-F-01 BOOK SERVICE LINCOLNSHIRE

TRENT ROAD

GRANTHAM
Edge of Town
No Sub Category
Total Gross floor area

Total Gross floor area: 32300 sqm

Survey date: MONDAY 29/11/10 Survey Type: MANUAL

6 SC-02-F-04 WAREHOUSING SURREY

PRETORIA ROAD

CHERTSEY Edge of Town No Sub Category

Total Gross floor area: 4460 sqm

Survey date: TUESDAY 27/11/07 Survey Type: MANUAL

7 SF-02-F-02 WAREHOUSING SUFFOLK

WALTON ROAD

FELIXSTOWE

Suburban Area (PPS6 Out of Centre)

Industrial Zone

Total Gross floor area: 22270 sqm

Survey date: THURSDAY 11/07/13 Survey Type: MANUAL

TRICS 7.1.1 280614 B16.42 (C) 2014 JMP Consultants Ltd on behalf of the TRICS Consortium

Thursday 10/07/14 Page 4

DTA Transportation Ltd Doctors Lane Henley in Arden Licence No: 623801

LIST OF SITES relevant to selection parameters (Cont.)

8 TV-02-F-02 ARGOS WAREHOUSE TEES VALLEY

ROUNDHOUSE ROAD

FAVERDALE

DARLINGTON Edge of Town

Industrial Zone

Total Gross floor area: 80066 sqm

Survey date: TUESDAY 07/10/08 Survey Type: MANUAL

9 TV-02-F-03 ELECTRICAL COMPONENTS TEES VALLEY

UNIT 8, NAVIGATOR COURT

STOCKTON-ON-TEES

Suburban Area (PPS6 Out of Centre)

Industrial Zone

Total Gross floor area: 387 sqm

Survey date: TUESDAY 28/06/11 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.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS				EPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 01:00	8			-	. 19			. 8		
01:00 - 02:00	3		296				2			
02:00 - 03:00								1		
03:00 - 04:00			83				55			
04:00 - 05:00	8		3			1	3			
05:00 - 06:00	1	22270	0.018	1	22270	0.040	1	22270	0.058	
06:00 - 07:00	1	22270	0.058	1	22270	0.063	1	22270	0.121	
07:00 - 08:00	9	25537	0.084	9	25537	0.052	9	25537	0.136	
08:00 - 09:00	9	25537	0.071	9	25537	0.047	9	25537	0.118	
09:00 - 10:00	9	25537	0.069	9	25537	0.052	9	25537	0.121	
10:00 - 11:00	9	25537	0.052	9	25537	0.050	9	25537	0.102	
11:00 - 12:00	9	25537	0.049	9	25537	0.049	9	25537	0.098	
12:00 - 13:00	9	25537	0.055	9	25537	0.057	9	25537	0.112	
13:00 - 14:00	9	25537	0.100	9	25537	0.077	9	25537	0.177	
14:00 - 15:00	9	25537	0.079	9	25537	0.097	9	25537	0.176	
15:00 - 16:00	9	25537	0.079	9	25537	0.096	9	25537	0.175	
16:00 - 17:00	9	25537	0.062	9	25537	0.094	9	25537	0.156	
17:00 - 18:00	9	25537	0.031	9	25537	0.079	9	25537	0.110	
18:00 - 19:00	9	25537	0.015	9	25537	0.048	9	25537	0.063	
19:00 - 20:00	1	22270	0.036	1	22270	0.031	1	22270	0.067	
20:00 - 21:00	1	22270	0.013	1	22270	0.031	1	22270	0.044	
21:00 - 22:00	1	22270	0.031	1	22270	0.018	1	22270	0.049	
22:00 - 23:00			2				2.			
23:00 - 24:00										
Total Rates:	× - 7		0.902			0.981		- 37	1.883	

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: 387 - 80066 (units: sqm) Survey date date range: 01/01/05 - 11/07/13

Number of weekdays (Monday-Friday): 9
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00	,				. 19			9	
01:00 - 02:00	2 2						276		
02:00 - 03:00									
03:00 - 04:00			5.0				53.		*
04:00 - 05:00		1					3		
05:00 - 06:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
06:00 - 07:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
07:00 - 08:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
08:00 - 09:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
09:00 - 10:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
10:00 - 11:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
11:00 - 12:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
12:00 - 13:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
13:00 - 14:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
14:00 - 15:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
15:00 - 16:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
16:00 - 17:00	9	25537	0.001	9	25537	0.001	9	25537	0.002
17:00 - 18:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
18:00 - 19:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
19:00 - 20:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
20:00 - 21:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
21:00 - 22:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
22:00 - 23:00	8	*	11 11 2						
23:00 - 24:00									
Total Rates:	* **		0.001	**	· /	0.001	200	137	0.002

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: 387 - 80066 (units: sqm) Survey date date range: 01/01/05 - 11/07/13

Number of weekdays (Monday-Friday): 9
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00	9								
01:00 - 02:00	4		24				274		
02:00 - 03:00									
03:00 - 04:00			2.0			1	- 50		*
04:00 - 05:00				Î			8		
05:00 - 06:00	1	22270	0.013	1	22270	0.040	1	22270	0.053
06:00 - 07:00	1	22270	0.027	1	22270	0.063	1	22270	0.090
07:00 - 08:00	9	25537	0.014	9	25537	0.012	9	25537	0.026
08:00 - 09:00	9	25537	0.013	9	25537	0.015	9	25537	0.028
09:00 - 10:00	9	25537	0.017	9	25537	0.020	9	25537	0.037
10:00 - 11:00	9	25537	0.019	9	25537	0.015	9	25537	0.034
11:00 - 12:00	9	25537	0.015	9	25537	0.018	9	25537	0.033
12:00 - 13:00	9	25537	0.013	9	25537	0.015	9	25537	0.028
13:00 - 14:00	9	25537	0.016	9	25537	0.010	9	25537	0.026
14:00 - 15:00	9	25537	0.022	9	25537	0.013	9	25537	0.035
15:00 - 16:00	9	25537	0.023	9	25537	0.015	9	25537	0.038
16:00 - 17:00	9	25537	0.019	9	25537	0.010	9	25537	0.029
17:00 - 18:00	9	25537	0.010	9	25537	0.010	9	25537	0.020
18:00 - 19:00	9	25537	0.004	9	25537	0.011	9	25537	0.015
19:00 - 20:00	1	22270	0.018	1	22270	0.022	1	22270	0.040
20:00 - 21:00	1	22270	0.013	1	22270	0.027	1	22270	0.040
21:00 - 22:00	1	22270	0.027	1	22270	0.004	1	22270	0.031
22:00 - 23:00							2.0		
23:00 - 24:00									
Total Rates:	×	**	0.283	**	- /s	0.320	***	***	0.603

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: 387 - 80066 (units: sqm) Survey date date range: 01/01/05 - 11/07/13

Number of weekdays (Monday-Friday): 9
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00			9.					9	
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00			5.32				5)		
04:00 - 05:00			3				3		8
05:00 - 06:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
06:00 - 07:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
07:00 - 08:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
08:00 - 09:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
09:00 - 10:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
10:00 - 11:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
11:00 - 12:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
12:00 - 13:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
13:00 - 14:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
14:00 - 15:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
15:00 - 16:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
16:00 - 17:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
17:00 - 18:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
18:00 - 19:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
19:00 - 20:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
20:00 - 21:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
21:00 - 22:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
22:00 - 23:00			- 411		8		3.0		
23:00 - 24:00									
Total Rates:	×		0.000	*	×	0.000		100	0.000

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.

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Parameter summary

Trip rate parameter range selected: 387 - 80066 (units: sqm) Survey date date range: 01/01/05 - 11/07/13

Number of weekdays (Monday-Friday): 9
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00					,			9	
01:00 - 02:00			596		2		59-1		
02:00 - 03:00									
03:00 - 04:00		2	83.				5.1		*
04:00 - 05:00		3	31						
05:00 - 06:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
06:00 - 07:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
07:00 - 08:00	9	25537	0.004	9	25537	0.000	9	25537	0.004
08:00 - 09:00	9	25537	0.000	9	25537	0.000	9	25537	0.000
09:00 - 10:00	9	25537	0.002	9	25537	0.000	9	25537	0.002
10:00 - 11:00	9	25537	0.000	9	25537	0.002	9	25537	0.002
11:00 - 12:00	9	25537	0.000	9	25537	0.002	9	25537	0.002
12:00 - 13:00	9	25537	0.001	9	25537	0.002	9	25537	0.003
13:00 - 14:00	9	25537	0.009	9	25537	0.010	9	25537	0.019
14:00 - 15:00	9	25537	0.001	9	25537	0.007	9	25537	0.008
15:00 - 16:00	9	25537	0.003	9	25537	0.003	9	25537	0.006
16:00 - 17:00	9	25537	0.000	9	25537	0.003	9	25537	0.003
17:00 - 18:00	9	25537	0.000	9	25537	0.004	9	25537	0.004
18:00 - 19:00	9	25537	0.001	9	25537	0.003	9	25537	0.004
19:00 - 20:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
20:00 - 21:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
21:00 - 22:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
22:00 - 23:00		7	- 11				3.1		
23:00 - 24:00									
Total Rates:			0.021		2	0.036			0.057

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.

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Parameter summary

Trip rate parameter range selected: 387 - 80066 (units: sqm) Survey date date range: 01/01/05 - 11/07/13

Number of weekdays (Monday-Friday): 9
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0



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Appendix C

Highway Authority Pre-Application Responses

Application no: 21/CH0006/Preapp Location: Land north of M40 Junction 10

Transport Development Control

Oxfordshire County Council is a consultee of the local planning authority and provides advice on the likely transport and highways impact of development where necessary. In line with confidentiality requirements, OCC will not carry out any external consultation on the proposals, although we may discuss them with the relevant Local Planning Authority. We encourage the applicant to carry out local engagement and can make recommendations of specific local groups to consult, on request.

It should be noted that the advice below represents the informal opinion of an Officer of the Council only, which is given entirely without prejudice to the formal consideration of any planning application, which may be submitted. Nevertheless, the comments are given in good faith and fairly reflect an opinion at the time of drafting given the information submitted.

Based on the information provided, I set out the main issues/information that will need to be considered with the proposal, and these are:

Application no: 21/01708/PREAPP

Location: Part Of M40 Through Ardley Parish Ardley

Transport Development Control

Oxfordshire County Council is a consultee of the local planning authority and provides advice on the likely transport and highways impact of development where necessary.

It should be noted that the advice below represents the informal opinion of an Officer of the Council only, which is given entirely without prejudice to the formal consideration of any planning application, which may be submitted. Nevertheless the comments are given in good faith and fairly reflect an opinion at the time of drafting given the information submitted.

Based on the information provided (location plan and Proposed Masterplan Option 2 SK011), I set out the main issues/information that will need to be considered with the proposal, and these are:

Relevant Policies:

National Planning Policy Framework

Paragraph 102

Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

a) the potential impacts of development on transport networks can be addressed;

b) opportunities from existing or proposed transport infrastructure, and changing

1

- transport technology and usage, are realised for example in relation to the scale, location or density of development that can be accommodated;
- c) opportunities to promote walking, cycling and public transport use are identified and pursued;
- d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
- e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

Paragraph 103

The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

Paragraph 104

Planning policies should:

- (a) support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;
- (b) be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;
- (c) identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development:
- (d) provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans);

Paragraph 108

In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- a) appropriate opportunities to promote sustainable transport modes can be or have been taken up, given the type of development and its location;
- b) safe and suitable access to the site can be achieved for all users; and
- c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

Paragraph 110

Within this context, applications for development should:

a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that

encourage public transport use;

- b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- c) create places that are safe, secure and attractive which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

Paragraph 111

All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

Connecting Oxfordshire: Oxfordshire County Council's Fourth Local Transport Plan 2015-2031 (LTP4) [adopted in September 2015]

Policy 3

Oxfordshire County Council will support measures and innovation that make more efficient use of transport network capacity by reducing the proportion of single occupancy car journeys and encouraging a greater proportion of journeys to be made on foot, by bicycle, and/or by public transport.

Policy 17

Oxfordshire County Council will seek to ensure through cooperation with the districts and city councils, that the location of development makes the best use of existing and planned infrastructure, provides new or improved infrastructure and reduces the need to travel and supports walking, cycling and public transport.

Policy 34

Oxfordshire County Council requires the layout and design of new developments to proactively encourage walking and cycling, especially for local trips, and allow developments to be served by frequent, reliable and efficient public transport. To do this, we will:

- secure transport improvements to mitigate the cumulative adverse transport impacts from new developments in the locality and/or wider area, through effective travel plans, financial contributions from developers or direct works carried out by developers:
- identify the requirement for passenger transport services to serve the development, seek developer funding for these to be provided until they become commercially viable and provide standing advice for developers on the level of Section 106 contributions towards public transport expected for different locations and scales of development.....

Policy INF 1 (Infrastructure) of the adopted Cherwell Local Plan 2011-31 states that "Development proposals will be required to demonstrate that infrastructure requirements can be met including the provision of transport, education, health, social and community facilities."

Access arrangements:

The proposed development is spread across two parcels, either side of the A43, immediately north of M40 J10. Access appears to be proposed via two roundabouts on the B4030, immediately to the west and east respectively. Scale drawings, on files separate from the Transport Assessment, will need to be provided, with annotation showing the geometry meets DMRB standards. The capacity of the roundabouts will need to be in accordance with the requirements forecast in the transport assessment. There is a planned HE scheme of improvements at the Baynards Green roundabout, which the design will need to take account of. Baynards Green effectively forms part of J10 and is included in a HE Vissim model. Due to the proximity of the access roundabouts to that junction, my opinion is that they should be included in the Vissim model, but advice should be sought from Highways England on this. Even with the improvement scheme, queues are likely to extend back on the B4100 past the proposed access roundabouts.

It will need to be demonstrated that the necessary highway works can be accommodated within highway land or the red line area. Where there is a ditch it should be assumed that the highway boundary is the carriageway side of the ditch (plans that can be obtained from our Highway Records department always contain this caveat and if there is any uncertainty, the applicant should request a detailed survey from that department). The applicant should demonstrate title up to the highway boundary to avoid significant delays at S278 stage.

A Road Safety Audit Stage 1 should be provided with the planning application.

The junction will need to be designed to meet the requirements of measured speeds.

Traffic impact

The development will clearly have a significant impact on the HE network, but also on the B4100 and the B430. A Transport Assessment will need to be provided with the application, together with a draft Travel Plan. A TA Scoping Report has been provided (Revision B dated 17 June 2021). A meeting is to be arranged, including Highways England, when this will be discussed, but in advance, my headline comments are set out below:

- 2.10 B4100 east more recent counts are available e.g. see TA for Heyford (18/00825/HYBRID).
- 2.17 Future year baseline flows from the Bicester Transport Model can be provided. We would expect the future year of 2031 to be assessed (there are currently no BTM scenarios beyond this).
- 2.18 Cumulative development that will impact M40 J10 is far ranging and will include additional traffic from other parts of Bicester. Traffic from development in south Banbury will also tend to use J10 to access the M40 southbound. The combination of committed development is taken account of in the BTM. Cherwell Local Plan allocations should be treated as committed development, as opposed to just those with planning permissions.
- 4.1 Trip generation is not agreed and cannot be directly compared with the sites at Bicester, which are on the edge of town and within walking distance of large residential areas. We

would expect the trip generation to be higher and in line with that proposed for the warehousing at the nearby Strategic Rail Freight Interchange (for B8 with no interation with rail terminal).

Rates per 100sqm GFA

AM

Light vehicles 0.142 Heavy vehicles 0.046

PM

Light vehicles 0.190 Heavy vehicles 0.040

- 4.5 Given the scale of the development, I consider that the BTM should be used to distribute and assign light traffic, rather than relying on 2011 census data, which will not reflect the very significant growth, particularly at Bicester. The adjustments to the distribution and the assumptions regarding trip assignment proposed in this section are difficult to demonstrate as sound. Distribution for heavy vehicles will require further evidence. The distribution/assignment will need to be broken down by access in order to assess the impact on the Baynards Green roundabout.
- 4.15 Drawings of the planned improvements at J10 have been provided.
- 4.16 The whole of M40 J10 will need to be assessed. HE's VISSIM model of the junction should be used (subject to agreement with HE). The planned improvement works at J10 should be assumed to be delivered by 2025. Additional locations to be assessed will depend on agreement on relative impact at other junctions, once the trip distribution and assignment has been agreed. The site will draw traffic through Northamptonshire, both directly on the A43, and via the B4100, which passes through Aynho in Northamptonshire on the way from Banbury. OCC will want to be satisfied that NCC have been consulted on the scope of the assessment. This also applies to committed development, including any further expansion at RAF Croughton.
- 4.18 Accident data for the OCC road network should be obtained from OCC.
- 4.21 The application will need to state the number of parking spaces to be provided, in order to assist with verifying the forecast of traffic impact.
- 4.24 The Ox SRFI has now been registered with the Planning Inspectorate and will be determined via a Development Consent Order, as it meets the criteria for a NSIP. OCC has been consulted by PINS on the scoping of the environmental statement, and is engaged in preapplication discussions on transport, through a Transport Working Group. The combined potential impact of both developments should be considered. I note that the applicant maintains there is no necessity for this combined assessment. However, OCC will seek their own advice on this our contention is that there is at least the need for a sensitivity test.

The applicant will also be aware that the further capacity improvements at J10 proposed by the SRFI would take up some of the land within the red line of this development.

HS2 construction traffic is expected to be on the network for the next 4-5 years, with a significant impact on J10. HE may want the opening year assessment to include an appropriate level of HS2 traffic.

Sustainable transport

It will be difficult for this location to provide a genuine choice of transport modes (NPPF Para 103).

This site is extremely challenging to serve by public transport. The relatively new 505 Brackley-Bicester service that passes the site is provided on a 2-year contract from West Northamptonshire Council, funded from development at Brackley. It remains to be seen whether there is sufficient demand to sustain the service at the end of the funding period, but this appears to be unlikely. A key challenge is the lack of settlements and potential fares between Brackley and Bicester. Demand responsive transport may be more appropriate, and there could potentially be options to provide services to nearby villages (which currently have no public transport) in between shift time buses. Nevertheless, there would still remain the issue that it would not become commercially self-sustaining.

The applicant must include a public transport strategy in the Transport Assessment, supported by an assessment of overall likely trip origins and arrival/departure times at the site across a 24-hour period.

The applicant would need to be prepared to make a substantial financial contribution towards improvement of public transport to the area, be it fixed route (most likely Bicester to Brackley, but other options such as Bicester to Banbury would also be relevant) or demand responsive covering the area north-west of Bicester. The size of the contribution would be proportionate to the size of development, which does not appear to be quantified in the pre-application documents, and the expected trip rates from the various towns in the area.

We would expect these services to be relevant to the public as well as to employees at the development, as the Council does not as a general rule support the introduction of private shuttle services.

Appropriate bus stop infrastructure will need to be provided under S278 works, including shelters. Suggested locations for these would be a pair on the B4100 between the Baynards Green roundabout and the access to Unit 4 (for which laybys will be required) and one stop on the access road to Units 1, 2 and 3 between the B4100 roundabout and the first access road roundabout. However, bus stop positions would need to be demonstrated not to conflict with the planned HE scheme. Contributions for real time passenger information displays will be required separately. Suitable safe, direct walking routes from each unit would need to be provided to the bus stops, together with crossing facilities at the eastern stops.

In terms of pedestrian and cycle access, there is very little residential development within walking distance of the site, and no safe routes other than on field paths, and there are no safe cycling routes from anywhere, so these cannot be considered realistic choices of mode for access. For the site to be considered sustainable, we would expect there to be a safe cycling route between Bicester and the site.

Consideration would also need to be given to the need for pedestrians to cross the B4100 and A43 to access the facilities at Baynards Green services (which includes a McDonalds restaurant). Links between Cherwell Valley Services and Unit 4, via the public bridleway on the boundary, could be explored.

An Electric Vehicle (EV) charging provision should be in place and in accordance with Oxfordshire's Electric Vehicle Infrastructure Strategy, which states that 'planning permission will only be granted for non-residential development that includes parking spaces if a minimum of 25% of the spaces are provided with electric charging points (Policy EVI 8). This should be accompanied with appropriate signage and monitoring to prevent the spaces being incorrectly used and the strategy should be designed to allow scaling up with change of policy and / or increased uptake.

Public rights of way

One footpath crosses the site Ardley footpath 109/5 and a bridleway forms the western boundary 109/2. Bridleway 367/21/10 runs to the south of the proposed development on the Eastern side of the A43.

The proposed development needs to take account of the routes and with incorporate them or apply to divert them if needed to enable the development. Given the industrialisation of this area as a result of this development the footpath through the site could be made suitable and legal for cyclists (through conversion to cyclepath or dedication as bridleway) and better connected to the services via shared use cyclepaths up to and around the roundabouts, possibly including a signalised crossing of the B4100 and a cyclepath link to the service's access road and bridleway.

Without prejudice to any application for diversion a suggested alignment is suggested below. The cyclepath needs to meet LTN 1/20. Standard measures are attached below.

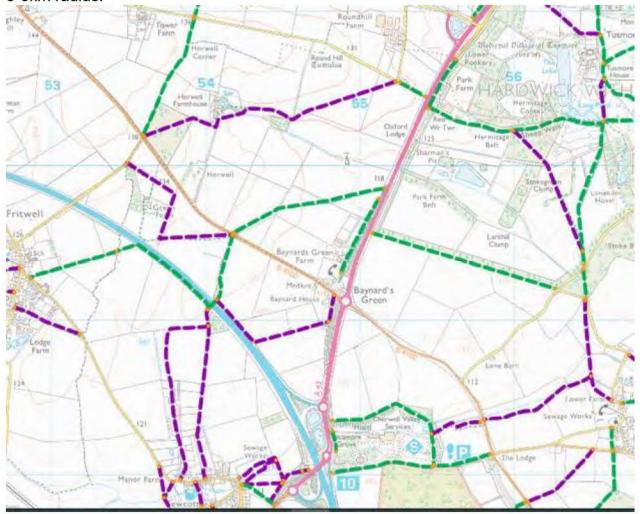


An additional bridleway (or cycleway if a bridleway cannot be accommodated) should be dedicated within the site E of the A43 - alignment indicated below.



Page 9 of 1

The development will impact rights of way in there area. When an application came through we'd look for offsite contribution under s106 to better connect public rights of way within a 3-5km radius.



Standard measures for applications affecting public rights of way

- 1. Correct route of public rights of way: Note that it is the responsibility of the developer to ensure that their application takes account of the legally recorded route and width of any public rights of way as recorded in the definitive map and statement. This may differ from the line walked on the ground. The Definitive Map and Statement is available online at www.oxfordshire.gov.uk/definitivemap.
- Temporary obstructions. No materials, plant, temporary structures or excavations of any kind should be deposited / undertaken on or adjacent to the Public Right of Way that obstructs the public right of way whilst development takes place.
- 3. Route alterations. The development should be designed and implemented to fit in with the existing public rights of way network. No changes to the public right of way's legally recorded direction or width must be made without first securing appropriate temporary or permanent diversion through separate legal process. Alterations to surface, signing or structures shall not be made without prior written permission by Oxfordshire County Council. Note that there are legal mechanisms to change PRoW when it is essential to enable a development to take place. But these mechanisms

have their own process and timescales and should be initiated as early as possible – usually through the local planning authority.

- 4. Vehicle access (construction): No construction / demolition vehicle access may be taken along or across a public right of way without prior written permission and appropriate safety/mitigation measures approved by Oxfordshire County Council.
- 5. Vehicle access (Occupation): No vehicle access may be taken along or across a public right of way to residential or commercial sites without prior written permission and appropriate safety and surfacing measures approved by Oxfordshire County Council.
- 6. Gates / right of way: Any gates provided in association with the development shall be set back from the public right of way or shall not open outwards from the site across the public right of way.
- 7. Improvements to routes: Public rights of way through the site should be integrated with the development and improved to meet the pressures caused by the development whilst retaining their character where appropriate. This may include upgrades to some footpaths to enable cycling or horse riding and better access for commuters or people with lower agility. Proposed improvements should be discussed and agreed with Oxfordshire County Council.

Engagement

Due to the scale of the development and relative proximity to the county boundary, it is recommended that the applicant engages with Northamptonshire Council, as well as the nearby parish councils.

The following links provide basic information needed to assist in the highway and transport consideration of many proposals.

- OCC Cycling Design Standards A guide for Developers, Planners and Engineers 2017:
 - https://www.oxfordshire.gov.uk/sites/default/files/file/roads-and-transport-policies-and-plans/cyclingstandards.pdf
- OCC Walking Design Standards
 https://www.oxfordshire.gov.uk/sites/default/files/file/roads-and-transport-policies-and-plans/walkingstandards.pdf
- OCC Local Standards and Guidance for Surface Water Drainage https://www.oxfordshirefloodtoolkit.com/wp-content/uploads/2018/12/LOCAL-STANDARDS-A ND-GUIDANCE-FOR-SURFACE-WATER-DRAINAGE-ON-MAJOR-DEVELOPMENT-IN-OX FORDSHIRE.pdf

OCC Guidance on Transport Assessments and Travel Plans https://www.oxfordshire.gov.uk/sites/default/files/file/roads-and-transport-policies-and-plans/TATPGuidance.pdf

- GOV.UK Cycle infrastructure design (LTN 1/20)
- https://www.gov.uk/government/publications/cycle-infrastructure-design-ltn-120

County Council Transport Guidance for new developments

https://www.oxfordshire.gov.uk/residents/roads-and-transport/transport-policies-and-plans/transport-new-developments

TRICS -

National information source for assisting the prediction of trip generation from new developments.

www.trics.org

Local Planning Guidance and Information

Cherwell

Cherwell Local Plan 2011-2031 Part 1:

https://www.cherwell.gov.uk/info/83/local-plans

Supplementary Planning Documents:

https://www.cherwell.gov.uk/info/234/supplementary-planning-documents-spd/333/supplementary-planning-documents--completed

Chargeable Pre-application Highways Advice

If further advice is required, either in the form of meeting, site visit, and or further written advice, we can provide that in accordance with our charging regime, which is also set out on Oxfordshire County Council web site

https://www.oxfordshire.gov.uk/cms/content/pre-application-highways-advice-major-planning-applications

We do encourage this further input, as experience proves that well formulated plans prior to planning applications being made frequently produce better result for all parties.

Officer's Name: Joy White

Officer's Title: Principal Transport Planner

Date: 30 July 2021

A

- Relevant policies and strategies
- Access arrangements
- Internal layout
- Sustainable transport connectivity
- Traffic impact
- Likely mitigation required
- Likely conditions required
- Information required with application
- · Likely further discussions/meetings required
- Informatives
- Safety of access

The following links provide basic information needed to assist in the highway and transport consideration of many proposals.

- OCC Residential Road Design Guide (2003) Second Edition (2015)
- OCC Cycling Design Standards A guide for Developers, Planners and Engineers 2017
- OCC Walking Design Standards
- OCC Parking Standards
- OCC Local Standards and Guidance for Surface Water Drainage
- OCC Guidance on Transport Assessments and Travel Plans
- GOV.UK Cycle infrastructure design (LTN 1/20)

County Council Transport Guidance for new developments

Transport for new developments | Oxfordshire County Council

TRICS -

National information source for assisting the prediction of trip generation from new developments.

http://www.trics.org/

Local Planning Guidance and Information

DELETE AS NECESSARY DEPENDING ON LOCATION OF APPLICATION

Cherwell

Cherwell Local Plan 2011-2031 Part 1:

Local plans | Cherwell District Council

Supplementary Planning Documents:

<u>Cherwell</u> Residential Design Guide Supplementary Planning Document (<u>SPD</u>) (July 2018) | Supplementary planning documents - completed | <u>Cherwell</u> District Council

Oxford

The Adopted Development Plan Technical Advice Notes Oxford City is a <u>CIL</u> charging authority

South Oxfordshire

South Oxfordshire Design Guide

South Oxfordshire Local Plan 2035

Vale of White Horse

Vale of White Horse Design Guide SPD

Local Plan 2031

West Oxfordshire

West Oxfordshire Local Plan 2011-2031 Local plan - West Oxfordshire District Council (westoxon.gov.uk)

Officer's Name: Joy White
Officer's Title: Principal Transport Planner

Date:

From: "Seldon, Martin" < Martin.Seldon@highwaysengland.co.uk>

Date: 16 July 2021 at 16:09:18 BST

To: Simon Parfitt < SP@dtatransportation.co.uk >

Cc: "White, Joy - Communities" < Joy. White@oxfordshire.gov.uk >, "Sivanesan,

Sonia" < sonia.sivanesan@aecom.com >, "Jopp, Matthew"

< Matthew.Jopp@highwaysengland.co.uk>

Subject: RE: Pre-application Scoping Report - Land at M40 J10

Afternoon Simon

Thank you for your email below containing the pre-application enquiry for an employment development of circa 280,000 sq.m on land adjacent to M40 J10, Oxfordshire. We note that the development site is located to the immediate north of M40 J10 and is bisected by the A43 in the area.

My apologies for the delay in responding to you. As previously noted the site is located near to the boundary between two Highways England regions (where there currently is a lot of activity!) and we've been having internal discussions to ensure that we have a unified position.

Based on our review of the TA scoping report dated 17 June 2021, we have the following comments to make:

1. Trip generation: We note that the trip rates have been estimated using TRICS version 7.1.1 (2014) and circa 300 vehicular trips are anticipated to be generated from the proposed development during the standard peak hours. However, based on our independent TRICS assessment, we expect a slightly higher trip generation from the proposed development. As such, we recommend that you review the TRICS assessment using the latest version of TRICS and by excluding Friday data.

Further to this, we recommend that time periods 09:00 to 10:00 and 16:00 to 17:00 are included in the assessments.

While we understand that the end users have not yet been finalised, we require further clarity from you regarding the minimum and maximum floorspace proposed for the individual units.

Trip distribution and assignment: We note that you have undertaken the trip distribution for light vehicles and heavy vehicles separately. While the light vehicles are distributed using Census 2011 data, we would require further evidence on how the heavy vehicles have been distributed.

As the vehicular accesses to serve Parcel A (western portion) and Parcel B (eastern portion) of the development are different, we would also require you to provide the calculation spreadsheets used for the trip distribution/ assignment exercises (including the assumptions made, if any) for our review and verification.

- 3. Traffic impact: We acknowledge that you will undertake capacity assessments for the proposed site accesses and A43/B4100 Baynards Green roundabout. As M40 J10 is in close proximity to the development proposal, and a significant amount of traffic would be using this junction, we would require you to include M40 J10 in the assessments to be carried out. All the junction capacity assessments must be carried out for the following scenarios in line with DfT's Circular 02/2013:
 - Opening Year (the year in which the development is expected to be opened) Reference Case Scenario: This scenario should include all the committed developments in the vicinity of the development site based on their likely build out by the opening year in line with DfT Circular 02/2013.
 - Opening Year With Development Scenario –
 Opening Year Reference Case Scenario +
 Proposed development. This scenario will
 determine whether any mitigation is required for
 the SRN.
 - The impact of the development should also be assessed for 10 years after the date of registration of the planning application or the end of the Local Plan period (whichever is greater). This is for information so that Highways England can inform their programme of works for the future.
 - a. <u>Baseline traffic</u>: We acknowledge that you will obtain the most recent traffic data available in the area from the respective highway authorities. We recommend that you liaise with the Council to extract the relevant data from the latest version of the validated Strategic Transport Model developed for the area.
 - b. <u>Modelling software</u>: We note that you will inform us on the modelling package to be used for the capacity assessments and we welcome this. Please note that Highways England's VISSIM model developed for M40 J10 in the area could be shared with you upon request.
 - Committed development: It is stated in section 2.18 of the

- scoping note that 'Cumulative developments to be assessed will include traffic demand and supporting infrastructure from development at Northwest Bicester (ecotown) and consented development at Upper Heyford'. However, can you please confirm if you have liaised with the respective local planning authorities regarding the list of cumulative developments to be considered for the purpose of the assessment work?
- d. Merge/ diverge assessments: We note that you will undertake a merge/ diverge assessment at the M40 J10 in accordance with the DMRB guidelines and we welcome this.

We also recommend that the TA is agreed in a staged approach, that is the overall methodology and elements such as trip generation and distribution, assessment years, growth rates, committed development, modelling software, etc. be agreed prior to further assessment work being carried out. This approach should avoid any abortive work.

We note that a Travel Plan would be submitted along with the TA to support the formal planning application for this development and we welcome this.

In addition the development site shares boundaries with the Strategic Road Network (SRN) including M40 J10 S/B off-slip, Padbury roundabout and the A43. Information should therefore be provided on issues which may impact on the SRN such as drainage and boundary treatments, as well as any proposed geotechnical works.

As previously confirmed I will be happy to meet and discuss this. However, I shall be on annual leave for part of next week and am also awaiting confirmation on the availability of a colleague from AECOM, our consultants. I shall therefore be in touch again later next week to advise on potential dates.

Have a nice weekend.

Kind regards

Martin Seldon, Assistant Spatial Planner

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Appendix D Personal Injury Accident Data