Appendix 8.1A

TRANSPORT ASSESSMENT ADDENDUM

Land at M40 Junction 10

Transport Assessment Addendum

May 2024

LPA References 21/03266/F, 21/03267/OUT and 21/03268/OUT

DTA

Transport Planning Consultants

Land at M40 Junction 10

Transport Assessment Addendum

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21/03267/OUT and
21/03268/OUT

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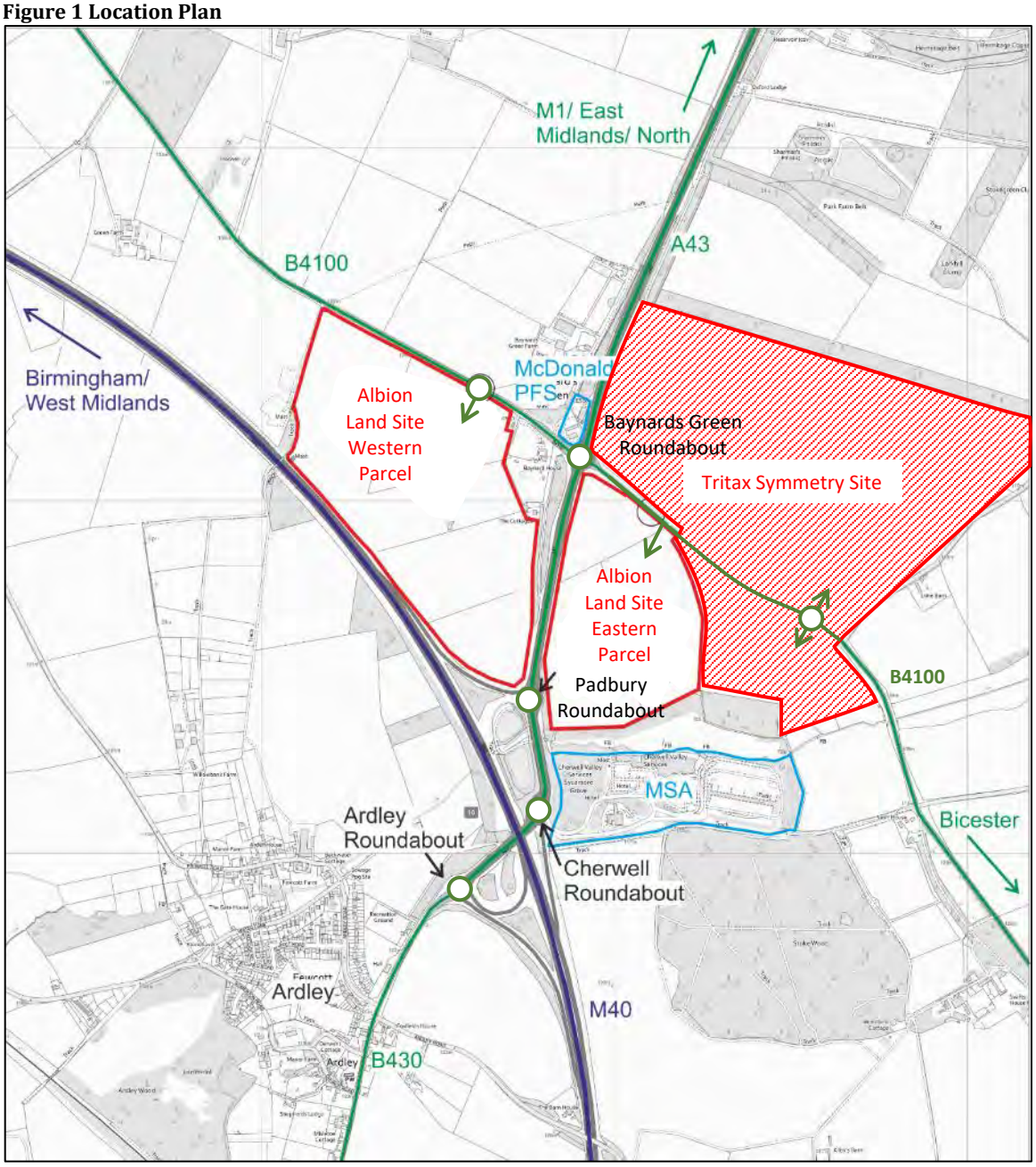
1. INTRODUCTION

1.1 Albion Land Ltd (AL) proposes the development of 280,000m^2 of commercial warehousing at Baynards Green adjacent to M40 Junction 10. The development is bisected by the A43 resulting in eastern and western development parcels. The location of the development parcels is shown on **Figure 1**.

Figure 1 Location Plan



1.2 Three planning applications were made by AL to the Local Planning Authority (LPA), Cherwell District Council (CDC) in 2021. These were:

- 21/03266/F Site clearance, construction of new site access from the B4100, permanent and temporary internal roads, an internal roundabout and a foul drainage station, diversion of an existing overhead power cable and public right of way, and soft landscaping

- 21/03267/OUT (Eastern Parcel) Outline planning permission (all matters reserved except for access) for the erection of buildings comprising logistics (Use Class B8) and ancillary Office (Use Class E(g)(i)) floorspace and associated infrastructure; construction of new site access from the B4100; creation of internal roads and access routes; and hard and soft landscaping. (100,000m^2)

- 21/03268/OUT (Western Parcel) Outline planning permission (all matters reserved except for access) for the erection of buildings comprising logistics (Use Class B8) and ancillary office (Use Class E(g)(i)) floorspace; construction of new site access from the B4100; creation of internal roads and access routes; hard and soft landscaping including noise attenuation measures; and other associated infrastructure. (180,000m^2)

1.3 Whilst the eastern and western development parcels are subject to separate planning applications, it is envisaged that the sites would come forward in parallel in 2026 and therefore the overall impact is assessed. The AL Masterplan is attached at **Appendix A**.

1.4 These applications are supported by a Transport Assessment (TA) prepared by David Tucker Associates (DTA) which considered the transport implications of the development. The applications have not, however, been determined pending additional detailed technical work on the transport implications of the development in response to consultees and cancelation of the Oxfordshire Growth Board (OGB) planned improvement works at A43 Baynards Green roundabout. Consultee responses include those from highway authorities:

- National Highways (NH) as the authority for the strategic road network (SRN) correspondence is attached at **Appendix B**;

- Oxfordshire County Council (OCC) as the local highway authority is attached at **Appendix C**;

- West Northamptonshire Council (WNC) correspondence is attached at **Appendix D**.

1.5 This report sets out the additional work that has been progressed by DTA on behalf of AL in consultation with the LPA, Oxfordshire County Council (OCC), as local highway authority (LHA), and National Highways (NH), as highway authority responsible for the strategic road network (SRN). This should be read in conjunction with the TA as this report primarily addresses the further work that has been undertaken since the TA was prepared.

1.6 As set out in Section 2 there have been changes in national guidance and development management policies of the LPA and LHA relating to transport. These include national and County level freight strategies.

1.7 Section 3 sets out the refined transport strategy whereby sustainable transport will be encouraged including by active travel modes and public transport. These initiatives will be supported by site travel policies as set out in the Travel Plan which has been updated.

1.8 Section 4 sets out the areas of technical agreement with respect to demand forecasting. This technical work has been aligned with and progressed in conjunction with SLR, acting on behalf of Tritax Symmetry Limited (TSL), the promotor of a development of 300,000m^2 of commercial warehousing on an adjacent site. The TSL Masterplan is attached at **Appendix E**.

- 22/01340/OUT - Outline planning permission (all matters reserved except means of access (not internal roads) from B4100) for the erection of buildings comprising logistics (use class B8) and ancillary offices (use class e(g)(i)) floorspace; energy centre, HGV parking, construction of new site access from the B4100; creation of internal roads and access routes; hard and soft landscaping; the construction of parking and servicing areas; substations and other associated infrastructure." (300,000m^2)

1.9 Section 5 considers the site access and internal layout issues including parking.

1.10 Section 6 considers the traffic implications of the development. The original approach adopted by SLR to their TA for the TSL proposals was broadly aligned with the DTA TA for the AL proposals whereby the development demand was manually added to a baseline reference case. This has been updated with the assessment of both proposals through NH and OCC traffic models. This has informed the development of an improvement scheme at the A43 Baynards Green roundabout.

1.11 Section 7 sets out the key findings and consideration of compliance with transport related policies.

1.12 A standalone Topic Paper prepared with SLR, advisers to TSL, considers common elements of the appraisal.

2. POLICY CONTEXT

2.1 Changes to prevailing policies since the original TA was prepared are set out in this section.

National Planning Policy Framework (NPPF) (December 2023)

2.2 NPPF sets out the Government's planning policies for England and how these are expected to be applied. Whilst the Framework has been updated and the relevant paragraphs references differ there has been no significant change in transport related requirements.

7. The purpose of the planning system is to contribute to the achievement of sustainable development, including the provision of homes, commercial development and supporting infrastructure in a sustainable manner.

2.3 Achieving sustainable development means that the planning system has three overarching objectives which are an economic objective, a social objective, and an environmental objective.

9. Planning policies and decisions should play an active role in guiding development towards sustainable solutions, but in doing so should take local circumstances into account, to reflect the character, needs and opportunities of each area.

2.4 Such local circumstances must be considered in the appraisal of the transport implications of a development.

89. Planning policies and decisions should recognise that sites to meet local business and community needs in rural areas may have to be found adjacent to or beyond existing settlements, and in locations that are not well served by public transport. In these circumstances it will be important to ensure that development is sensitive to its surroundings, does not have an unacceptable impact on local roads and exploits any opportunities to make a location more sustainable (for example by improving the scope for access on foot, by cycling or by public transport). The use of previously developed land, and sites that are physically well-related to existing settlements, should be encouraged where suitable opportunities exist.

2.5 The key transport related tests are set out in paragraph 114 and 115.

114. 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;

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and

d) 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.

2.6 Paragraph 115 sets a high bar for refusal of an application on highway impact grounds.

115. Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Local Transport Connectivity Plan (LTCP) (July 2022)

2.7 The Oxfordshire Local Transport and Connectivity Plan (LTCP), the fifth Local Transport Plan, was adopted in July 2022. It replaced the previous Local Transport Plan (LTP4). It outlines a vision to deliver a net-zero Oxfordshire transport and travel system that enables the county to thrive whilst protecting the environment. The LTCP covers the time period 2022 to 2050.

2.8 The LTCP has four over-arching transport goals:

- *To support jobs and housing growth and economic vitality;*
- *To reduce transport emissions and meet our obligations to Government;*
- *To protect, and where possible enhance Oxfordshire's environment and improve quality of life; and*
- *To improve public health, air quality, safety and individual wellbeing.*

2.9 The LTCP has three transport targets are set:

- *reduce 1 in 4 current car trips by 2030;*
- *deliver a net zero transport network by 2040;*
- *and have zero, or as close as possible, road fatalities or life changing injuries by 2050.*

2.10 The LTCP sets out the policies that will be adopted to achieve the above goals which give an indication of the approach and priorities that will be followed. Policy 36 promotes a 'decide and provide approach'.

Policy 36 – We will:

a) Only consider road capacity schemes after all other options have been explored.
b) Where appropriate, adopt a decide and provide approach to manage and develop the county's road network.
c) Assess opportunities for traffic reduction as part of any junction or road route improvement schemes.

d) Require transport assessments accompanying planning applications for new development to follow the County Council's 'Implementing 'Decide & Provide': Requirements for Transport Assessments' document.

e) Promote the use of the 'decide and provide' approach in planning policy development to support site assessment.

2.11 Policies 47 and 48 relate to the freight and logistics strategy.

Policy 47 – We will develop and deliver a freight and logistics strategy based around the principles of:

- *Appropriate movement*
- *Efficient movement*
- *Net-zero movement*
- *Safe movement*
- *Partnership working*

Policy 48 – We will:

a) Promote rail freight as our priority for the long distance movement of goods.

b) Support a range of additional measures to improve the safety and efficiency of long distance goods movement.

Circular 01/22: Strategic Road Network and the delivery of sustainable development (December 2022)

2.12 The Circular sets out how National Highways engages in plan-making and decision -taking to support the delivery of sustainable development. It replaced Circular 02/2013.

The company's licence agreement defines sustainable development as encouraging economic growth while protecting the environment and improving safety and quality of life for current and future generations.

2.13 The Strategic Road Network (SRN) includes the M40 Motorway and the A43 and A34 Trunk Roads.

5. In this regard, the SRN provides critical links between our cities and other urban areas, serves as a gateway to global markets and travel destinations, connects our communities with families and job opportunities, and binds and strengthens our union. It drives productivity and prosperity by unlocking growth, encouraging trade and attracting investment, and plays a vital role in levelling up the country.

6. The SRN also has an essential role in supporting the government's commitments in Decarbonising Transport: A Better, Greener Britain ("the transport decarbonisation plan"). In particular, the company will prepare and plan for the delivery of future transport technology on the network, such as the installation of high-powered chargepoints for electric vehicles (EV). Further, it will support initiatives that reduce the need to travel by private car and enable the necessary behavioural change to make walking, wheeling, cycling and public transport the natural first choice for all who can take it.

2.14 The needs of the Freight and Logistics sectors is emphasised.

> *7. These actions must be carried out alongside effective engagement in the planning system, to enable the delivery of sustainable development, support the needs of the freight and logistics sector, and mitigate the impact of growth on the natural environment. As such, the company will share evidence, data, knowledge and experience, and work collaboratively and constructively with public bodies and other key stakeholders.*

2.15 It is recognised that the access to the SRN for storage and distributions operations is important and that large scale sites will be located in out-of-town locations with good SRN access.

> *30. The NPPF is clear that planning policies should recognise the specific locational requirements of different economic sectors, including for storage and distribution operations at a variety of scales and in suitably accessible locations. To operate efficiently, the freight and logistics sector requires land for distribution and consolidation centres at multiple stages within supply chains including the need for welfare facilities for the drivers of commercial vehicles. For instance, some hubs serve regions and tend to be located out-of-town near the SRN, while others are 'last-mile' facilities that will support more sustainable freight alternatives in urban areas. The Future of Freight Plan sets out that a joined-up approach between the planning system, local authorities and industry can safeguard and prioritise the land needed for these uses, such that all parties should work together to identify the specific requirements in their area*

Future of Freight Plan (2022)

2.16 Future of Freight is a policy paper of 2022 which sets out a long-term cross modal plan for the freight and logistics sector. The plan sets out a vision for a freight and logistics sector that is cost efficient, reliable, resilient, environmentally sustainable and valued by society. The plan identifies that the planning system has a crucial role in promoting development that supports the efficient supply of goods by ensuring that sufficient land is being made available in the right places for freight operations.

3. TRANSPORT STRATEGY

Active Travel

3.1 The development will require localised diversion of existing PRoW 109/5/10 within the Western Parcel. This is a footway and OCC has requested that this is upgraded to a bridleway to link Stoke Lyne Bridleway 367/29 and Ardley Bridleway 109/2. This will be a 3m wide path with a bound surface.

An agreed contribution of £65,000 will fund improvements to the Public Rights of Way Network (PRoW) as requested by OCC. These will fund improvements to routes primarily back towards the village of Ardley with Fewcott.

3.2 The site accesses and Baynards Green improvement schemes incorporate a high standard of dedicated pedestrian and cycle provision to ensure that workers can access amenities at the roadside service area as well as access public transport (bus) services.

3.3 The scope of the Local Cycling Walking Improvement Plan (LCWIP) for Bicester, limited within its existing developed area, does not extend to its functional hinterland. Notwithstanding this, OCC is seeking improvements to the B4100 corridor to encourage cycling.

3.4 The feasibility of the route has been considered with respect to the construction implications. This has been informed by a topographical survey, a highway extents search, and environmental walk-over surveys. A testing arrangement is attached at **Appendix F**.

3.5 The route is circa 4.5 kilometres in length. The construction of the path and supporting buffer could be achieved by narrowing of the carriageway. The narrowing would provide separation of the path from the running lanes where there is insufficient room within the verge. The need for separation will be speed related and therefore a reduction in the posted speed limit would support the corridor development. Where the buffer is narrow and/or there is no reduction in the posted speed limit splitter islands would need to be provided.

3.6 An active travel path would be dependent on infrastructure and traffic management policies (speed reduction) within the B4100 corridor.

Public Transport

3.7 This bus strategy is part of a wider sustainable travel strategy for the site as supported by the Travel Plan (TP). It is envisaged that bus services would provide 7.5% demand in 2025 increasing to 10% by 2030.

3.8 As confirmed by the Bicester Traffic Model (BTM) the main local population centres from which employees will come are Bicester and Brackley. For the development to be independently accessible to residents without a private car the sites will be integrated with existing bus services.

3.9 This is as set out in the TA and TP and there is no fundamental change to the bus strategy which has been planned around the existing Brackley to Bicester service. The proposals have however been refined in consultation with OCC.

3.10 The inter-urban bus service, Stagecoach route 505, runs between Brackley and Bicester. It is an express service which operates along the A43 and B4100. There are no stops between Brackley and Elmsbrook on the edge of Bicester and therefore it does not directly support the functional hinterlands of either market town within this corridor. OCC notes that *'non-development related passenger flows between Brackley and Bicester are needed to secure the overall long-term financial viability of the service'*.

3.11 It is understood from OCC that the service is currently supported financially by development contributions from sites in Brackley. OCC does not consider the route to be secure based on current patronage when these funds are exhausted.

OCC has identified a contribution of £2,133,333 (December 2023 cost) for the provision of two buses with one operating daily between 05:00 – 22:00 and the other operating Monday to Friday 06:00 - 18:00 creating a higher frequency (every 30 minutes) at the expected peak times

3.12 In the long term, the service will be supported by the additional travel demand within the corridor from the employment sites.

3.13 Bus stops within laybys are now proposed on the B4100 between the AL eastern access and the TSL access. These will be provided with sheltered seating and service information. OCC has requested a contribution of £8,904 (per shelter - Sept 2020 price base) if not delivered under S278/S38.

3.14 The arrangement for the western parcel is unchanged whereby buses will operate on a spur from Baynards Green and into the site.

3.15 Whilst the new bus stops are provided to serve the employment sites, these will benefit the local communities Baynards Green, Ardley with Fewcott, Fritwell, Bucknell and Stoke Lyne, more widely as rural mobility hubs to access employment and secondary schools in Brackley and Bicester.

3.16 Further consideration has been given to augmenting the bus strategy to support the overall sustainable travel aims. The associated funding requirements have been agreed with OCC.

An additional contribution of £1,796,667 (December 2023 cost) would increase the 30-minute service to a 15-minute service during peak hours through the funding of two further buses taking total additional buses to four.

3.17 In addition, as proposed within the TSL TAA, enhanced interchange opportunities, such as cycle lockers at key bus stops within Bicester, will increase the accessibility of the services to all town residents.

Travel Plan

3.18 The Travel Plan (TP) has been updated so the AL and TSL initiatives directly mirror each other. For the AL TP further cycling measures as per the TSL TP have been included such as bikeability training, cycle surgery days, health MOTs and car free days.

A contribution of £2,379 (December 2020 price base) plus additional amount for individual operator Travel Plans.

4. TRAVEL DEMAND FORECASTS

Baseline and Scenario Changes

4.1 The Oxfordshire Growth Fund (OGB) previously promoted a junction improvement scheme at Baynards Green to accommodate planned growth within the Cherwell District. £18M had been allocated for these works. Funding for this improvement was reallocated resulting in a smaller scheme of works at the Padbury Roundabout only.

4.2 The Oxfordshire Strategic Rail Freight Interchange (OxSRFI) proposal for 675,000m^2 GFA rail-connected warehousing has not progressed. The promotors announced in April 2023 an open-ended project hiatus. There have been no further updates and no application to the Planning Inspectorate has been made. It is agreed with the LHA and LPA that cumulative assessment with the OxSFRI is not required.

4.3 Tritax Symmetry (TSL) propose a development for 300,000m^2 GFA commercial warehousing on adjacent land at Baynards Green. As requested by the LHA and NH, the traffic impact in a cumulative scenario with both AL and TSL developments has been assessed.

Construction Travel Demand

4.4 The Enabling Works will be constructed over a period of approximately six months which includes the construction of the roundabout to the Western Site.

4.5 The construction of the Western Development will take access from the internal roundabout which in turn connects to a new B4100 roundabout, both of which are to be built as part of the Enabling Works. The construction of the Eastern Development will take temporary access from the B4100 with a simple priority access arrangement. Construction of the Western Development and the Eastern Development would take place concurrently.

4.6 Based on appraisal of other development sites of a similar nature in the Bicester area it is estimated that there will be 40 HGV deliveries and 190 car or van trips to the respective development parcels per day. These assumptions are robust and reflect the demand during the busiest stages of construction. Most of the demand will arise outside the peak network periods and as such the proportional change in flow will be negligible. As such there will be no significant change in traffic on the local road network from the construction.

4.7 There will be traffic management required during the road works. Details of the traffic management will be agreed with the LHA.

4.8 Parking for construction workers off the local roads will be provided. Measures will be put in place to avoid mud being brought on to the highways. These measures are set out in the Framework CEMP.

Operational Travel Demand

4.9 The Bicester Traffic Model (BTM) is a strategic traffic model covering the Bicester area which was developed and managed for the LHA. BTM has been extensively used in the area for development planning. The day to day running of the model is undertaken by Tetra

Tech (TT) on behalf of the LHA. BTM includes planned developments in the Bicester Area for future years of 2026 and 2031. 2026 broadly equates to the anticipated opening year of the development and is accordingly considered to be the relevant date for impact appraisal. 2031 is primarily presented as a sensitivity test which aligns with the end of the current Development Plan. Details of the development assumptions are set out in the uncertainty log (**Appendix G**).

4.10 The specification of BTM is defined and controlled by the LHA. The only parameters defined by DTA and SLR are the development travel demand forecasts and the HGV distribution and assignment. These parameters were agreed with the LHA and NH prior to the model runs.

4.11 The travel demand forecasts are as set out in Table 5 of the TA. These are based on surveys of large-scale commercial warehousing sites. The underlying data is unchanged. The reported weekday trip rates have been supplemented with an annual average trip rate (7-day) as summarised in **Table 1** below.

Table 1 Weekday Trip generation rates (per 100m²)

	HGV		Cars		Total		
	In	Out	In	Out	In	Out	Two-way
AM Peak (0800-0900)	0.019	0.019	0.092	0.027	0.111	0.046	0.157
AM Peak (0900-1000)	0.021	0.020	0.070	0.020	0.091	0.041	0.131
PM Peak (1600-1700)	0.018	0.016	0.021	0.114	0.039	0.129	0.168
PM Peak (1700-1800)	0.016	0.015	0.024	0.099	0.041	0.114	0.155
12 Hour (0700-1900)	0.226	0.217	0.610	0.710	0.836	0.927	1.763
16 Hour (0700-2300)	0.281	0.269	0.691	0.807	0.972	1.076	2.048
18 Hour (0600-2400)	0.305	0.299	0.787	0.903	1.092	1.202	2.294
8 Hour (2300-0700)	0.089	0.107	0.252	0.170	0.340	0.277	0.617
24 Hour (0000-2400)	0.370	0.376	0.942	0.977	1.312	1.353	2.665
24 Hour AADT	0.292	0.281	0.741	0.788	1.033	1.069	2.104

4.12 The light vehicle distribution reported in the TA is no longer used. As agreed with the LHA and NH the light vehicle distribution has been forecast within the BTM process. Within the BTM the home trip ends of employees are distributed and assigned. The BTM assignment is reported in passenger car units cumulatively with the heavy vehicle distribution.

4.13 The light vehicle distribution is summarised in **Table 2**.

Table 2 Light Vehicle Assignment

Assignment	% demand TA (2011 Census derived)	% demand BTM
B4100 (West)	8%	16.8%
B4100 (Aynho)	8%	6.8%
A43 (North)	10%	26.1%
B4100 (East)	54%	35.1%
M40 (Northwest)	3%	5.2%
B430	6%	12.2%
M40 (South)	16%	4.1%

4.14 The HGV distribution as before is based on the National Freight Matrices. These were assigned to the local road network using network analyst within ArcGIS. This was subject

to validation, in consultation with AECOM acting on behalf of NH, to align the assignment of HGVs with observed HGV movements through M40 Junction 10. The agreed assignment, summarised in **Table 3** below, was then provided to TT as an input to the BTM runs.

Table 3 HGV Assignment

Assignment	% HGV demand TA	% HGV demand Agreed
B4100 (West)	0%	0%
A43 (North)	31%	41%
B4100 (East)	5%	6%
M40 (Northwest)	19%	11%
B430	0%	2%
M40 (South)	45%	41%

4.15 The outputs from the BTM include turning movement matrices at key local junctions. These turning movements have been used for the detailed modelling of the M40 Junction 10 network of junctions including Baynards Green (these are included at **Appendix P** as set out below).

5. SITE ACCESS & LAYOUT

Albion Land Eastern Access (Signals)

5.1 The proposed junction form of the Eastern Site Access has changed from the original application (21/03267/OUT) from a roundabout to a traffic signal-controlled T-junction. This has allowed the introduction of active travel crossings across the site access. The new General Arrangement and Vehicle Tracking Drawings are attached at **Appendix H**.

5.2 There are two versions of the General Arrangement plans within **Appendix H** covering the scenario where the Eastern Site Access comes forward in advance of the TSL Access and a second where both accesses come forward together. The difference between the plans relates to the tie-in. The B4100 would be realigned on approach to the TSL access which overlaps with the AL access layout. The two plans show that either scenario is covered as the AL access layout can tie into either the existing or realigned B4100.

5.3 The more compact junction form has allowed the access to be moved eastward removing the need for a weaving section between the access and Baynards Green. Although not required given the available separation the future co-ordination with signals at the Baynards Green junction is possible.

5.4 The operation of the junction has been tested in LINSIG which shows that the junction has an appropriate level of capacity to accommodate the development demand. These results assume that the junction would operate with a common cycle time with the Baynards Green roundabout (72 seconds). Pedestrian crossings on the access operate on a walk with traffic basis and hence are called every cycle.

5.5 A summary of the junction performance is included in **Table 4** below and additional detail (model output reports) of the operational appraisal is attached in **Appendix I**.

Table 4 Eastern Access Performance Summary – Albion Land Only (eastern and western parcels)

	AM				PM			
	Queue (PCU)	**Degree of Sat.**	**Delay (pcuHr)**	**Practical Reserve Capacity**	**Queue (PCU)**	**Degree of Sat.**	**Delay (pcuHr)**	**Practical Reserve Capacity**
2026 Design								
1. B4100 W	6.3	53.7%	5.20	54.5%	3.7	35.8%	5.76	28.9%
2. B4100 E	9.0	58.2%			12.2	69.8%		
3. Site Access	0.8	10.6%			1.5	19.5%		
2031 Design								
1. B4100 W	6.1	52.4%	6.57	23.7%	4.4	41.3%	7.76	10.1%
2. B4100 E	13.1	72.8%			16.7	81.7%		
3. Site Access	0.8	10.6%			1.5	19.5%		

5.6 With the TSL development the ahead movements on the B4100 increase by circa 500 vehicles per hour in the peak direction resulting in a demand of 1,373 vehicles per hour in the westbound direction in the 2031 AM peak. As can be seen in **Table 5**, the junction still operates within capacity.

Table 5 Eastern Access Performance Summary – Albion Land and Tritax Symmetry

	AM				PM			
	Queue (PCU)	**Degree of Sat.**	**Delay (pcuHr)**	**Practical Reserve Capacity**	**Queue (PCU)**	**Degree of Sat.**	**Delay (pcuHr)**	**Practical Reserve Capacity**
2026 Design								
1. B4100 W	11.3	78.5%	4.38	14.6%	0.7	57.4%	5.33	20.5%
2. B4100 E	8.4	55.3%			13.8	76.4%		
3. Site Access	0.7	8.2%			1.4	19.5%		
2031 Design								
1. B4100 W	20.7	89.5%	6.11	0.5%	10.6	65.6%	7.22	7.7%
2. B4100 E	11.1	66.4%			17.9	83.5%		
3. Site Access	0.7	7.8%			1.4	16.2%		

5.7 The Eastern Site Access has been subject to an independent Road Safety Audit Stage 1. No fundamental issues were identified. The recommendations of the audit have been taken on board and will inform the detailed design process. In the meantime, the general arrangement drawing has been updated where appropriate. The RSA1 including the designer's response is attached at **Appendix J**.

B4100 East Bus Stops

5.8 The original AL scheme allowed for a bus set down area within the eastern site. It is now proposed to provide bus stops online on the B4100 which will be accessible by both the TSL and AL developments. These will be to the east of the AL eastern parcel access and to the west of the TSL access. Both stops will be within laybys and will have shelters etc. as set out in Section 3. To allow pedestrians to access both eastbound and westbound stops it is proposed to provide an independent traffic signal-controlled crossing immediately to the west of the laybys.

Albion Land Western Roundabout

5.9 The proposed junction form of the Western Site Access is broadly unchanged from the original application (21/03268/OUT) and remains a roundabout. OCC, in their response of 24th November 2021) requested a review the conflict angles on the B4100 as these were deemed relatively sharp. These have been updated whilst maintaining the requirements of the DMRB. The new General Arrangement and Vehicle Tracking Drawings are attached at **Appendix K**.

5.10 The operation of the junction has been tested in JUNCTIONS which shows an appropriate level of capacity to accommodate the development demand. A summary of the junction performance is included in **Table 6** below and additional detail of the operational appraisal is attached in **Appendix L**.

Table 6 Western Access Performance Summary – Albion Land Only (eastern and western parcels)

	AM				PM			
	Queue (PCU)	**Delay (s)**	**RFC**	**Network Residual Capacity**	**Queue (PCU)**	**Delay (s)**	**RFC**	**Network Residual Capacity**
2026 Design								
1. B4100 W	1.0	6.03	0.51	75%	0.4	4.29	0.27	156%
2. B4100 E	1.0	6.07	0.48		0.6	4.73	0.36	
3. Site Access	0.2	5.18	0.12		0.3	4.72	0.23	
2031 Design								
1. B4100 W	1.3	6.72	0.56	60%	0.5	4.81	0.33	134%
2. B4100 E	1.3	6.76	0.54		0.6	4.60	0.34	
3. Site Access	0.2	5.31	0.12		0.3	4.61	0.23	

5.11 A summary of the junction performance including the TSL development is summarised in **Table 7**.

Table 7 - Western Site Access Junction Assessment – Albion and Tritax Symmetry Developments

	AM				PM			
	Queue (PCU)	**Delay (s)**	**RFC**	**Network Residual Capacity**	**Queue (PCU)**	**Delay (s)**	**RFC**	**Network Residual Capacity**
2026 Design								
1. B4100 W	1.7	7.94	0.63	43%	0.9	5.79	0.45	85%
2. B4100 E	2.0	8.86	0.64		1.0	5.98	0.47	
3. Site Access	0.2	5.88	0.13		0.4	5.20	0.25	
2031 Design								
1. B4100 W	1.8	8.50	0.65	34%	1.0	6.23	0.50	71%
2. B4100 E	2.4	9.90	0.68		1.0	5.96	0.47	
3. Site Access	0.2	5.98	0.13		0.4	5.16	0.25	

5.12 The results show that the geometry has ample capacity to accommodate the development demand (TSL, AL and wider planned growth) with limited delay or queueing on any arm. All approaches to the junction are single lane entries and therefore there are no lane balance issues.

5.13 The Western Site Access was previously subject to an independent Road Safety Audit Stage 1. No fundamental issues were identified. The recommendations of the audit have been taken on board and will inform the detailed design stage. The general arrangement drawing has been updated where appropriate. The RSA1 including the designer's response is attached at **Appendix M**.

5.14 The accesses are both safe and suitable in accordance with the policy requirements set out in the NPPF at paragraph 114.

Tritax Symmetry Site Access

5.15 The TSL site is proposed to be accessed from a four-arm roundabout on the B4100 to the east of the Eastern AL parcel. Details of the access are set out in the SLR TA Addendum where the performance of the junction is tested both with and without the AL development. This reports that the arrangement has appropriate capacity.

5.16 In addition, the operation of the TSL access and AL access are cumulatively tested in both the BTM and the VISSIM (considered in Section 6) as reported in **Appendix P**.

Parking

5.17 The development is subject to outline planning applications and as such the internal layout is indicative.

5.18 As per the TA, an appropriate level of vehicle, accessible parking, and cycle parking will be provided to meet the demand within the site but within the context of the sustainable travel strategy for the site.

5.19 Parking provision will be assessed on a case-by-case basis with consideration of trip rates, users groups and shift patterns, as well as site location and potential implications of off-site parking.

5.20 Cycle parking standards are expressed as the minimum that developments are expected to achieve, albeit it is considered reasonable that the level of cycle parking provided could be monitored through the staff Travel Plan and amended in response to demands.

5.21 Current LHA guidance indicates that there should be a minimum requirement for 1,120 long-stay staff cycle parking spaces and 560 short-stay visitor cycle parking spaces. AL proposes to safeguard land for the level of cycle parking identified by the LHA guidelines, but only provide a proportion of this from day one. The initial level of cycle parking provided will be identified at the reserved matters stage having regard to the requirements on individual users. Usage would be monitored via a Travel Plan and increased wherever necessary based on recorded demands.

5.22 The level of car parking will be determined as part of future reserved matters applications with consideration for the end occupier needs as well as reference to LPA and LHA standards.

5.23 Notwithstanding the above, the illustrative masterplan shows the car parking spaces which reflects the Applicant's experience of what the market would require from an operational perspective.

5.24 The site will provide electric vehicle charging facilities in line with OCC guidance. This required 25% of spaces to be equipped.

6. TRAFFIC IMPLICATIONS

Road Safety

6.1 The performance of the road network has been assessed by a review of reported incidents (STATS19 data). The LHA records were obtained, and a summary is attached at **Appendix N**. The study area includes the B4100 between Elmsbrook to the East to Baynards Green including the potential area of influence of the AL-western parcel access. The data covers the most recent five-year period 2018 to 2022 plus provisional data for 2023.

6.2 The data shows that there were 25 reported incidents.

6.3 There were 15 incidents at the Baynards Green roundabout and approaches including fourteen incidents of slight severity and one of serious severity.

6.4 There were no incidents on the B4100 on the frontage of the western parcel.

6.5 Between Baynards Green (excluding roundabout) and Bicester there were twelve incidents. There are no apparent locational trends or clusters. There was one fatal incident on this section of the B4100 which involved a cyclist. There were two serious incidents including a single vehicle loss of control.

6.6 At the Padbury roundabout there were eight reported incidents in the most recent six-year period. All incidents were of slight severity. Given the level of demand the reported safety performance is good. The junction will be upgraded to traffic signal control by others which will have a significant effect on the operation of the junction.

6.7 At the Cherwell roundabout there were three reported incidents in the most recent six-year period. The three incidents, on the southbound approach were of slight severity.

6.8 There were two incidents on the northbound link between the Cherwell and Ardley roundabouts both of which were of serious severity.

6.9 There was a single incident at the Ardley roundabout on the B430 entry. The incident was of serious severity.

M40 Junction 10 Network

6.10 The M40 Junction 10 VISSIM model is a micro simulation model which covers Junction 10 including the Ardley, Cherwell and Padbury Roundabouts as well as Baynards Green. The model was provided to SLR for the purposes of testing the AL and TSL developments and the junction improvements that would be delivered in conjunction with these developments.

6.11 The scope of this model includes Baynards Green Roundabout, Padbury Roundabout including signalisation improvements promoted by OGB, Cherwell Roundabout from which the Motorway Service Area (MSA) is accessed, Ardley Roundabout and the M40 Junction 10 slip roads including merges and diverges.

6.12 The base VISSIM was reviewed by SLR in conjunction with AECOM to ensure that it was appropriate for scenario testing. The NH model was further developed with respect to its structure and the demand forecasts. Network revisions to improve lane usage and gap

acceptance (at give way lines) and agreed with NH. The forecast demand from the BTM informed the VISSIM as set out in the SLR Matrix Development Methodology Note and agreed with NH. Model output is attached within the report at **Appendix P**.

6.13 The VISSIM model confirms that the throughput of the M40 Junction network is significantly increased, and benefits of the improvement scheme are not affected by the wider network. The summarised findings of the VISSIM modelling, ordered by year and peak, are:

2026 AM

- There is an overall reduction in delay for the whole network of at least 26s per vehicle. The actual reduced delay will be greater because the number of unreleased vehicles (traffic that cannot enter the network due to blocking) reduced from 1000 to 0.
- The A43 south-bound queue to Barnards Green roundabout reduces by around 700m in the AM peak. The actual reduction in queue is greater because of unreleased vehicles (latent demand which cannot enter the network). Overall, the latent demand reduces from 1000 vehicles to 0 vehicles equivalent to a queue of circa 3km across two lanes.
- The improvement at Baynards Green roundabout allows more traffic South in the AM peak. The model reports some additional south-bound queues (displaced downstream) at the Padbury and Cherwell MSA junctions, however, these queues are contained within links.
- The additional south-bound flow increases M40 northbound off-slip queues in the AM peak to circa 340m. However, these queues are wholly contained within the slip, i.e., not beyond the back of the nose, some 460m from the ICD.

2026 PM

- There is an overall reduction in delay for the whole network of at least 15s per vehicle. The B4100 East entry queue reduces by an average of nearly 400m, while the number of unreleased vehicles in the reduces from 50 (reference case) to 0 (development case).
- The Northbound queue to Barnards Green roundabout reduces by an average of c300m.
- The model reports south-bound queues (displaced from Baynards Green) to the Padbury and Cherwell MSA junctions, however, these queues are contained within links.

AM 2031

- The 2031 tests are not required as set out in DfT Circular 01/2022. However, the results are included as a sensitivity test.
- There is an overall reduction in delay for the whole network of at least 4s per vehicle. The south-bound approach to Barnards Green roundabout has around 900 fewer unreleased vehicles. While these vehicles do not contribute to the overall delay

statistics and queue length statistics, this level of reduction is clearly a significant improvement.

- Queues on the B4100 West reduce by nearly 400m while those on the B4100 East reduce by around 200m.
- The model reports south-bound queues (traffic displaced downstream from Baynards Green) to the Padbury and Cherwell MSA junctions, however, these queues are contained within links.
- The additional south-bound flow does increase M40 north-bound off-slip queues in the AM peak. These queues are wholly contained within the slip, i.e. not beyond the back of the nose.

2031 PM

- There is an overall reduction in delay of 33 seconds per vehicle.
- The North-bound queue to Barnards Green roundabout reduces by an average of circa 550m. This is an improvement when compared with the reference case where queues stretched to Padbury roundabout, which could have safety implications for the M40 south-bound off-slip.
- The B4100 East entry queue reduces by an average of nearly 450m, reducing the number of unreleased vehicles by around 300, to zero. The B4100 West queues are circa 250m shorter than the reference case.

6.14 The slip road merge and diverge arrangements perform well within VISSIM with no evidence of blocking back.

Baynards Green Roundabout

6.15 Baynards Green roundabout currently experiences stress during the peak hour periods. An £18M junction improvement scheme at Baynards Green was promoted by OGB to accommodate planned growth within Cherwell District including at Heyford Park. Funding for the scheme was, however, withdrawn at the concept design stage.

6.16 DTA and SLR have collaboratively worked to develop the concept into a deliverable scheme capable of accommodating the AL and TSL developments and the wider planned growth.

The A43 Baynards Green Improvement Scheme is to be delivered by AL and/or TSL. It will accommodate both the development and wider demands from planned growth within Cherwell District; a significant improvement to a long-identified need.

6.17 The proposed general arrangement is shown on **SLR drawing 216285/A/14 RevB** which is attached at **Appendix O**. All four arms of the roundabout will be signal controlled. Localised widening will be required on approaches to the junction and within the circulatory carriageway but where possible the scheme makes use of the existing layout to minimise disruption during construction. Vehicle tracking is shown on **SLR drawing 216285/SK12**.

6.18 Pedestrian and cycle crossings will be provided on both B4100 arms and on the A43 south. These will operate on a walk with traffic basis such that active travel demand will have no impact on overall junction performance.

The A43 Baynards Green Improvements Scheme requires land from both TSL and AL sites for the delivery of visibility splays. Without this land the scheme could not be delivered in its entirety. Agreement between TSL and AL allow for implementation by either party or together.

6.19 Performance of the junction has been tested based on BTM demands both through ARCADY, based on the current layout, LINSIG, based on the proposed layout, and within the NH M40 J10 VISSIM, in the context of the wider M40 Junction 10 network inclusive of the AL and TSL accesses. In **Table 8** is a summary of the existing arrangement, the reference case as reported in the ARCADY, and the proposed arrangement as reported in the LINSIG. This shows that in isolation the Baynards Green junction operation will significantly benefit from the improvement works both in terms of delay and queuing. Modelling output reports are attached at **Appendix P**.

Table 8 Baynards Green Capacity Assessment

	Reference Case		Design	
	Highest Ratio of Flow to Capacity	Longest Queue	Highest Ratio of Flow to Capacity	Longest Queue
AM 2026	1.21	221	0.92	21
PM 2026	1.25	95	0.88	25
AM 2031	1.37	425	1.00	37
PM 2031	1.58	231	0.97	36

6.20 The delivery of the scheme has been tested against the requirements of the Design Manual for Roads and Bridges. No new Departures from Standards (DfS) are required. Existing DfS relating to entry path curvature are retained and have been tested in accordance with the Departures Manual (v2.1.0), subject to the GG104 Risk Assessment process and provision approval has been granted by NH Safety Engineering and Standards Directorate (SES).

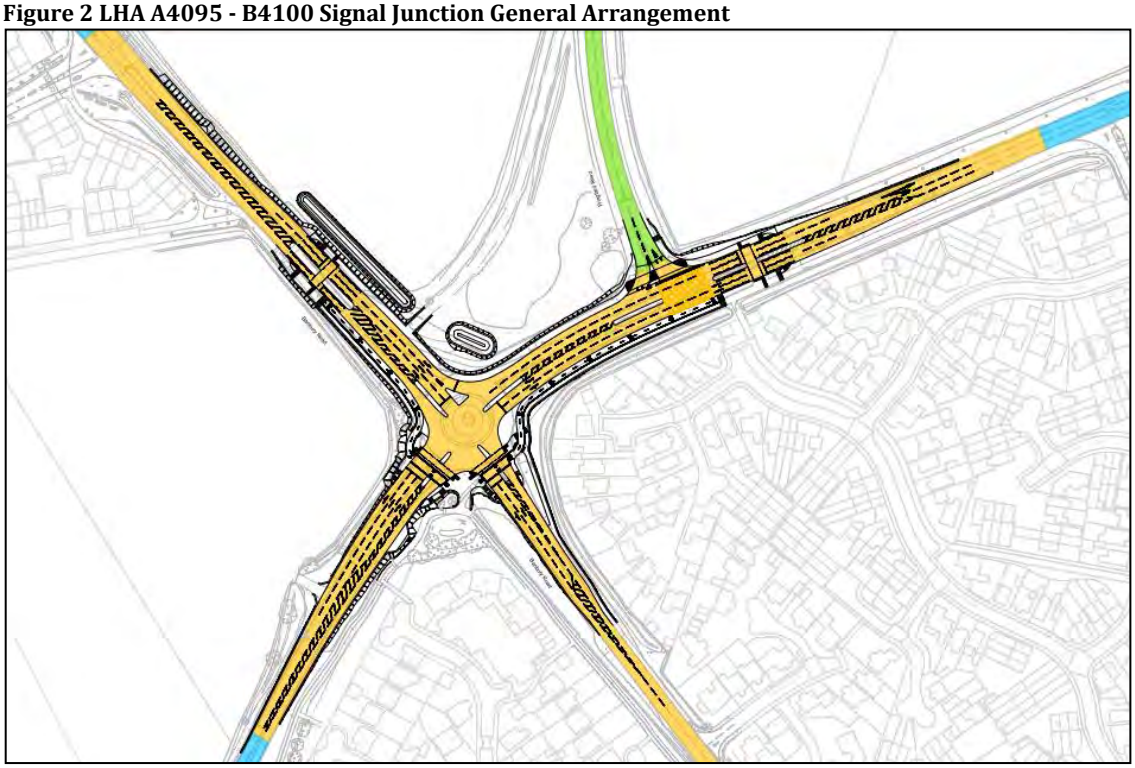
6.21 The scheme has been subject to an Independent Road Safety Audit undertaken by Gateway Road Safety Engineering (RSE) on behalf of the applicants but instructed by NH and OCC. The brief, was agreed in advance with NH and OCC, and undertaken in strict accordance with GG119 Road Safety Audit. A representative of NH accompanied the audit team. The audit RSE Report 2309-11 RSA1, dated 13th February 2024, identifies no fundamental issues but makes several recommendations. These recommendations have been accepted and will inform the detailed design stage. The Road Safety Audit Stage 1 and designers' response are attached at **Appendix Q**.

Bicester Area Transport Implications

6.22 No improvements to the Bicester Road network are required. The BTM reflects the planned growth within the Bicester Area including the proposed changes to the local road network. The BTM outputs indicate that no additional changes, in addition to those already planned, are required. Detailed micro-simulation modelling has been undertaken of the planned signalisation of the A4095/B4100 junction. This demonstrates no material change in future year performance of this junction.

6.23 Both the TSL and AL applications considered the impacts upon the Banbury Roundabout junction, which is currently a four-arm roundabout. However, as was reported in the SLR and DTA TAs, this junction is intended to be signalised. Indeed, since the respective TSL and AL applications were submitted, the LHA has granted itself planning permission under the provisions of application R3.0094/21 to construct the junction as shown in **Figure 2**.

Figure 2 LHA A4095 - B4100 Signal Junction General Arrangement



6.24 Given that this junction will be constructed in the coming months, the effects of the proposed developments upon this junction have been tested. For this assessment a VISSIM model is used developed using published information in the supporting TA (LPA/LHA application R3.0094/21).

6.25 On the basis of this modelling, which has used the BTM model demands, that was run to assess the impacts of the proposed developments at the TSL and AL site accesses, Baynards Green roundabout and M40 J10, there would be a limited impact on the overall performance of the junction. Using the same metrics that LHA used to inform its own application, Average delay per vehicles, as shown on **Figure 3** and **Figure 4**, there will be negligible changes in vehicle delays between the 2031 Reference Case and when traffic demand associated with both the AL scheme in isolation and with TSL taken into cumulatively.

Figure 3 A4095 - B4100 Junction Network Performance – Average Delay (AM Peak)

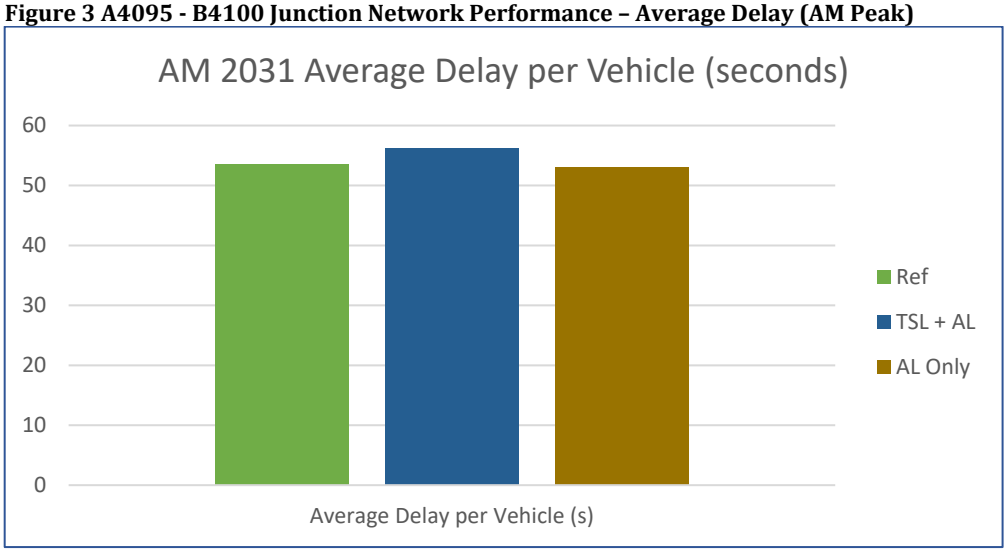
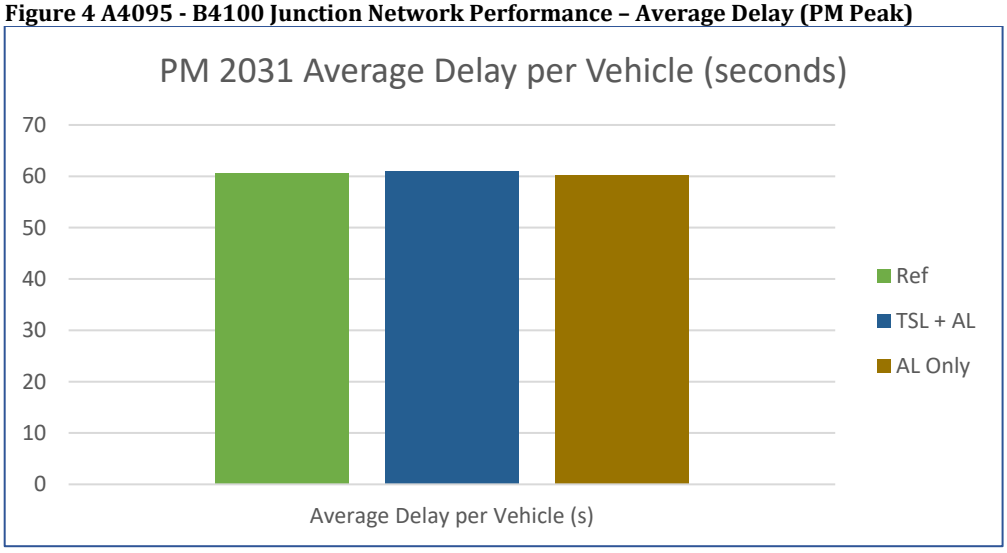


Figure 4 A4095 - B4100 Junction Network Performance – Average Delay (PM Peak)



6.26 Similarly, vehicle speeds at the junction are expected to be similar to that which OCC approved pursuant to application R3.0094/21 as shown on the speed 'heat maps' shown at **Figure 5** (Reference Case), **Figure 6** (AL east and western parcels) and **Figure 7** (AL & TSL developments).

Figure 5 A4095 - B4100 Junction Network Performance – Average Speed (2031 Reference Case)

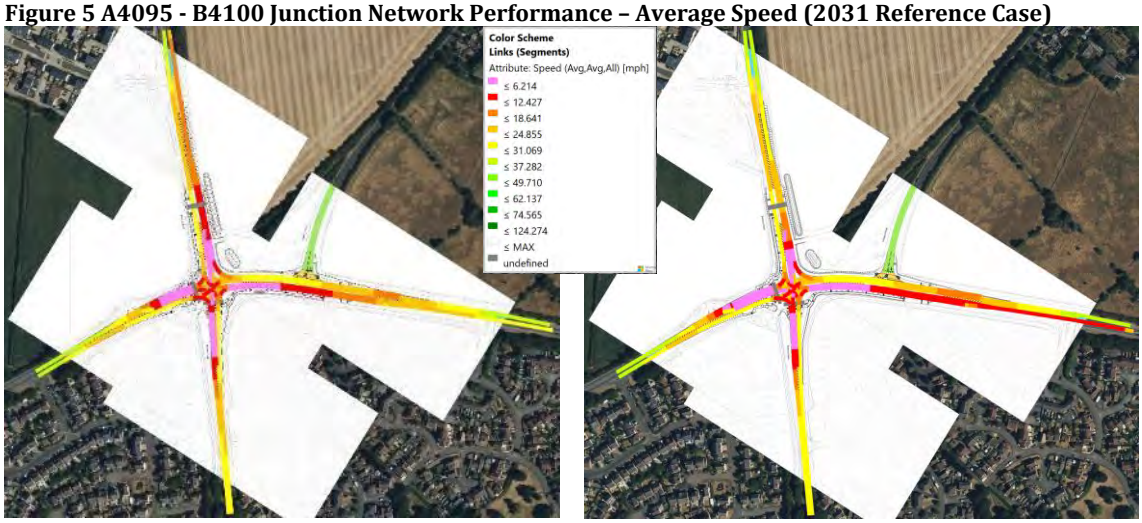


Figure 6 A4095 - B4100 Junction Network Performance – Average Speed (2031 AL only)

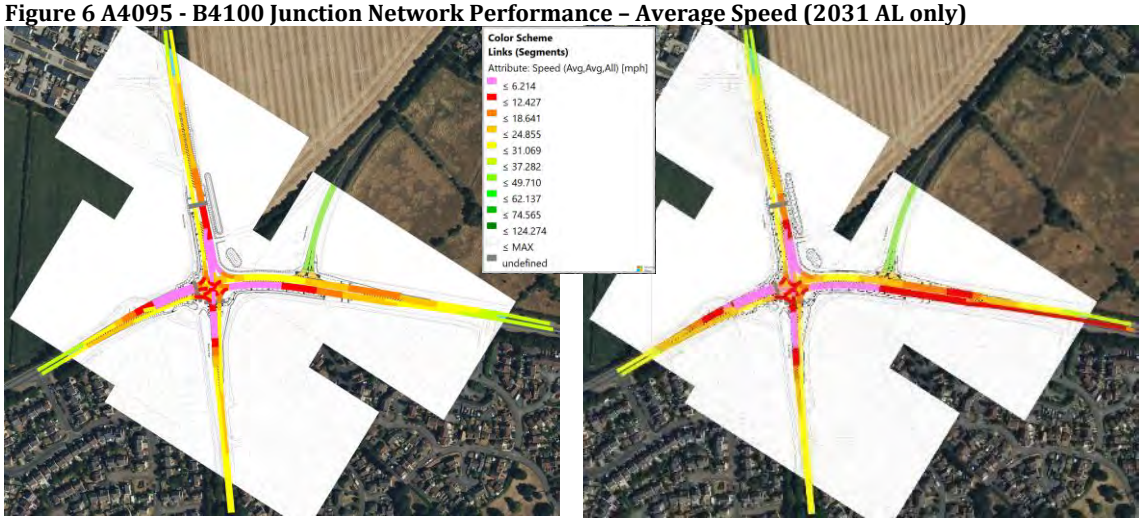
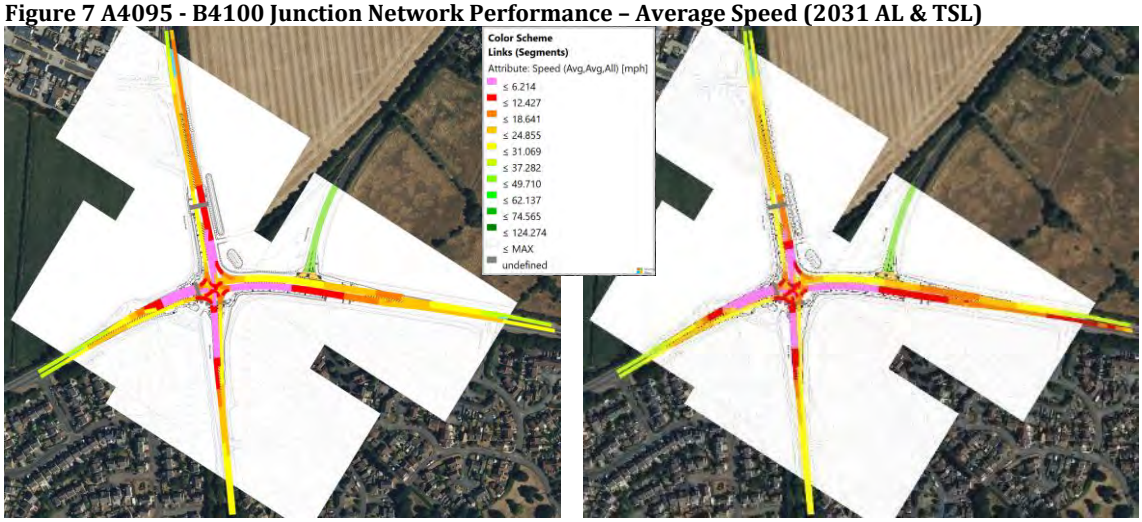


Figure 7 A4095 - B4100 Junction Network Performance – Average Speed (2031 AL & TSL)



6.27 It is demonstrated above that there would be a negligible change in speeds at the junction following the inclusion of TSL and AL development trips. Overall, it is concluded that the development proposals will not have a material impact on the operation of the junction.

West Northants Area Transport Implications

6.28 WNC welcomed the use of the BTM. However, WNC requested further analysis of the transport implications for Aynho and Croughton in their letter of 14th March 2022 (**Appendix D**). Manual classified turning counts (MCC) were requested at two key junctions within Aynho to be undertaken over a period of three days. In addition, an automatic traffic counter (ATC) was installed. Full survey reports are attached at **Appendix R**.

6.29 The B4100 through Aynho carries around 11,000 vehicles per day two-way. The two-way peak hour flows by link are summarised in **Table 9** and **Table 10** below.

6.30 The development demands are derived from the BTM. These are also summarised in **Table 9** and **Table 10** for AL, TSL and the cumulative increase. This shows that the absolute increases are modest in all scenarios on all links within the day-to-day variations that already occurs.

Table 9 Aynho Assessment – Western Junction

Vehicles per hour (2-way)	3-day average	Tritax Symmetry	Albion Land Development			TSL & AL
West B4100/B4031 Jct			East Parcel	West Parcel	Combined	
B4100 Banbury Rd (N)	SURVEY	DEV	DEV	DEV	DEV	DEV
AM Peak	762	6	2	5	7	13
PM Peak	747	6	2	14	16	22
B4031 Station Road (W)	SURVEY	DEV	DEV	DEV	DEV	DEV
AM Peak	438	9	3	8	11	20
PM Peak	425	9	3	7	10	19
B4100 Roundtown	SURVEY	DEV	DEV	DEV	DEV	DEV
AM Peak	926	18	6	13	19	37
PM Peak	942	18	6	21	27	45
Overall Change (relative)		DEV	DEV	DEV	DEV	DEV
AM Peak	1063	1.7%	0.6%	1.2%	1.8%	3.5%
PM Peak	1057	1.7%	0.6%	2.0%	2.6%	4.3%

Table 10 Aynho Assessment – Eastern Junction

Vehicles per hour (2-way)	3-day average	Tritax Symmetry	Albion Land Development			TSL & AL
East B4100/B4031 Jct			East Parcel	West Parcel	Combined	
Unnamed Rd to Charlton (N)	SURVEY	DEV	DEV	DEV	DEV	DEV
AM Peak	46	0	0	4	4	4
PM Peak	46	6	2	4	3	9
B4031 Croughton Road (E)	SURVEY	DEV	DEV	DEV	DEV	DEV
AM Peak	450	0	0	8	8	8
PM Peak	477	0	0	0	0	0
B4100 Bicester Rd(S)	SURVEY	DEV	DEV	DEV	DEV	DEV
AM Peak	648	18	6	25	31	49
PM Peak	625	24	8	25	33	57
Overall Change (relative)		DEV	DEV	DEV	DEV	DEV
AM Peak	1056	1.7%	0.6%	2.4%	2.9%	4.6%
PM Peak	1064	2.3%	0.8%	2.3%	3.1%	5.4%

6.31 The additional information demonstrates that there is no material impact on the operation or performance of the WNC network. The BTM routes circa 1% of traffic to Croughton via the B4100. Croughton is the destination for this demand, i.e. it is not through traffic. The BTM routes circa 4% of traffic to and/or through Aynho; the increase is one additional vehicle every one to two minutes.

6.32 WNC confirm that their PRoW is not affected by the development.

7. CONCLUSION

7.1 This Transport Assessment Addendum considers the development of a proposed logistics development near at M40 Junction 10 which is being promoted by Albion Land. It updates the position set out on the Transport Assessment and should be read in conjunction with it.

7.2 The development aligns with the needs of the logistics and distribution industry providing modern large scale commercial warehousing that is well related to the strategic road network in a location which will minimise the impact of heavy goods vehicles on the local communities. The development will provide significant employment opportunities that will be accessible to residents from the expanding communities Bicester and Brackley including by non-car modes.

7.3 Responding both to the initial consultation responses and contextual changes, including the withdrawal of funding for the OGB Baynards Green improvement Scheme, a significant amount of technical work has been undertaken in consultation with the LPA, LHA and NH.

7.4 The sustainable travel strategy for the site has been refined to allow accessibility to the employment opportunities that will be created. A transit-oriented solution is now favoured.

7.5 The inter-urban bus service between Brackley and Bicester would in the short term be financially secured by financial support of up to £2.1M from AL and/or TSL and in the longer term will be supported by the additional travel demand within the corridor. The new stops that will be created will be usable by local communities as rural mobility hubs. A further contribution of up to £1.7M to further increase frequency is being considered and will be discussed further with the LHA.

7.6 Active travel provision has been significantly improved with a new controlled crossing facility across the A43. AL also agree to funding requested by OCC of £65k for improvements to the local PRoW. A further enhancement to active travel provision on the B4100 is being considered and will be discussed further with the LHA.

7.7 The Travel Plan, which sets out the operational travel policies for businesses on the site, has been updated with additional measures to support sustainable travel.

7.8 The implications of the operational traffic and residual employee travel demand from the AL development has been extensively tested independently and in conjunction with the TSL development using the traffic models developed by the LHA and NH. The future demand forecasts are fully aligned with planned growth in the area.

7.9 The OGB had previously allocated £18M to upgrade the Baynards Green roundabout to a traffic signal-controlled arrangement. This funding, however, was reallocated and the OGB scheme has not progressed.

7.10 A scheme for the signalisation of the Baynards Green junction has been developed and supported by detailed modelling, scrutiny on compliance with design standards and independent road safety auditing. The scheme, to be delivered by AL and/or TSL will accommodate both the development demand and wider demands from planned growth

within Cherwell District. This is a significant improvement to a long-identified need and removes the need for very significant public investment at this location.

7.11 The Baynards Green Scheme represents a significant upgrade, accommodating both development and wider growth, both in isolation and in the context of the wider M40 Junction 10 network. No additional works to the SRN network are required.

7.12 No improvements to the Bicester Road network are required. Testing of the planned signalisation of the A4095/B4100 junction demonstrates no material change in future year performance of this junction.

7.13 Overall, the development includes a balanced package of transport improvements including the upgrade of a key junction on the SRN, in support of the development and wider growth in the District, and improvements to the local transport network including support for bus services and the active travel network. This package brings the development proposals fully in line with the requirements of prevailing transport related planning policy.

APPENDIX A

Albion Land Masterplan

NOTES

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Subject to Statutory Approvals.

Rev	Description	Chk	Date
A	Entry to the Eastern Parcel updated	SM	05/12/2023

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Project Title.
JUNCTION 10 M40

Drawing Title.
ILLUSTRATIVE MASTERPLAN

Drawing Status.
TOWN PLANNING

Scale.
0 20 metres 200

Drawn By.	Scale.	Date.	Chk'd By.
S K	1:2500 @ A1	20/09/2021	C S

ALBION LAND

Drawing No.	Rev.
20005 - TP - 020	A

APPENDIX B

National Highways Responses

National Highways Planning Response (NHPR 21-09)
Formal Recommendation to an Application for Planning Permission

From: Andrew Jinks (Regional Director),
Operations Directorate
Midlands Region
Highways England
PlanningM@highwaysengland.co.uk

To: **Cherwell District Council – FAO: David Lowin**

CC: transportplanning@dft.gov.uk
spatialplanning@highwaysengland.co.uk

Council's Reference: 21/03267/OUT

Location: OS Parcel 0006, South East of Baynards House Adjoining A43, Baynards Green

Proposal: Outline planning permission (all matters reserved except for access) for the erection of buildings comprising logistics (Use Class B8) and ancillary Office (Use Class E(g)(i)) floorspace and associated infrastructure; construction of new site access from the B4100; creation of internal roads and access routes; and hard and soft landscaping

National Highways Ref: 92857

Referring to the consultation on a planning application dated 5 Oct 2021 referenced above, in the vicinity of the A43 and M40 that form part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

~~a) offer no objection (see reasons at Annex A);~~

~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – National Highways recommended Planning Conditions & reasons);~~

c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);

d) ~~recommend that the application be refused (see reasons at Annex A)~~

Highways Act 1980 Section 175B is not relevant to this application.[1]

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

Signature: [redacted]	**Date:** 25 January 2022
Name: Martin Seldon	**Position:** Assistant Spatial Planner
National Highways National Highways, The Cube, 199 Wharfside Street, Birmingham, B1 1RN Martin.Seldon@highwaysengland.co.uk	

[1] Where relevant, further information will be provided within Annex A.

Annex A National Highway's assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommended Non-Approval

It is recommended that the application should not be approved for a further period of three months from the date of this response to allow the applicant to provide the additional information required.

Reasons

National Highways has engaged with the applicant/ their consultants on this development proposal since the pre-application stage in July 2021.

Having reviewed the information submitted in support of the planning application, we are content with the anticipated trip generation and growth rates proposed. However, several concerns were noted regarding traffic related matters and geotechnical matters. As such, National Highways issued a holding recommendation response on 26 October 2021 detailing the concerns identified.

Following this a meeting was arranged by the applicant's consultant with National Highways, the Local Highway Authority (LHA) and the Local Planning Authority (LPA) on 5 November 2021. Since then the consultant has been in continuous engagement with National Highways to resolve the outstanding matters relating to trip distribution, capacity assessments, committed development, etc. The following sections provide an overview of the outstanding concerns from a National Highways perspective.

Traffic related matters

Quantum of development

We noted some inconsistencies between the total floorspace proposed for the Eastern Parcel in the Application Form and that stated within the Transport Assessment (TA). While the floorspace for the Eastern Parcel is stated as 100,000 sq.m within the TA submitted, it is entered as 107,000 sq.m in the Application Form. Therefore, we require the applicant to use the floorspace stated within the Application Form for all the assessments to ensure that the worst-case scenario is considered.

Trip distribution

The applicant previously undertook the trip distribution for light vehicles based on 2011 Census data and heavy vehicles using the 2006 freight matrices published by DfT. While we acknowledged that the freight data on DfT's website is the latest available information, we noted in our response that this data is quite old and as such, may not capture the development growth that has happened in the area over the last 15 years. Further to this, as the vehicular accesses serving the Western Parcel and Eastern Parcel of the development are different, we required additional insight on how the distributions have been undertaken for the development at each.

In line with the above, National Highways welcomed an alternative methodology to be adopted for determining trip distribution to ensure a robust assessment.

Following further discussions, it was agreed that the trip distribution and assignment would be undertaken using the Bicester Transport Model (BTM) available for the area. A modelling brief was provided in December 2021 which detailed the scope of work to be undertaken. Overall, the scope of model runs to be performed and the outputs to be extracted were agreed with the applicant.

The traffic survey data available with National Highways for the area was supplied to the consultant to help determine the proposed HGV distribution for the development, which will be fed into the BTM model for undertaking the runs. The consultant has now undertaken further assessments and has provided the outputs for our review. We are currently reviewing this information and will respond to the consultant shortly.

Committed development

In our previous response, we welcomed clarification on whether the committed developments considered for the assessments have been finalised following the confirmation from the relevant LPAs.

Discussions are currently being held between the applicant and National Highways and Oxfordshire County Council on the need for sensitivity tests regarding development proposals in the area.

Capacity assessments

Capacity assessments have currently been undertaken for the western and eastern site accesses and A43 Baynards Green roundabout only. We noted that the applicant has referred to the Oxfordshire Housing and Growth Deal scheme which proposes improvements at the A43 Baynards Green roundabout and the Padbury roundabout of M40 J10, amongst other improvements. However, National Highways required that the applicant undertakes junction capacity assessments at M40 J10 and A43 Baynards Green roundabout using the latest available information regarding the proposed improvement schemes.

Following the discussion in November 2021, it was agreed with the applicant that the A43 Growth Deal scheme will be incorporated into the model for assessing the development impacts with the scheme in place.

Baseline traffic – We note from section 8.3.6 of the Environmental Statement (ES) that the baseline data has been collated from a number of sources, including the commissioning of traffic surveys, WebTRIS data, the historic Transport Assessment for North West Bicester Masterplan (2014), freight matrices published by DfT, etc. However, it is not clear how the data has been processed and used for the assessments. As such, it was stated in our previous response that we require the applicant to include a section on this in the TA to understand the suitability of the data used.

We also recommended that the traffic flow diagrams be provided (preferably in the form of spreadsheets) for all the scenarios under consideration.

Modelling software – The applicant has previously undertaken the capacity assessments at the site accesses and A43 Baynards Green roundabout using ARCADY. However, no information was provided regarding the source or validation of the models.

Notwithstanding the above, we required that the applicant model the junctions in the area (including Baynards Green roundabout and M40 J10) using a linked model to capture the likely interactions between these closely placed junctions. Further to the discussion in November 2021, it was agreed that National Highways' VISSIM model developed for M40 J10 in the area will be used for undertaking the capacity assessments. Following the completion of BTM runs, National Highways' VISSIM model can be shared.

Merge/ Diverge Assessments

While the applicant has carried out merge and diverge assessments on the slip roads at M40 J10, we are unable to undertake the checks as the flow data is unavailable. We would therefore welcome a review of this data.

Interim mitigation scheme

The applicant has proposed an interim mitigation scheme at the A43 Baynards Green roundabout which includes widening of the B4100 entries and a standalone signal-controlled toucan (pedestrian and cycle) crossing.

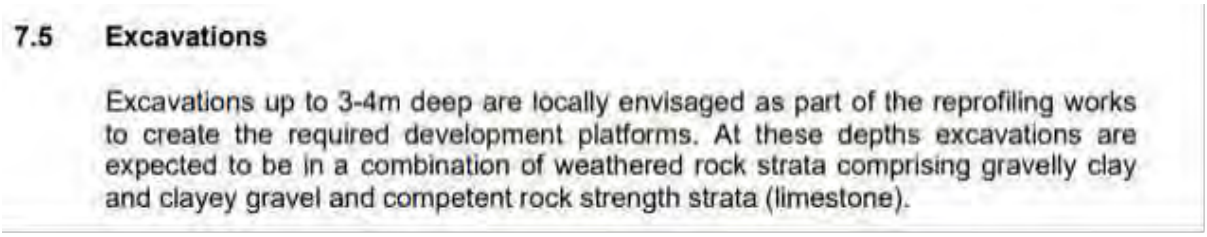
As there remain outstanding concerns, and the proposed improvement scheme as part of the Growth Deal scheme at the A43 Baynards Green roundabout and M40 J10 has not been modelled into the assessments, it was stated in our previous response that National Highways is not in a position to comment on the suitability of the interim mitigation scheme.

In line with the above, a detailed review of the assessments as presented within the TA was not undertaken by National Highways.

The outstanding concerns are likely to be resolved in due course and National Highways will provide comments accordingly.

Geotechnical matters

In addition, the submitted preliminary Ground Investigation report is a geo-environmental Phase 2 investigation for the main developments themselves. It does not include any details of the boundaries with National Highways operations, aside from a comment about excavations in (Part 1(2) (1).pdf):



7.5 Excavations

Excavations up to 3-4m deep are locally envisaged as part of the reprofiling works to create the required development platforms. At these depths excavations are expected to be in a combination of weathered rock strata comprising gravelly clay and clayey gravel and competent rock strength strata (limestone).

The applicant will need to advise / confirm if there will be any earthworks associated with the development(s) in relatively close proximity to National Highways boundaries (e.g. the stability of the balancing ponds, etc). In the first instance, some cross sections (to scale) through the boundaries showing the proposed extent of the development, its features and any proposed changes in elevation (excavations, landscaping) etc should be submitted for further assessment. Once received, we will review to determine the possible extent of any geotechnical reporting under the Design Manual for Roads and Bridges (DMRB) standard CD 622, which may be required to confirm the extent of any geotechnical risk to the SRN.

Once this information has been provided, we can fully assess the potential impact on the drainage of the site and whether this will be effectively mitigated.

National Highways Planning Response (NHPR 21-09)
Formal Recommendation to an Application for Planning Permission

From: Andrew Jinks (Regional Director),
Operations Directorate
Midlands Region
Highways England
PlanningM@highwaysengland.co.uk

To: **Cherwell District Council – FAO: David Lowin**

CC: transportplanning@dft.gov.uk
spatialplanning@highwaysengland.co.uk

Council's Reference: 21/03266/F

Location: OS Parcel 2636, NW of Baynards House, Ardley

Proposal: Site clearance, construction of new site access from the B4100, permanent and temporary internal roads, an internal roundabout and a foul drainage station, diversion of an existing overhead power cable and public right of way, and soft landscaping

National Highways Ref: 92860

Referring to the consultation on a planning application dated 5 Oct 2021 referenced above, in the vicinity of the A43 and M40 that form part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

~~a) offer no objection (see reasons at Annex A);~~

~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – National Highways recommended Planning Conditions & reasons);~~

c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);

d) ~~recommend that the application be refused (see reasons at Annex A)~~

Highways Act 1980 Section 175B is not relevant to this application.[1]

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

Signature: [redacted]	**Date:** 25 January 2022
Name: Martin Seldon	**Position:** Assistant Spatial Planner
National Highways National Highways, The Cube, 199 Wharfside Street, Birmingham, B1 1RN Martin.Seldon@highwaysengland.co.uk	

[1] Where relevant, further information will be provided within Annex A.

Annex A National Highway's assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommended Non-Approval

It is recommended that the application should not be approved for a further period of three months from the date of this response to allow the applicant to provide the additional information required.

Reasons

National Highways has engaged with the applicant/ their consultants on this development proposal since the pre-application stage in July 2021.

National Highways previously issued a holding recommendation response for this application on 26 October 2021. In our response we noted that more detailed information was required regarding the extent of proposed geotechnical activity, as well as the associated potential impact on the operation of the adjacent SRN. It was also noted that the outcome of this would, in turn, affect our review of the proposed drainage arrangements for the site.

Following the submission of this additional information, National Highways will be in a position to provide our comments regarding application 21/03266/F.

National Highways Planning Response (NHPR 21-09)
Formal Recommendation to an Application for Planning Permission

From: Andrew Jinks (Regional Director),
Operations Directorate
Midlands Region
Highways England
PlanningM@highwaysengland.co.uk

To: **Cherwell District Council – FAO: David Lowin**

CC: transportplanning@dft.gov.uk
spatialplanning@highwaysengland.co.uk

Council's Reference: 21/03268/OUT

Location: OS Parcel 2636, NW of Baynards House, Ardley

Proposal: Outline planning permission (all matters reserved except for access) for the erection of buildings comprising logistics (Use Class B8) and ancillary Office (Use Class E(g)(i)) floorspace; construction of new site access from the B4100; creation of internal roads and access routes; hard and soft landscaping including noise attenuation measures; and other associated infrastructure

National Highways Ref: 92859

Referring to the consultation on a planning application dated 5 Oct 2021 referenced above, in the vicinity of the A43 and M40 that form part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

~~a) offer no objection (see reasons at Annex A);~~

~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – National Highways recommended Planning Conditions & reasons);~~

c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);

d) ~~recommend that the application be refused (see reasons at Annex A)~~

Highways Act 1980 Section 175B is not relevant to this application.[1]

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

Signature: [redacted]	**Date:** 25 January 2022
Name: Martin Seldon	**Position:** Assistant Spatial Planner
National Highways National Highways, The Cube, 199 Wharfside Street, Birmingham, B1 1RN Martin.Seldon@highwaysengland.co.uk	

[1] Where relevant, further information will be provided within Annex A.

Annex A National Highway's assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommended Non-Approval

It is recommended that the application should not be approved for a further period of three months from the date of this response to allow the applicant to provide the additional information required.

Reasons

National Highways was has engaged with the applicant/ their consultants on this development proposal since the pre-application stage in July 2021.

Having reviewed the information submitted in support of the planning application, we are content with the anticipated trip generation and growth rates proposed. However, several concerns were noted regarding traffic related matters and geotechnical matters. As such, National Highways issued a holding recommendation response on 26 October 2021 detailing the concerns identified.

Following this, a meeting was arranged by the applicant's consultant with National Highways, the Local Highway Authority (LHA) and the Local Planning Authority (LPA) on 5 November 2021. Since then the consultant has been in continuous engagement with National Highways to resolve the outstanding matters relating to trip distribution, capacity assessments, committed development, etc. The following sections provide an overview of the outstanding concerns from a National Highways perspective.

Traffic related matters

Quantum of development

We noted some inconsistencies between the total floorspace proposed for the Eastern Parcel in the Application Form and that stated within the Transport Assessment (TA). While the floorspace for the Eastern Parcel is stated as 100,000 sq.m within the TA submitted, it is entered as 107,000 sq.m in the application form. Therefore, we require that applicant to use the floorspace stated within the Application Form for all the assessments to ensure that the worst-case scenario is considered.

Trip distribution

The applicant previously undertook the trip distribution for light vehicles based on 2011 Census data and heavy vehicles using the 2006 freight matrices published by DfT. While we acknowledged that the freight data on the DfT website is the latest available information, we noted in our response that this data is quite old and as such, may not capture the development growth that has happened in the area over the last 15 years. Further to this, as the vehicular accesses serving the Western Parcel and Eastern Parcel of the development are different, we required additional insight on how the distributions have been undertaken for the development at each.

In line with the above, National Highways welcomed an alternative methodology to be adopted for determining trip distribution to ensure a robust assessment.

Following further discussions, it was agreed that the trip distribution and assignment would be undertaken using the Bicester Transport Model (BTM) available for the area. A modelling brief was provided in December 2021 which detailed the scope of work to be undertaken. Overall, the scope of model runs to be performed and the outputs to be extracted were agreed with the applicant.

The traffic survey data available with National Highways for the area was supplied to the consultant to help determine the proposed HGV distribution for the development, which will be fed into the BTM model for undertaking the runs. The consultant has now undertaken further assessments and has provided the outputs for our review. We are currently reviewing this information and will respond to the consultant shortly.

Committed development

In our previous response, we welcomed clarification on whether the committed developments considered for the assessments have been finalised following the confirmation from the relevant LPAs.

Discussions are currently being held between the applicant and National Highways and Oxfordshire County Council on the need for sensitivity tests regarding development proposals in the area.

Capacity assessments

Capacity assessments have currently been undertaken for the western and eastern site accesses and A43 Baynards Green roundabout only. We noted that the applicant has referred to the Oxfordshire Housing and Growth Deal scheme which proposes improvements at the A43 Baynards Green roundabout and the Padbury roundabout of M40 J10, amongst other improvements. However, National Highways required that the applicant undertakes junction capacity assessments at M40 J10 and A43 Baynards Green roundabout using the latest available information regarding the proposed improvement schemes.

Following the discussion in November 2021, it was agreed with the applicant that the A43 Growth Deal scheme will be incorporated into the model for assessing the development impacts with the scheme in place.

Baseline traffic – We note from section 8.3.6 of the Environmental Statement (ES) that the baseline data has been collated from a number of sources, including the commissioning of traffic surveys, WebTRIS data, the historic Transport Assessment for North West Bicester Masterplan (2014), freight matrices published by DfT, etc. However, it is not clear how the data has been processed and used for the assessments. As such, it was stated in our previous response that we require the applicant to include a section on this in the TA to understand the suitability of the data used.

We also recommended that the traffic flow diagrams be provided (preferably in the form of spreadsheets) for all the scenarios under consideration.

Modelling software – The applicant has previously undertaken the capacity assessments at the site accesses and A43 Baynards Green roundabout using ARCADY. However, no information was provided regarding the source or validation of the models.

Notwithstanding the above, we required that the applicant model the junctions in the area (including Baynards Green roundabout and M40 J10) using a linked model to capture the likely interactions between these closely placed junctions. Further to the discussion in November 2021, it was agreed that National Highways' VISSIM model developed for M40 J10 in the area will be used for undertaking the capacity assessments. Following the completion of BTM runs, National Highways' VISSIM model can be shared.

Merge/ Diverge Assessments

While the applicant has carried out merge and diverge assessments on the slip roads at M40 J10, we are unable to undertake the checks as the flow data is unavailable. We would therefore welcome a review of this data.

Interim mitigation scheme

The applicant has proposed an interim mitigation scheme at the A43 Baynards Green roundabout which includes widening of the B4100 entries and a standalone signal-controlled toucan (pedestrian and cycle) crossing.

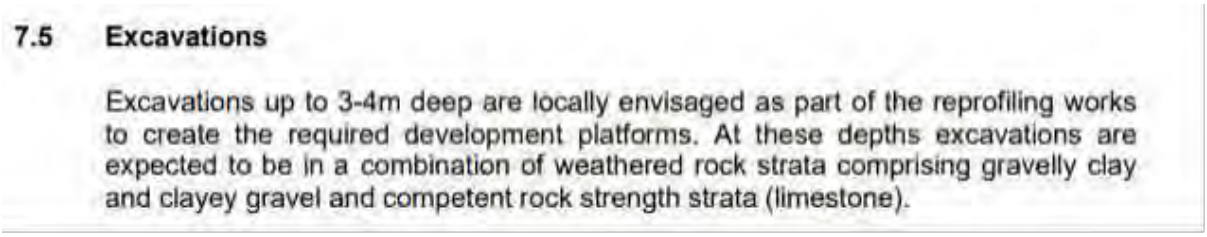
As there remain outstanding concerns, and the proposed improvement scheme as part of the Growth Deal scheme at the A43 Baynards Green roundabout and M40 J10 has not been modelled into the assessments, it was stated in our previous response that National Highways is not in a position to comment on the suitability of the interim mitigation scheme.

In line with the above, a detailed review of the assessments as presented within the TA was not undertaken by National Highways.

The outstanding concerns are likely to be resolved in due course and National Highways will provide comments accordingly.

Geotechnical matters

In addition, the submitted preliminary Ground Investigation report is a geo-environmental Phase 2 investigation for the main developments themselves. It does not include any details of the boundaries with National Highways operations, aside from a comment about excavations in (Part 1(2) (1).pdf):



7.5 Excavations

Excavations up to 3-4m deep are locally envisaged as part of the reprofiling works to create the required development platforms. At these depths excavations are expected to be in a combination of weathered rock strata comprising gravelly clay and clayey gravel and competent rock strength strata (limestone).

The applicant will need to advise / confirm if there will be any earthworks associated with the development(s) in relatively close proximity to National Highways boundaries (e.g. the stability of the balancing ponds, etc). In the first instance, some cross sections (to scale) through the boundaries showing the proposed extent of the development, its features and any proposed changes in elevation (excavations, landscaping) etc should be submitted for further assessment. Once received, we will review to determine the possible extent of any geotechnical reporting under the Design Manual for Roads and Bridges (DMRB) standard CD 622, which may be required to confirm the extent of any geotechnical risk to the SRN.

Once this information has been provided, we can fully assess the potential impact on the drainage of the site and whether this will effectively mitigated.

National Highways Planning Response (NHPR 21-09)
Formal Recommendation to an Application for Planning Permission

From: Andrew Jinks (Regional Director)
Operations Directorate
Midlands Region
National Highways
PlanningM@highwaysengland.co.uk

To: **Cherwell District Council – FAO: David Lowin**

CC: transportplanning@dft.gov.uk
spatialplanning@highwaysengland.co.uk

Council's Reference: 21/03266/F

Location: OS Parcel 2636, NW of Baynards House, Ardley

Proposal: Site clearance, construction of new site access from the B4100, permanent and temporary internal roads, an internal roundabout and a foul drainage station, diversion of an existing overhead power cable and public right of way, and soft landscaping

National Highways Ref: 92860

Referring to the consultation on a planning application dated 5 Oct 2021 referenced above, in the vicinity of the A43 and M40 that form part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

~~a) offer no objection (see reasons at Annex A);~~

~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – National Highways recommended Planning Conditions & reasons);~~

c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);

~~d) recommend that the application be refused (see reasons at Annex A)~~

Highways Act 1980 Section 175B is not relevant to this application.[1]

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

Signature: [redacted]	**Date:** 25 April 2022
Name: Martin Seldon	**Position:** Assistant Spatial Planner
National Highways National Highways, The Cube, 199 Wharfside Street, Birmingham, B1 1RN Martin.Seldon@highwaysengland.co.uk	

[1] Where relevant, further information will be provided within Annex A.

Annex A National Highways' assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommended Non-Approval

It is recommended that the application should not be approved for a further period of three months from the date of this response to allow the applicant to provide the additional information required.

Reasons

National Highways has engaged with the applicant/ their consultants on this development proposal since the pre-application stage in July 2021.

National Highways previously issued a holding recommendation response for this application on 25 January 2022. In our response we noted that more detailed information was required regarding the extent of proposed geotechnical activity, as well as the associated potential impact on the operation of the adjacent SRN. It was also noted that the outcome of this would, in turn, affect our review of the proposed drainage arrangements for the site.

Following the submission of this additional information, National Highways will be in a position to provide our comments regarding application 21/03266/F.

National Highways Planning Response (NHPR 21-09)
Formal Recommendation to an Application for Planning Permission

From: Andrew Jinks (Regional Director)
Operations Directorate
Midlands Region
National Highways
PlanningM@highwaysengland.co.uk

To: **Cherwell District Council – FAO: David Lowin**

CC: transportplanning@dft.gov.uk
spatialplanning@highwaysengland.co.uk

Council's Reference: 21/03268/OUT

Location: OS Parcel 2636, NW of Baynards House, Ardley

Proposal: Outline planning permission (all matters reserved except for access) for the erection of buildings comprising logistics (Use Class B8) and ancillary Office (Use Class E(g)(i)) floorspace; construction of new site access from the B4100; creation of internal roads and access routes; hard and soft landscaping including noise attenuation measures; and other associated infrastructure

National Highways Ref: 92859

Referring to the consultation on a planning application dated 5 Oct 2021 referenced above, in the vicinity of the A43 and M40 that form part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

~~a) offer no objection (see reasons at Annex A);~~

~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – National Highways recommended Planning Conditions & reasons);~~

c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);

~~d) recommend that the application be refused (see reasons at Annex A)~~

Highways Act 1980 Section 175B is not relevant to this application.[1]

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

Signature: [redacted]	**Date:** 25 April 2022
Name: Martin Seldon	**Position:** Assistant Spatial Planner
National Highways National Highways, The Cube, 199 Wharfside Street, Birmingham, B1 1RN Martin.Seldon@highwaysengland.co.uk	

[1] Where relevant, further information will be provided within Annex A.

Annex A National Highways' assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommended Non-Approval

It is recommended that the application should not be approved for a further period of three months from the date of this response to allow the applicant to provide the additional information required.

Reasons

National Highways has engaged with the applicant/ their consultants on this development proposal since the pre-application stage in July 2021.

Having reviewed the information submitted in support of the planning application, we have agreed with the anticipated trip generation and growth rates proposed. However, several concerns were outstanding relating to traffic related matters and geotechnical matters. As such, National Highways issued a holding recommendation response on 25 January 2022 detailing the concerns identified.

Discussions have taken place with the applicant's consultant to resolve the outstanding issues on the trip distribution element. The following sections detail the up-to-date position of this planning application from a National Highways' perspective.

Traffic related matters

Quantum of development

We noted some inconsistencies between the total floorspace proposed for the Eastern Parcel in the Application Form and that stated within the Transport Assessment (TA). While the floorspace for the Eastern Parcel is stated as 100,000 sq.m within the TA submitted, it is entered as 107,000 sq.m in the Application Form. Therefore, we require the applicant to use the floorspace stated within the Application Form for all the assessments to ensure that the worst-case scenario is considered.

Trip distribution

The applicant previously undertook the trip distribution for light vehicles based on 2011 Census data and heavy vehicles using the 2006 freight matrices published by DfT. While we acknowledged that the freight data on DfT's website is the latest available information, we noted in our response that this data is quite old and as such, may not

capture the development growth that has happened in the area over the last 15 years. Further to this, as the vehicular accesses serving the Western Parcel and Eastern Parcel of the development are different, we required additional insight on how the distributions have been undertaken for the development at each.

In line with the above, National Highways welcomed an alternative methodology to be adopted for determining trip distribution to ensure a robust assessment.

Following further discussions, it was agreed that the light vehicle trip distribution and assignment would be undertaken using the Bicester Transport Model (BTM) available for the area. Based on our review of the modelling brief provided in December 2021, the scope of model runs to be performed and the outputs to be extracted were agreed with the applicant. Following the completion of the BTM runs, we request that the applicant submits the model outputs for our review and agrees with us the wider SRN junctions that are to be assessed in detail.

The traffic survey data available with National Highways for the area was supplied to the consultant to help determine the proposed HGV distribution for the development, which will be fed into the BTM model for undertaking the runs. Having reviewed the HGV trip distributions undertaken by the consultant, we are content with the proposed HGV trip distribution and have no further comment to provide on this.

Committed development

We welcomed clarification on whether the committed developments considered for the assessments have been finalised following confirmation from the relevant Local Planning Authorities (LPA).

Discussions are ongoing between the applicant, National Highways and Oxfordshire County Council on the need for sensitivity tests regarding development proposals in the area.

Capacity assessments

Capacity assessments have been undertaken for the western and eastern site accesses and the A43 Baynards Green roundabout only. We noted that the applicant has referred to the Oxfordshire Housing and Growth Deal scheme which proposes improvements at the A43 Baynards Green roundabout and the Padbury roundabout of M40 J10, amongst other improvements. However, National Highways requires the applicant to undertake junction capacity assessments at M40 J10 and A43 Baynards Green roundabout using the latest available information regarding the proposed improvement schemes.

Based on discussions with the applicant, it was agreed that the A43 Growth Deal scheme will be incorporated into the model for assessing the development impacts with the scheme in place.

Following the review of the outputs from BTM runs, we may also require the applicant to undertake capacity assessments at wider SRN junctions in the area.

Baseline traffic – We noted from section 8.3.6 of the Environmental Statement (ES) that the baseline data has been collated from a number of sources, including commissioned traffic surveys, WebTRIS data, the historic Transport Assessment for North West Bicester Masterplan (2014), freight matrices published by DfT, etc. However, it was not clear how the data has been processed and used for the assessments. As such, we require the applicant to include a section on this in the TA to understand the suitability of the data used.

It was also recommended in our previous response that the applicant provides traffic flow diagrams (preferably in the form of spreadsheets) for all the scenarios under consideration. We are still waiting for these to be provided.

Modelling software – The applicant has previously undertaken the capacity assessments at the site accesses and A43 Baynards Green roundabout using ARCADY. However, no information was provided regarding the source or validation of the models.

Notwithstanding the above, we required that the applicant model the junctions in the area (including Baynards Green roundabout and M40 J10) using a linked model to capture the likely interactions between these closely placed junctions. Further to the this, it was agreed that National Highways' VISSIM model developed for M40 J10 in the area will be used for undertaking the capacity assessments.

Merge/ Diverge Assessments

While the applicant has carried out merge and diverge assessments on the slip roads at M40 J10, we are unable to undertake the checks as the flow data is unavailable. We would therefore welcome a review of this data.

Interim mitigation scheme

The applicant has proposed an interim mitigation scheme at the A43 Baynards Green roundabout which includes widening of the B4100 entries and a standalone signal-controlled toucan (pedestrian and cycle) crossing.

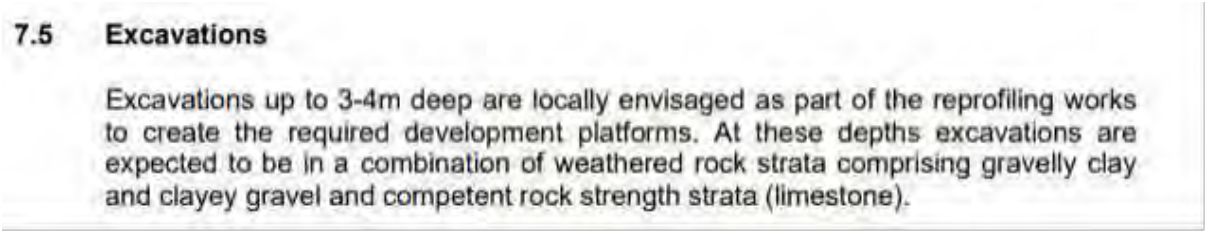
As there remain outstanding concerns, and the proposed improvement scheme as part of the Growth Deal scheme at the A43 Baynards Green roundabout and M40 J10 has not been modelled into the assessments, National Highways is not in a position to comment on the suitability of the interim mitigation scheme.

In line with the above, a detailed review of the assessments as presented within the TA was not undertaken by National Highways.

The outstanding concerns are likely to be resolved in due course and National Highways will provide comments accordingly.

Geotechnical matters

In addition, the submitted preliminary Ground Investigation report is a geo-environmental Phase 2 investigation for the main developments themselves. It does not include any details of the boundaries with National Highways operations, aside from a comment about excavations in (Part 1(2) (1).pdf):



7.5 Excavations

Excavations up to 3-4m deep are locally envisaged as part of the reprofiling works to create the required development platforms. At these depths excavations are expected to be in a combination of weathered rock strata comprising gravelly clay and clayey gravel and competent rock strength strata (limestone).

The applicant will need to advise / confirm if there will be any earthworks associated with the development(s) in relatively close proximity to National Highways boundaries (e.g. the stability of the balancing ponds, etc). In the first instance, some cross sections (to scale) through the boundaries showing the proposed extent of the development, its features and any proposed changes in elevation (excavations, landscaping) etc should be submitted for further assessment. Once received, we will review to determine the possible extent of any geotechnical reporting under the Design Manual for Roads and Bridges (DMRB) standard CD 622, which may be required to confirm the extent of any geotechnical risk to the SRN.

Once this information has been provided, we can fully assess the potential impact on the drainage of the site and whether this can effectively be mitigated.

National Highways Planning Response (NHPR 21-09)
Formal Recommendation to an Application for Planning Permission

From: Andrew Jinks (Regional Director)
Operations Directorate
Midlands Region
National Highways
PlanningM@highwaysengland.co.uk

To: **Cherwell District Council – FAO: David Lowin**

CC: transportplanning@dft.gov.uk
spatialplanning@highwaysengland.co.uk

Council's Reference: 21/03267/OUT

Location: OS Parcel 0006, southeast of Baynards House Adjoining A43, Baynards Green

Proposal: Outline planning permission (all matters reserved except for access) for the erection of buildings comprising logistics (Use Class B8) and ancillary Office (Use Class E(g)(i)) floorspace and associated infrastructure; construction of new site access from the B4100; creation of internal roads and access routes; and hard and soft landscaping

National Highways Ref: 92857

Referring to the consultation on a planning application dated 5 Oct 2021 referenced above, in the vicinity of the A43 and M40 that form part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

~~a) offer no objection (see reasons at Annex A);~~

~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – National Highways recommended Planning Conditions & reasons);~~

c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);

~~d) recommend that the application be refused (see reasons at Annex A)~~

Highways Act 1980 Section 175B is not relevant to this application.[1]

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

Signature: [redacted]	**Date:** 25 April 2022
Name: Martin Seldon	**Position:** Assistant Spatial Planner
National Highways National Highways, The Cube, 199 Wharfside Street, Birmingham, B1 1RN Martin.Seldon@highwaysengland.co.uk	

[1] Where relevant, further information will be provided within Annex A.

Annex A National Highways' assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommended Non-Approval

It is recommended that the application should not be approved for a further period of three months from the date of this response to allow the applicant to provide the additional information required.

Reasons

National Highways has engaged with the applicant/ their consultants on this development proposal since the pre-application stage in July 2021.

Having reviewed the information submitted in support of the planning application, we have agreed with the anticipated trip generation and growth rates proposed. However, several concerns were outstanding relating to traffic related matters and geotechnical matters. As such, National Highways issued a holding recommendation response on 25 January 2022 detailing the concerns identified.

Discussions have taken place with the applicant's consultant to resolve the outstanding issues on the trip distribution element. The following sections detail the up-to-date position of this planning application from a National Highways' perspective.

Traffic related matters

Quantum of development

We noted some inconsistencies between the total floorspace proposed for the Eastern Parcel in the Application Form and that stated within the Transport Assessment (TA). While the floorspace for the Eastern Parcel is stated as 100,000 sq.m within the TA submitted, it is entered as 107,000 sq.m in the Application Form. Therefore, we require the applicant to use the floorspace stated within the Application Form for all the assessments to ensure that the worst-case scenario is considered.

Trip distribution

The applicant previously undertook the trip distribution for light vehicles based on 2011 Census data and heavy vehicles using the 2006 freight matrices published by DfT. While we acknowledged that the freight data on DfT's website is the latest available information, we noted in our response that this data is quite old and as such, may not

capture the development growth that has happened in the area over the last 15 years. Further to this, as the vehicular accesses serving the Western Parcel and Eastern Parcel of the development are different, we required additional insight on how the distributions have been undertaken for the development at each.

In line with the above, National Highways welcomed an alternative methodology to be adopted for determining trip distribution to ensure a robust assessment.

Following further discussions, it was agreed that the light vehicle trip distribution and assignment would be undertaken using the Bicester Transport Model (BTM) available for the area. Based on our review of the modelling brief provided in December 2021, the scope of model runs to be performed and the outputs to be extracted were agreed with the applicant. Following the completion of the BTM runs, we request that the applicant submits the model outputs for our review and agrees with us the wider SRN junctions that are to be assessed in detail.

The traffic survey data available with National Highways for the area was supplied to the consultant to help determine the proposed HGV distribution for the development, which will be fed into the BTM model for undertaking the runs. Having reviewed the HGV trip distributions undertaken by the consultant, we are content with the proposed HGV trip distribution and have no further comment to provide on this.

Committed development

We welcomed clarification on whether the committed developments considered for the assessments have been finalised following confirmation from the relevant Local Planning Authorities (LPA).

Discussions are ongoing between the applicant, National Highways and Oxfordshire County Council on the need for sensitivity tests regarding development proposals in the area.

Capacity assessments

Capacity assessments have been undertaken for the western and eastern site accesses and the A43 Baynards Green roundabout only. We noted that the applicant has referred to the Oxfordshire Housing and Growth Deal scheme which proposes improvements at the A43 Baynards Green roundabout and the Padbury roundabout of M40 J10, amongst other improvements. However, National Highways requires the applicant to undertake junction capacity assessments at M40 J10 and A43 Baynards Green roundabout using the latest available information regarding the proposed improvement schemes.

Based on discussions with the applicant, it was agreed that the A43 Growth Deal scheme will be incorporated into the model for assessing the development impacts with the scheme in place.

Following the review of the outputs from BTM runs, we may also require the applicant to undertake capacity assessments at wider SRN junctions in the area.

Baseline traffic – We noted from section 8.3.6 of the Environmental Statement (ES) that the baseline data has been collated from a number of sources, including commissioned traffic surveys, WebTRIS data, the historic Transport Assessment for North West Bicester Masterplan (2014), freight matrices published by DfT, etc. However, it was not clear how the data has been processed and used for the assessments. As such, we require the applicant to include a section on this in the TA to understand the suitability of the data used.

It was also recommended in our previous response that the applicant provides traffic flow diagrams (preferably in the form of spreadsheets) for all the scenarios under consideration. We are still waiting for these to be provided.

Modelling software – The applicant has previously undertaken the capacity assessments at the site accesses and A43 Baynards Green roundabout using ARCADY. However, no information was provided regarding the source or validation of the models.

Notwithstanding the above, we required that the applicant model the junctions in the area (including Baynards Green roundabout and M40 J10) using a linked model to capture the likely interactions between these closely placed junctions. Further to the this, it was agreed that National Highways' VISSIM model developed for M40 J10 in the area will be used for undertaking the capacity assessments.

Merge/ Diverge Assessments

While the applicant has carried out merge and diverge assessments on the slip roads at M40 J10, we are unable to undertake the checks as the flow data is unavailable. We would therefore welcome a review of this data.

Interim mitigation scheme

The applicant has proposed an interim mitigation scheme at the A43 Baynards Green roundabout which includes widening of the B4100 entries and a standalone signal-controlled toucan (pedestrian and cycle) crossing.

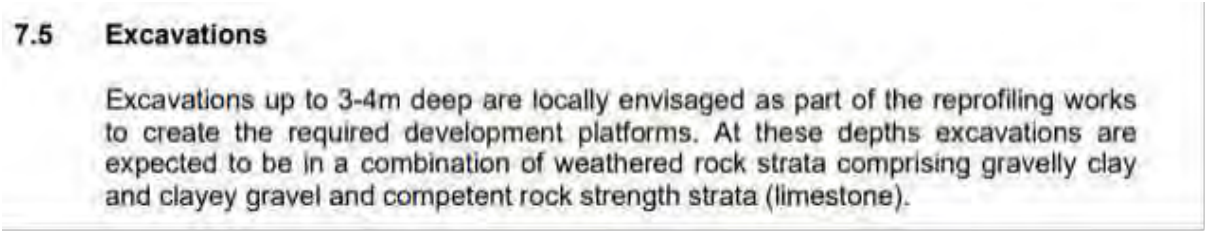
As there remain outstanding concerns, and the proposed improvement scheme as part of the Growth Deal scheme at the A43 Baynards Green roundabout and M40 J10 has not been modelled into the assessments, National Highways is not in a position to comment on the suitability of the interim mitigation scheme.

In line with the above, a detailed review of the assessments as presented within the TA was not undertaken by National Highways.

The outstanding concerns are likely to be resolved in due course and National Highways will provide comments accordingly.

Geotechnical matters

In addition, the submitted preliminary Ground Investigation report is a geo-environmental Phase 2 investigation for the main developments themselves. It does not include any details of the boundaries with National Highways operations, aside from a comment about excavations in (Part 1(2) (1).pdf):



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The applicant will need to advise / confirm if there will be any earthworks associated with the development(s) in relatively close proximity to National Highways boundaries (e.g. the stability of the balancing ponds, etc). In the first instance, some cross sections (to scale) through the boundaries showing the proposed extent of the development, its features and any proposed changes in elevation (excavations, landscaping) etc should be submitted for further assessment. Once received, we will review to determine the possible extent of any geotechnical reporting under the Design Manual for Roads and Bridges (DMRB) standard CD 622, which may be required to confirm the extent of any geotechnical risk to the SRN.

Once this information has been provided, we can fully assess the potential impact on the drainage of the site and whether this can effectively be mitigated.

APPENDIX C

Oxfordshire County Council Responses

OXFORDSHIRE COUNTY COUNCIL'S RESPONSE TO CONSULTATION ON THE FOLLOWING DEVELOPMENT PROPOSAL

District: Cherwell
Application no: 21/03267/OUT
Proposal: Outline planning permission (all matters reserved except for access) for the erection of buildings comprising logistics (Use Class B8) and ancillary Office (Use Class E(g)(i)) floorspace and associated infrastructure; construction of new site access from the B4100; creation of internal roads and access routes; and hard and soft landscaping
Location: South East Of Baynards House Adjoining A43, Baynards Green

Date: 18 November 2021

This report sets out the officer views of Oxfordshire County Council (OCC) on the above proposal. These are set out by individual service area/technical discipline and include details of any planning conditions or Informatives that should be attached in the event that permission is granted and any obligations to be secured by way of a S106 agreement. Where considered appropriate, an overarching strategic commentary is also included. If the local County Council member has provided comments on the application these are provided as a separate attachment.

Application no: 21/03267/OUT
Location: South East Of Baynards House Adjoining A43, Baynards Green

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General Information and Advice

Recommendations for approval contrary to OCC objection:
If within this response an OCC officer has raised an objection but the Local Planning Authority are still minded to recommend approval, OCC would be grateful for notification (via planningconsultations@oxfordshire.gov.uk) as to why material consideration outweigh OCC's objections, and to be given an opportunity to make further representations.

Outline applications and contributions
The anticipated number and type of dwellings and/or the floor space may be set by the developer at the time of application which is used to assess necessary mitigation. If not stated in the application, a policy compliant mix will be used. The number and type of dwellings used when assessing S106 planning obligations is set out on the first page of this response.

In the case of outline applications, once the unit mix/floor space is confirmed by reserved matters approval/discharge of condition a matrix (if appropriate) will be applied to establish any increase in contributions payable. A further increase in contributions may result if there is a reserved matters approval changing the unit mix/floor space.

Where a S106/Planning Obligation is required:

- **Index Linked** – in order to maintain the real value of S106 contributions, contributions will be index linked. Base values and the index to be applied are set out in the Schedules to this response.

- **Administration and Monitoring Fee - TBC**
  This is an estimate of the amount required to cover the monitoring and administration associated with the S106 agreement. The final amount will be based on the OCC's scale of fees and will adjusted to take account of the number of obligations and the complexity of the S106 agreement.

- **OCC Legal Fees** The applicant will be required to pay OCC's legal fees in relation to legal agreements. Please note the fees apply whether a S106 agreement is completed or not.

Security of payment for deferred contributions - Applicants should be aware that an approved bond will be required to secure a payment where a S106 contribution is to be paid post implementation and

- the contribution amounts to 25% or more (including anticipated indexation) of the cost of the project it is towards and that project cost £7.5m or more
- the developer is direct delivering an item of infrastructure costing £7.5m or more
- where aggregate contributions towards bus services exceeds £1m (including anticipated indexation).

A bond will also be required where a developer is direct delivering an item of infrastructure.

The County Infrastructure Funding Team can provide the full policy and advice, on request.

Application no: 21/03267/OUT
Location: South East Of Baynards House Adjoining A43, Baynards Green

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Transport Schedule

Recommendation:

Objection for the following reasons:

- The transport assessment provided with the application is not adequate to demonstrate that the development would not have a severe impact on the operation of the highway network.
- Further information is required to demonstrate that safe and suitable pedestrian and cycle access can be provided to the development, in accordance with NPPF.
- The geometry of the access junction has associated safety risks for all users and could affect its potential for signalisation.

If despite OCC's objection permission is proposed to be granted then OCC requires prior to the issuing of planning permission a S106 agreement including an obligation to enter into a S278 agreement and S38 agreement to mitigate the impact of the development plus planning conditions as detailed below.

S106 Contributions

Contribution	**Amount £**	**Price base**	**Index**	**Towards** (details)
Highway works	TBC		Baxter	Proportionate contribution towards imrovements to M40 J10 (which includes Baynards Green rbt)
Public transport services	£714,000	November 2021	RPI-x	Bus services serving the site
Public transport infrastructure (*if not dealt with under S278/S38 agreement*)	£8,904	September 2020	Baxter	Real time information unit at bus stop
Traffic Reg Order (*if not dealt with under S278/S38*	Possible changes to speed limit and parking		RPI-x	

agreement)	controls - will be part of highways agreement			
Travel Plan Monitoring	£2,379 plus additional amount for individual operator travel plans - see below.	December 2020	RPI-x	**T**o cover the OCC cost of monitoring for the life of the travel plan.
Administration fee	**TBC depending on total amount of contributions**			**To cover the cost of OCC monitoring the agreement.**
Total				

Other obligations:

- Off-site highway works – see below
- On site highway works – Provision of suitable bus loop, shelter, flagpole plus footway/cycleway within the site
- Other:

Key points

- The development has not taken into account the committed 'Growth Deal' scheme of capacity improvement at Baynards Green roundabout, which will involve enlarging and signalising the roundabout, both in terms of road safety, and capacity modelling.
- The transport assessment has not adequately tested the impact on the adjacent junctions, using available transport models, including the various elements of M40 J10 which are closely linked.
- The site access junction is proposed as a four arm roundabout with two arms leading into the development. This is considered to have potential safety issues due to the proximity of the arms, and the number of crossing points of the proposed pedestrian and cycle route. A single arm should suffice for this size of development.
- **Further information is required to confirm that the pedestrian/cycle link to Bicester is feasible.**

No safe pedestrian access is proposed to nearby restaurant and retail facilities, which employees would want to access at lunch time/breaks.
Comments:

This application is for 100,000sqm GIA of logistics space, located to the east of the A43, accessed via a new roundabout on the B4100, with two arms leading into the development.

A separate outline application has been received from the same applicant for a further 180,000sqm GIA of logistics space to the west of the A43, again with access via a new roundabout onto the B4100. A transport assessment has been provided, assessing the impact of each site, and the cumulative impact of the two sites together.

Vehicular access

A new roundabout junction is proposed onto the B4100. A drawing has been provided showing how this meets DMRB standards. However, OCC has concerns about the geometry of the roundabout and considers that only one arm should be provided leading into the development. The arms are very close together, which makes it difficult for drivers to assess gaps, and could lead to potential conflicts. It also leads to more crossing points than necessary for the pedestrian/cycle route proposed along the frontage, to provide access to the western site. The geometry of the western access arm into this site in particular, will make it difficult for cyclists and pedestrians to judge when to cross safely. There does not appear to be any justification for having two arms off the roundabout, and the design should be amended to provide a single arm.

Further, it is very likely that the roundabout may need to be signalised, due to capacity constraints, and due to the proximity to Baynards Green. The layout, with arms close together, is likely to preclude future signalisation.

Drawings have been provided showing the new roundabouts in the context of the current highway network including Baynards Green Roundabout, and in the context of the proposed redesign of Baynards Green, which is being taken forward by National Highways and currently due for completion in 2024 (the 'Growth Deal' scheme referred to in the Transport Assessment). However, the Road Safety Audit has not taken into account the new accesses in conjunction with the new layout. This must be addressed.

Further discussion will be needed with OCC about the extent of adoption. Normally OCC does not adopt cul de sacs into industrial estates, but if this is to be formally part of a bus route that will need to be considered.

'Growth Deal' scheme

A scheme to increase capacity at M40 J10 is planned to be delivered by National Highways in 2024, using forward funding from the Oxfordshire Growth Deal. This will

see Baynards Green roundabout enlarged and signalised, and the signalisation of the junction of the M40 northbound off slip with the A43.

In both the Oxfordshire County Council's Local Transport Plan 4 LTP4 policy document and Cherwell District Councils Local Plan and Infrastructure Delivery Plan (IDP), there is a strong emphasis on seeking the necessary contributions relating to junction capacity improvements on the M40 junction 10.

- The Cherwell District Council IDP refers to Junction capacity improvements with contributions necessary as required by the Highways England (now National Highways) – see Appendix 8; no. 14b.
- The Cherwell District Council IDP refers to Junction capacity improvements with contributions necessary as required by the Highways England (now National Highways) – see Appendix 8; no. 14e.
- LTP4 - BIC1 – Improve access and connections between key employment and residential sites and the strategic transport system by:
    - Continuing to work with HE to improve connectivity to the strategic highway. Continue to work in partnership on the A34 and A43 strategies, as well as Junction 9 and 10 of the M40 to relieve congestion particularly in the peak periods.

The modelling carried out so far shows that Baynards Green roundabout is operating over capacity and the addition of the development will make it worse. If the development is approved a S106 financial contribution must be made towards the improvement scheme. We would expect that to be proportionate in terms of peak hour trips with contributions being secured from development at Heyford. It may also be necessary to restrict development that can be occupied prior to the scheme being implemented.

Depending on further modelling results, it may be necessary to provide additional capacity to accommodate the traffic from the development. Further works or contributions may be sought.

Sustainable transport access

The site is remote from any built up area, but is within reasonable cycling distance from Bicester, which would generate a large proportion of the potential workforce. The developer is offering to construct an off carriageway cycle route within highway land between the site and Elmsbrook, where cyclists could connect safely with the rest of Bicester. The proposed cycle route would be a 3m wide route (with slight narrowings in some places where there is insufficient highway land) shared with pedestrians. Given the likely level of usage by pedestrians and cyclists in any hour, based on the travel plan targets, and the constraint of the available highway land, this is likely to be acceptable in the context of LTN 1/20 guidance.

There would be a 1m separation from the carriageway, which should be increased where possible as it would make the route more attractive. Most of the route would not be lit, and it needs to be acknowledged that some potential cyclists would not use the route for that reason.

Having walked some of the route, I noted that the ground slopes away from the carriageway in places, which could make construction challenging. Also along part of the route there are ditches and trees on the road side of a fence. The highway boundary will need to be researched carefully to ascertain whether there is sufficient space.

Given how critical this cycle route is to the sustainability of the site, and to providing safe access via a choice of sustainable modes, more information is required to demonstrate its feasibility. The information must be based on a topographical survey and include cross sections. This should not be left to condition given how critical it is. Without a safe walking and cycling route, OCC would consider the site unsustainable.

The TA acknowledges that further work is required to assess how the cycle and pedestrian facilities can be accommodated into the Growth Deal scheme.

Along the site frontage, it would be preferable to set the pedestrian/cycle route further back into the site, particularly immediately adjacent the roundabout.

No pedestrian link is proposed to the nearby restaurant and retail facilities at Baynards Green or the Motorway service area. It is inevitable that there would be a demand to access these at break times, and walking would be unsafe. For this site, a connection across the boundary to the MSA would overcome this issue. See below under public rights of way.

Public transport

Bus service requirements:

An existing bus route, 505 (Bicester – Brackley), currently passes to the north of the eastern part of the site along the B4100 from Bicester, then turns right at Barnard's Gate towards Brackley along the A43.

The route is S106 funded by West Northamptonshire using money from housing developments in Brackley. Initially the service was hourly but since Covid has been permanently reduced in frequency to eight journeys in each direction per day. The funding for the service will run out in the near future and the service is not financially viable at present without further funding. It is reasonable to assume that route 505 will no longer exist when this development commences.

Looking at the combined public transport demand from this site and the proposed western site, the transport assessment has a 7.5% bus mode share for bus equating to 564 trips per day, and a higher bus target of 10% by 2030 in the travel plan.

(However looking at the predicted 18-hour car trip generation and factoring this down base on the ratio of 'bus' to 'car driver' percentage modal shares below, I estimate 493 trips in 2025, and 763 in 2031).

To achieve this level of bus usage will require an attractive, high quality bus service with the timetable covering the majority of shift change times. The stated level of trips by bus generated by the development, 564 per day, won't alone be sufficient to support a financially sustainable bus route in the long-term. However the trips will generate revenue to form a substantial proportion of bus routes costs, which when combined with other passenger flows not related to the development (e.g. Bicester to Brackley), should be enough to financially sustain a service at the level required.

For a sufficiently attractive service, a service operating half-hourly in each direction for most of the operating day will be required. A Bicester to Brackley via Barnard's Green service will require two buses to operate at this frequency. While it is acknowledged that substantially fewer trips generated by the development will originate from Brackley compared to Bicester, we feel the proportion from Brackley will be considerably higher than the 4% stated, given the population of the town and the short distance to the development. In addition, non-development related passenger flows between Brackley and Bicester are needed to secure the overall long-term financial viability of the service. There are also bus connections at Brackley to a wide area towards Banbury, Towcester and Milton Keynes that will enable a wider range of possible bus journeys to the development.

A contribution is required towards the cost of providing two buses over an eight year period to serve the development, to provide a Bicester – Barnard's Green – Brackley route operating half-hourly most of the day and hourly in the evenings and on weekends. Costs have been calculated based on OCC's standard declining subsidy profile – subsidy costs decline each year as patronage/revenue levels rise, ultimately to the point the that service requires no subsidy after eight years.

Costs:
Monday to Friday core service (half hourly 6am – 6pm, 2 buses): £300,000 per year
Monday to Friday evenings / early am (hourly, 5am – 6am, 6pm – 10pm, 1 bus): £50,000 per year
Saturdays and Sundays (hourly, 5am – 10pm, 1 bus): £75,000 per year

Year 1 cost	£425,000
Year 2 cost	£375,000
Year 3 cost	£325,000
Year 4 cost	£275,000
Year 5 cost	£225,000
Year 6 cost	£175,000
Year 7 cost	£125,000
Year 8 cost	£75,000

Total	£2,000,000

The rate of subsidy decline is £50,000 per year.

Costs have been based on bus operating costs of £50 per hour during core times and £40 per hour at other times.

OCC would endeavour to integrate the route with others to provide longer distance direct journey opportunities (e.g. Oxford – Bicester – Barnard's Green).

We have considered the situation where the western and eastern sites come forward in isolation, which is quite likely, since they are proposed via separate planning applications. The potential passenger numbers from a single site are unlikely to ever be enough for financial sustainability of a half hourly service. A lesser lower level of service would reduce the attractiveness of public transport, and it is highly unlikely the predicted modal share would be achieved.

The proportion of the contribution split based on size would be £714,000 east and £1,286,000 western, which is almost exactly the split of the differences in costs for each bus (one bus does all day and weekends, the other does just 6-6 Mon-Fri).

The eastern site contribution would pay for one bus – operating M-F core service hourl, while the western site would pay for one bus – operating M-F core service hourly + evenings and weekends hourly

This would allow OCC to be able to procure a sensible proportion of the total service if one site comes forward independently of the other.

OCC considers that the modal share target will be challenging to achieve due to the isolated location. The application does not specify the number of parking spaces. Alongside travel plan incentives to support use of the bus service, we would want parking provision to reflect modal share targets, supported by parking demand management.

<u>Bus stop locations:</u>

The two bus stop locations proposed, one within each part of the development, are well located for the development. They are however located off-line of a Bicester to Brackley bus route – to serve them will increase the overall bus journey time and lessen the attractiveness of the bus for passengers travelling that are not going to the development. This is particularly the case for the western side of the development. However, locating the stops on the B4100 would increase the walking distance to the development and lessen the attractiveness of bus for passengers travelling to the development. On balance, the proposed stop locations are probably the best within the

constraints of the current development proposal. If the layout of the development is revised, it would be beneficial to investigate whether more efficient stop locations can be found, particularly for the western part of the site, without the stops becoming too remote from the building entrances they serve.

Bus stop facilities:

Both bus stops should have a bus shelter (at least three bays long with seating) provided and maintained by the site. In addition, a separate bus stop pole, flag and timetable cases should be provided to OCC specification. The shelters must be suitable for OCC to install real time information displays, with ducting provided. A contribution will be sought for the provision of these displays.

Travel Plan

A draft Framework Travel Plan has been produced for this application, as part of the Environmental Statement, but it requires further site-based information before it can meet the criteria outlined within appendix 7 of the OCC guidance document 'Transport for New Developments – Transport Assessments and Travel Plans 2014'. I have added some specific points below for information.

- As the site is adjacent to another large site and employees will be travelling to a similar destination it would be advantageous to open a dialogue with the adjacent site to discuss possible joint working opportunities. It is therefore encouraged that this is included as an action for the TPC and identified within the action plan.

- Information about on site facilities should be included. Levels and type of cycle parking, changing facillities, restaurant facillities (reducing the need to leave the site during the day) etc.

- A dedicated cycle route to Bicester has been discussed within the document but this has not been included within the action plan. Similarly with information about EV charging points?

- Anticipated number of occupiers on site?

- Estimated date of occupation?

- What are the barriers to the promotion of sustainable, active travel in this location? How will these be mitigated?

- How will deliveries be managed?

It is requested that an amended travel plan is submitted as a separate document.

Cycle parking and EV charging points for both cycles and vehicles should be provided within the site boundary. Cycle parking must be covered and secure and conveniently located near to the entrance to each building.

As each of the units will be occupied independently by different organisations, a Framework Travel Plan and associated monitoring fee (£2,379 index linked) will be required for the site. Depending on the individual sizes of the units it is likely that each organisation will also be required to produce either a Full Travel Plan (with associated monitoring fee) or Travel Plan Statement. However, as I am unable to find definitive sizes, I am unable to confirm the exact requirements. I have therefore included a copy of the threshold and monitoring fee table relevant to this application for information.

B8 Storage or distribution • wholesale warehouses; • distribution centres; • repositories.	**B8 Storage or distribution -** This class includes open air storage.	Over 7500m^2	Travel Plan	2,379
		3000-7499m 2	Travel Plan	2,379
		2000-2999m 2	Travel Plan Statement	None

Traffic impact

A Transport Assessment has been provided, covering both the western and eastern sites, and considering them individually and cumulatively. The TA acknowledges that further modelling work is required to make use of the local, detailed VISSIM Model that National Highways holds for M40 Junction 10, including Baynards Green roundabout. This was recommended as part of our preapplication advice and is a vital part of understanding the traffic impact of the site, given the proximity of the access junctions to Baynards Green, and the complex interaction of the various junctions that form M40 Junction 10. Modelling the roundabouts individually (as has been done in this TA) is not sufficient, largely because traffic is not free flowing at each due to their proximity. Traffic queueing on the A43 at Baynards Green could lead to exit blocking for the M40 northbound off slip, which would then present a safety hazard due to queueing on the M40, so this needs to be examined carefully. Lack of this modelling in the current application is a reason for objection.

The TA also acknowledges that further modelling must be carried out to take into account the Growth Deal scheme. Again, lack of this modelling in the current application is a reason for objection.

At the time of writing, discussions are ongoing to scope out the further traffic modelling work that will be necessary, in conjunction with National Highways.

The Highway Authority will submit further representations in due course, to take into account this work.

I have the following further comments on the TA:

Future year baseline traffic: Traffic counts were carried out in June 2021, when traffic volumes were still below pre-pandemic levels. No assumptions can be made that future traffic volumes will remain lower than pre-pandemic levels. These counts have then been growthed up using TEMPRO. Instead, future year flows from the Bicester Transport Model should be used, as this takes into account the concentration of development locally. This data is being used for transport assessments of other strategic developments in the area.

Committed development: Cumulative assessment should take into account the Oxfordshire Strategic Railfreight Interchange. It is formally registered with the Planning Inspectorate and public consultation is expected in spring 2022. It is therefore moving forward on a scale of certainty of delivery. The published scoping report provides sufficient information on land use to make assumptions about lorry movements, and additional information could be provided. OCC considers that it should be taken into account in the cumulative assessment, at least in a form of sensitivity test. Emerging proposals for significant employment development at Junction 9 should also be taken into account, **as should the Great Wolf resort and other significant development proposals in the area.**

Trip generation: The proposed trip generation is based on surveys obtained or carried out by the applicant for comparable sites. The full survey report should be provided.

Trip distribution: Light traffic has been distributed on the basis of 2011 Census travel to work data for an MSOA in NE Bicester. I do not follow the discussion in paragraph 5.3.5. Although I understand why the MSOA in which the proposal is located, has not been used (there is very little employment in the ward), I don't follow the justification for using a ward in Bicester, where it is very likely that employment would attract a large proportion of employees from the immediate surrounding area. A site remote from Bicester would certainly attract a high proportion of employees from Bicester, as it is the nearest town, but I think would attract more people from other settlements than would a site in Bicester.

HGV distribution: This has been based on DfT data using a 2006 base year, which is considered too old as it would not take into account the pattern of development since then. A more recent dataset should be used or an alternative methodology for distribution should be discussed with OCC and NH. A gravity model would be more appropriate.

Trip assignment: For both light and heavy traffic, tables should be provided to show how the assignment was arrived at. Given the desire to locate on the M40 corridor, the proportions predicted to travel via M40 N and S look surprisingly low.

Junction capacity assessment: M40 Junction 10 has not been assessed, which is unacceptable for a development of this scale, which will clearly have an impact on the junction. The TA shows that the development would increase the traffic on the A43 approaching the junction by 7%, which demonstrates a significant impact that must be assessed.

Junctions 10 software has been used to assess the site access roundabouts and Baynards Green roundabout, as well as the A4095/B4100 junction at Bicester. For reasons stated above this is not sufficient for the first three. Notwithstanding that, I query whether the assessments are reliable because the queue lengths at Baynards Green have not been validated against the traffic surveys, albeit those surveys themselves are not reliable due to the fact they were carried out when traffic conditions were not back to pre-pandemic levels. Even taking the output tables at face value, the roundabout is showing as over capacity in the base year and the development, individually and cumulatively with the eastern site, makes the RFC worse.

At the A4095/B4100 junction, the queue lengths are not validated and the queue lengths are not borne out by anecdote. The planned improvement scheme there will deliver additional capacity, but that additional capacity is intended to release housing growth at Bicester.

I will leave NH to comment on the M40 slip roads and the merge/diverge assessments.

Interim mitigation scheme: A slight increase in flare on the approach to Baynards Green roundabout has been proposed. This is shown to bring about only marginal benefit on some arms and makes one arm worse. The scheme would cause significant disruption to construct at this very busy junction.

Public rights of way

A connection should be made within the site to the bridleway which runs along the southern boundary, both to enable access to the facilities at the MSA, and to help link up public rights of way in the area.

S106 obligations and their compliance with Regulation 122(2) Community Infrastructure Levy Regulations 2010 (as amended):

£TBC Highway Works Contribution indexed from TBC using Baxter Index
Towards: Capacity improvements at M40 J10 including Baynards Green Roundabout

Justification: A high proportion of the development traffic will pass through Baynards Green and the rest of Junction 10. A scheme of improvements is planned for the junction, which is required to accommodate planned growth. Subject to further modelling, additional works may be required to accommodate the traffic from this development.

Calculation: TBC - Contribution towards the planned scheme will be proportionate based on contributions to be secured from development at Heyford, with additional amount as required to provide for additional capacity.

£714,000 Public Transport Service Contribution indexed from November 2021 using RPI-x
Towards: Bus services serving the site.

Justification: A range of sustainable travel options to the site is required to make the site sustainable in planning terms. The existing bus service between Bicester and Brackley is unlikely to continue past the end of its current contract, which would leave the site with no public transport.

Calculation: See commentary above.

£TBC Public Transport Infrastructure Contribution indexed from TBC using Baxter Index
Towards: Provision of Real Time Information unit in the bus shelter which are to be provided by the developer.

Justification: To encourage public transport use, people will need the reassurance that the bus is on its way, especially given local traffic congestion.

Calculation: The amount will be based on the cost to OCC to provide the unit, together with a commuted sum for maintenance.

£TBC Travel Plan Monitoring Fee indexed from December 2020 using RPI-x

Justification: To ensure that the travel plan is delivered and revised as required in order to be effective, OCC will need to monitor it over its life.

Calculation: The amount is based on the staff cost for OCC to monitor the travel plan, based on an estimate of the time it will take over the life of the plan.

S278 Highway Works:

An obligation to enter into a S278 Agreement will be required to secure mitigation/improvement works, including:

- Access junction- details to be agreed, including bus turning facility and bus stop
- Footway/cycleway linking the site with Elmsbrook, Bicester.

Notes:
This is to be secured by means of S106 restriction not to implement development (until S278 agreement has been entered into. The trigger by which time S278 works are to be completed shall also be included in the S106 agreement. With this site, the safety of construction traffic access will be critical, so the junction may be required to be constructed prior to construction activity on the rest of the site. The footway/cycleway would be required prior to first occupation.

Identification of areas required to be dedicated as public highway and agreement of all relevant landowners will be necessary in order to enter into the S278 agreements. A detailed survey of the highway boundary should be carried out to ensure that the adopted highway abuts the land holding. This may not be the case where there is a ditch, and all highway record plans provided by OCC contain a caveat about this. Such 'gaps' can lead to significant delays to S278 agreements.

S38 Highway Works – [Spine Road][/ On-Site Rights of Way]:

An obligation to provide a bus turning loop will be required for the development. The S106 agreement will secure delivery via future completion of a S38 agreement.

Planning Conditions:

In the event that permission is to be given, the following planning conditions should be attached:

No development shall commence unless and until full details of the means of access between the land and the highway, including, position, layout, construction, drainage and vision splays have been submitted to and approved in writing by the Local Planning Authority. The means of access shall be constructed in strict accordance with the approved details and shall be retained and maintained as such thereafter. Agreed vision splays shall be kept clear of obstructions higher than 0.6m at all times.
Reason - In the interests of highway safety and to comply with Policy ESD15 of the Cherwell Local Plan 2011-2031 Part 1 and Government guidance contained within the National Planning Policy Framework.

No development shall commence unless and until full specification details (including construction, layout, surfacing and drainage) of the turning areas and parking spaces within the curtilage of the site, arranged so that motor vehicles may enter, turn round

and leave in a forward direction and vehicles may park off the highway, have been submitted to and approved in writing by the Local Planning Authority. The turning area and car parking spaces shall be constructed in accordance with the approved details prior to the first occupation of the development shall be retained as such for the parking and manoeuvring of vehicles at all times thereafter.
Reason - In the interests of highway safety and to comply with Policy ESD15 of the Cherwell Local Plan 2011-2031 Part 1 and Government guidance contained within the National Planning Policy Framework.

Prior to the first use or occupation of the development hereby permitted, covered cycle parking facilities shall be provided on the site in accordance with details which shall be firstly submitted to and approved in writing by the Local Planning Authority. Thereafter, the covered cycle parking facilities shall be permanently retained and maintained for the parking of cycles in connection with the development.
Reason - In the interests of sustainability, to ensure a satisfactory form of development and to comply with Government guidance contained within the National Planning Policy Framework.

Prior to the first occupation of the development, a scheme for the provision of vehicular electric charging points to serve the development shall be submitted to and approved in writing by the Local Planning Authority. The vehicular electric charging points shall be provided in accordance with the approved details prior to the first occupation of the unit they serve, and retained as such thereafter.
Reason - To comply with Policies SLE 4, ESD 1, ESD 3 and ESD 5 of the adopted Cherwell Local Plan 2011-2031 Part 1 and to maximise opportunities for sustainable transport modes in accordance with paragraph 110(e) of the National Planning Policy Framework

Prior to commencement of the development hereby approved, a Construction Traffic Management Plan (CTMP) shall be submitted to and approved in writing by the Local Planning Authority. Thereafter, the development shall not be carried out other than in accordance with the approved CTMP.
Reason: In the interests of highway safety and the residential amenities of neighbouring occupiers and to comply with Government guidance contained within the National Planning Policy Framework.

Prior to the first occupation of the development hereby approved, a Travel Plan, prepared in accordance with the Department of Transport's Best Practice Guidance Note "Using the Planning Process to Secure Travel Plans", shall be submitted to and approved in writing by the Local Planning Authority. Thereafter, the development shall be implemented and operated in accordance with the approved details.
Reason - In the interests of sustainability and to ensure a satisfactory form of development, in accordance with Government guidance contained within the National Planning Policy Framework.

The development shall not be occupied until a signage strategy for the site has been

submitted and approved in writing by the Local Planning Authority. The development shall thereafter be completed and signage installed in accordance with the approved details prior to the first use of any building on the site.
Reason - To ensure that traffic is directed along the most appropriate routes and to comply with Government guidance contained within the National Planning Policy Framework.

Subject to further traffic modelling: The development shall not be occupied until the planned scheme of enlargement and signalisation of Baynards Green roundabout, or other similar capacity improvement scheme as agreed with National Highways, has been implemented at Baynards Green junction.

Officer's Name: Joy White
Officer's Title: Principal Transport Planner
Date: 2 November 2021

Application no: 21/03267/OUT
Location: South East Of Baynards House Adjoining A43, Baynards Green

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Lead Local Flood Authority

Recommendation:

Objection

Detailed comments:

Unable to find FRA in the submission.

Where car parking spaces and access roads are proposed, water quality standards must be met. Proposed development needs a water quality assessment in accordance with Section 4 and Section 26 of SuDS Manual.

Proposed development must meet local standards, L19, "At least one surface feature should be deployed within the drainage system for water quality purposes, or more features for runoff which may contain higher levels of pollutants in accordance with the CIRIA SuDS Manual C753. Only if surface features are demonstrated as not viable, then approved proprietary engineered pollution control features such as vortex separators, serviceable/ replaceable filter screens, or pollution interceptors may be used"

Furthermore, a detailed surface water management strategy must be submitted in accordance with the Local Standards and Guidance for Surface Water Drainage on Major Development in Oxfordshire

In line with this guidance, runoff must be managed at source (i.e. close to where it falls) with residual flows then conveyed downstream to further storage or treatment components, where required. The proposed drainage should mimic the existing drainage regime of the site as much as possible.

The applicant is required to provide a Surface Water Management Strategy in accordance with the following guidance:

The Sustainable Drainage Systems (SuDS) Policy, which came into force on the 6th April 2015 requires the use of sustainable drainage systems to manage runoff on all applications relating to major development. As well as dealing with surface water runoff, they are

required to provide water quality, biodiversity and amenity benefits in line with National Guidance. The Sustainable Drainage Systems (SuDS) Policy also implemented changes to the Town and Country Planning (Development Management Procedure) (England) Order 2010 to make the Lead Local Flood Authority (LLFA) a statutory Consultee for Major Applications in relation to surface water drainage. This was implemented in place of the SuDS Approval Bodies (SAB's) proposed in Schedule 3 of the Flood and Water Management Act 2010.

All full and outline planning applications for Major Development must be submitted with a Surface Water Management Strategy. A site-specific Flood Risk Assessment (FRA) is also required for developments of 1 hectare or greater in Flood Zone 1; all developments in Flood Zones 2 and 3 or in an area within Flood Zone 1 notified as having critical drainage problems; and where development or a change of use to a more vulnerable class may be subject to other sources of flooding.

Further information on flood risk in Oxfordshire, which includes access to view the existing fluvial and surface water flood maps, can be found on the Oxfordshire flood tool kit website. The site also includes specific flood risk information for developers and Planners.

The National Planning Policy Framework (NPPF), which was updated in July 2021 provides specific principles on flood risk (Section 14, from page 45). National Planning Practice Guidance (NPPG) provides further advice to ensure new development will come forward in line with the NPPF.

Paragraph 159 states; "Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere."

As stated in Paragraph 160 and 161 of the NPPF, we will expect a sequential approach to be used in areas known to be at risk now or in the future from any form of flooding.

The Non-statutory technical Standards for sustainable drainage systems were produced to provide initial principles to ensure developments provide SuDS in line with the NPPF and NPPG. Oxfordshire County Council have published the "Local Standards and Guidance for Surface Water Drainage on Major Development in Oxfordshire" to assist developers in the design of all surface water drainage systems, and to support Local Planning Authorities in considering drainage proposals for new development in Oxfordshire. The guide sets out the standards that we apply in assessing all surface water drainage proposals to ensure they are in line with National legislation and guidance, as well as local requirements.

The SuDS philosophy and concepts within the Oxfordshire guidance are based upon and derived from the CIRIA SuDS Manual (C753), and we expect all development to come forward in line with these principles.

In line with the above guidance, surface water management must be considered from the beginning of the development planning process and throughout – influencing site layout and design. The proposed drainage solution should not be limited by the proposed site layout and design.

Wherever possible, runoff must be managed at source (i.e. close to where it falls) with residual flows then conveyed downstream to further storage or treatment components, where required. The proposed drainage should mimic the existing drainage regime of the site. Therefore, we will expect existing drainage features on the site to be retained and they should be utilised and enhanced wherever possible.

Although we acknowledge it will be hard to determine all the detail of source control attenuation and conveyance features at an outline stage, we will expect the Surface Water Management Strategy to set parameters for each parcel/phase to ensure these are included when these parcels/phases come forward. Space must be made for shallow conveyance features throughout the site and by also retaining existing drainage features and flood flow routes, this will ensure that the existing drainage regime is maintained, and flood risk can be managed appropriately.

Drainage Pro-Forma

Officer's Name: Sujeenthan Jeevarangan
Officer's Title: LLFA Planning Engineer
Date: 18/11/2021

Application no: 21/03267/OUT
Location: South East Of Baynards House Adjoining A43, Baynards Green

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Archaeology

Recommendation:

Objection

Key issues:

The site is located in an area of archaeological interest on the site of a medieval and post medieval green mentioned in historical records. An archaeological desk based assessment will need to be undertaken for the site to assess the potential of any proposed development to impact on archaeological deposits and heritage assets. The results of an archaeological field evaluation will also need to be submitted along with any planning application for the site.

Legal agreement required to secure:

Conditions:

Informatives:

Detailed comments:

The site is located in an area of archaeological interest immediately south of the site of a medieval and post medieval green mentioned in historical records. The area of the green has been suggested to be either the site of medieval jousting or a camp site for these jousts, horse racing and a rendezvous site during the C17th civil war. A number of possible Bronze or Iron Age banjo enclosures have been recorded in the vicinity of the site from aerial photographs and a ring ditch has been recorded 500m north east of the site.

An archaeological desk-based assessment will need to be undertaken for the site to assess the potential of any proposed development to impact on archaeological deposits and heritage assets.

A written scheme of investigation has been agreed for this desk-based assessment and a short statement on the historic environment has been submitted with this application. This submitted document however does not however appear to contain the whole assessment as set out in the agreed WSI. This will need to be submitted.

A programme of archaeological evaluation will need to be undertaken on the site and the report submitted ahead of the determination of any planning application. This must be carried out by a professionally qualified archaeological organisation and should aim to define the character and extent of the archaeological remains within the application area, and thus indicate the weight which should be attached to their preservation. This evaluation must be undertaken in line with the Chartered Institute for Archaeologists standards and guidance for archaeological evaluation including the submission and agreement of a suitable written scheme of investigation.

This information can be used for identifying potential options for minimising or avoiding damage to the archaeology and on this basis, an informed and reasonable decision can be taken.

Officer's Name: Richard Oram
Officer's Title: Archaeology Lead
Date:12-10-21

OXFORDSHIRE COUNTY COUNCIL'S RESPONSE TO CONSULTATION ON THE FOLLOWING DEVELOPMENT PROPOSAL

District: Cherwell
Application no: 21/03268/OUT
Proposal: Outline planning permission (all matters reserved except for access) for the erection of buildings comprising logistics (Use Class B8) and ancillary Office (Use Class E(g)(i)) floorspace; construction of new site access from the B4100; creation of internal roads and access routes; hard and soft landscaping including noise attenuation measures; and other associated infrastructure
Location: NW Of Baynards House, Ardley

Date: 19 November 2021

This report sets out the officer views of Oxfordshire County Council (OCC) on the above proposal. These are set out by individual service area/technical discipline and include details of any planning conditions or Informatives that should be attached in the event that permission is granted and any obligations to be secured by way of a S106 agreement. Where considered appropriate, an overarching strategic commentary is also included. If the local County Council member has provided comments on the application these are provided as a separate attachment.

Application no: 21/03268/OUT
Location: NW Of Baynards House, Ardley

General Information and Advice

Recommendations for approval contrary to OCC objection:
If within this response an OCC officer has raised an objection but the Local Planning Authority are still minded to recommend approval, OCC would be grateful for notification (via planningconsultations@oxfordshire.gov.uk) as to why material consideration outweigh OCC's objections, and to be given an opportunity to make further representations.

Outline applications and contributions
The anticipated number and type of dwellings and/or the floor space may be set by the developer at the time of application which is used to assess necessary mitigation. If not stated in the application, a policy compliant mix will be used. The number and type of dwellings used when assessing S106 planning obligations is set out on the first page of this response.

In the case of outline applications, once the unit mix/floor space is confirmed by reserved matters approval/discharge of condition a matrix (if appropriate) will be applied to establish any increase in contributions payable. A further increase in contributions may result if there is a reserved matters approval changing the unit mix/floor space.

Where a S106/Planning Obligation is required:

- **Index Linked** – in order to maintain the real value of S106 contributions, contributions will be index linked. Base values and the index to be applied are set out in the Schedules to this response.

- **Administration and Monitoring Fee - TBC**
  This is an estimate of the amount required to cover the monitoring and administration associated with the S106 agreement. The final amount will be based on the OCC's scale of fees and will adjusted to take account of the number of obligations and the complexity of the S106 agreement.

- **OCC Legal Fees** The applicant will be required to pay OCC's legal fees in relation to legal agreements. Please note the fees apply whether a S106 agreement is completed or not.

Security of payment for deferred contributions - Applicants should be aware that an approved bond will be required to secure a payment where a S106 contribution is to be paid post implementation and

- the contribution amounts to 25% or more (including anticipated indexation) of the cost of the project it is towards and that project cost £7.5m or more
- the developer is direct delivering an item of infrastructure costing £7.5m or more
- where aggregate contributions towards bus services exceeds £1m (including anticipated indexation).

A bond will also be required where a developer is direct delivering an item of infrastructure.

The County Infrastructure Funding Team can provide the full policy and advice, on request.

Application no: 21/03268/OUT
Location: NW Of Baynards House, Ardley

Transport Schedule

Recommendation:

Objection for the following reasons:

- The transport assessment provided with the application is not adequate to demonstrate that the development would not have a severe impact on the operation of the highway network.
- Further information is required to demonstrate that safe and suitable pedestrian and cycle access can be provided to the development, in accordance with NPPF.
- The geometry of the access junction has associated safety risks for all users and could affect its potential for signalisation.

If despite OCC's objection permission is proposed to be granted then OCC requires prior to the issuing of planning permission a S106 agreement including an obligation to enter into a S278 agreement and S38 agreement to mitigate the impact of the development plus planning conditions as detailed below.

S106 Contributions

Contribution	**Amount £**	**Price base**	**Index**	**Towards** (details)
Highway works	TBC		Baxter	Proportionate contribution towards imrovements to M40 J10 (which includes Baynards Green rbt)
Public transport services	£1,286,000	November 2021	RPI-x	Bus services serving the site
Public transport infrastructure (*if not dealt with under S278/S38 agreement*)	£8,904	September 2020	Baxter	Real time information unit at bus stop
Traffic Reg Order (*if not*	Possible changes to		RPI-x	

dealt with under S278/S38 agreement)	speed limit and parking controls - will be part of highways agreement			
Travel Plan Monitoring	£2,379 plus additional amount for individual operator travel plans - see below.	December 2020	RPI-x	**T**o cover the OCC cost of monitoring for the life of the travel plan.
Admin fee	TBC dependent on final amount agreed			Fee for the monitoring and administration of the S106 agreement
Public rights of way improvements	**£65,000**	**November 2021**	**Baxter**	**Upgrades to PRoW between the site and Fewcott and Fritwell**

Other obligations:

- Off-site highway works – see below
- On site highway works – Provision of suitable bus loop, shelter, flagpole plus footway/cycleway within the site
- Other:

Key points

- The development has not taken into account the committed 'Growth Deal' scheme of capacity improvement at Baynards Green roundabout, which will involve enlarging and signalising the roundabout, both in terms of road safety, and capacity modelling.
- The transport assessment has not adequately tested the impact on the adjacent junctions, using available transport models, including the various elements of M40 J10 which are closely linked.
- The site access roundabout has very straight approaches, which could be a safety hazard and should be reviewed.

Comments:

This application is for 180,000sqm GIA of logistics space, located to the west of the A43, stretching between the M40 and the B4100, with access via a new roundabout onto the B4100. A separate full application (21/03266/F) has been submitted for the roundabout and access road into the parcel.

A separate outline application has been received from the same applicant for a further 100,000sqm GIA of logistics space to the east of the A43, again with access via a new roundabout onto the B4100. A transport assessment has been provided, assessing the impact of each site, and the cumulative impact of the two sites together.

Vehicular access

A new roundabout junction is proposed onto the B4100. A drawing has been provided showing how this meets DMRB standards. However, OCC has concerns about the straightness of the approaches on the B4100, especially given the national speed limit. Experience of similar layouts of recently constructed roundabouts on high speed roads has shown that some drivers fail to appreciate the roundabout until the last minute, leading to collisions or driving over the roundabout. Further work is needed to adjust the alignment of the B4100 on approaches. This is challenging due to the land on the northern side of the B4100 not being available. This has not been picked up in the Road Safety Audit provided, but OCC would welcome further discussions given their experiences elsewhere. Consideration could be given to a reduction in the speed limit along the site frontage extending to Baynards Green roundabout.

Drawings have been provided showing the new roundabouts in the context of the current highway network including Baynards Green Roundabout, and in the context of the proposed redesign of Baynards Green, which is being taken forward by National Highways and currently due for completion in 2024 (the 'Growth Deal' scheme referred to in the Transport Assessment). However, the Road Safety Audit has not taken into account the new accesses in conjunction with the new layout. This must be addressed.

Further discussion will be needed with OCC about the extent of adoption. Normally OCC does not adopt cul de sacs into industrial estates, but if this is to be formally part of a bus route that will need to be considered.

'Growth Deal' scheme

A scheme to increase capacity at M40 J10 is planned to be delivered by National Highways in 2024, using forward funding from the Oxfordshire Growth Deal. This will

see Baynards Green roundabout enlarged and signalised, and the signalisation of the junction of the M40 northbound off slip with the A43.

In both the Oxfordshire County Council's Local Transport Plan 4 LTP4 policy document and Cherwell District Councils Local Plan and Infrastructure Delivery Plan (IDP), there is a strong emphasis on seeking the necessary contributions relating to junction capacity improvements on the M40 junction 10.

- The Cherwell District Council IDP refers to Junction capacity improvements with contributions necessary as required by the Highways England (now National Highways) – see Appendix 8; no. 14b.
- The Cherwell District Council IDP refers to Junction capacity improvements with contributions necessary as required by the Highways England (now National Highways) – see Appendix 8; no. 14e.
- LTP4 - BIC1 – Improve access and connections between key employment and residential sites and the strategic transport system by:
    - Continuing to work with HE to improve connectivity to the strategic highway. Continue to work in partnership on the A34 and A43 strategies, as well as Junction 9 and 10 of the M40 to relieve congestion particularly in the peak periods.

The modelling carried out so far shows that Baynards Green roundabout is operating over capacity and the addition of the development will make it worse. If the development is approved a S106 financial contribution must be made towards the improvement scheme. We would expect that to be proportionate in terms of peak hour trips with contributions being secured from development at Heyford. It may also be necessary to restrict development that can be occupied prior to the scheme being implemented.

Depending on further modelling results, it may be necessary to provide additional capacity to accommodate the traffic from the development. Further works or contributions may be sought.

Sustainable transport access

The site is remote from any built up area, but is within reasonable cycling distance from Bicester, which would generate a large proportion of the potential workforce. The developer is offering to construct an off carriageway cycle route within highway land between the site and Elmsbrook, where cyclists could connect safely with the rest of Bicester. The proposed cycle route would be a 3m wide route (with slight narrowings in some places where there is insufficient highway land) shared with pedestrians. Given the likely level of usage by pedestrians and cyclists in any hour, based on the travel

plan targets, and the constraint of the available highway land, this is likely to be acceptable in the context of LTN 1/20 guidance.

There would be a 1m separation from the carriageway, which should be increased where possible as it would make the route more attractive. Most of the route would not be lit, and it needs to be acknowledged that some potential cyclists would not use the route for that reason.

Having walked some of the route, I noted that the ground slopes away from the carriageway in places, which could make construction challenging. Also along part of the route there are ditches and trees on the road side of a fence. The highway boundary will need to be researched carefully to ascertain whether there is sufficient space.

Given how critical this cycle route is to the sustainability of the site, and to providing safe access via a choice of sustainable modes, more information is required to demonstrate its feasibility. The information must be based on a topographical survey and include cross sections. This should not be left to condition given how critical it is. Without a safe walking and cycling route, OCC would consider the site unsustainable.

The TA acknowledges that further work is required to assess how the cycle and pedestrian facilities can be accommodated into the Growth Deal scheme. Without this work there is a risk that there is insufficient space within the highway boundary to accommodate the cycle link.

The TA proposes an interim scheme, which could be delivered in advance of the Growth Deal scheme, which includes a Toucan crossing of the A43. This would need to be agreed with National Highways.

Where the shared use route runs along the site frontage, it would be preferable for it to run within the site rather than adjacent the carriageway, as it would only be accessing the site. To provide a direct route to the western building in the indicative masterplan, I recommend a safe crossing point part way along the access road – this could be a parallel crossing if the access road is subject to a 30mph speed limit, or combined with some sort of traffic calming feature such as a refuge.

The crossing of the A41 across to the motorway service area should be made suitable for cycles, providing a good quality refuge and a 3m wide path on the northern side, leading into the service area track that connects to bridleway 367/29 (see Public Rights of Way below).

Public transport

Bus service requirements:

An existing bus route, 505 (Bicester – Brackley), currently passes to the north of the eastern part of the site along the B4100 from Bicester, then turns right at Barnard's Gate towards Brackley along the A43.

The route is S106 funded by West Northamptonshire using money from housing developments in Brackley. Initially the service was hourly but since Covid has been permanently reduced in frequency to eight journeys in each direction per day. The funding for the service will run out in the near future and the service is not financially viable at present without further funding. It is reasonable to assume that route 505 will no longer exist when this development commences.

Looking at the combined public transport demand from this site and the proposed western site, the transport assessment has a 7.5% bus mode share for bus equating to 564 trips per day, and a higher bus target of 10% by 2030 in the travel plan. (However looking at the predicted 18-hour car trip generation and factoring this down base on the ratio of 'bus' to 'car driver' percentage modal shares below, I estimate 493 trips in 2025, and 763 in 2031).

To achieve this level of bus usage will require an attractive, high quality bus service with the timetable covering the majority of shift change times. The stated level of trips by bus generated by the development, 564 per day, won't alone be sufficient to support a financially sustainable bus route in the long-term. However the trips will generate revenue to form a substantial proportion of bus routes costs, which when combined with other passenger flows not related to the development (e.g. Bicester to Brackley), should be enough to financially sustain a service at the level required.

For a sufficiently attractive service, a service operating half-hourly in each direction for most of the operating day will be required. A Bicester to Brackley via Barnard's Green service will require two buses to operate at this frequency. While it is acknowledged that substantially fewer trips generated by the development will originate from Brackley compared to Bicester, we feel the proportion from Brackley will be considerably higher than the 4% stated, given the population of the town and the short distance to the development. In addition, non-development related passenger flows between Brackley and Bicester are needed to secure the overall long-term financial viability of the service. There are also bus connections at Brackley to a wide area towards Banbury, Towcester and Milton Keynes that will enable a wider range of possible bus journeys to the development.

A contribution is required towards the cost of providing two buses over an eight year period to serve the development, to provide a Bicester – Barnard's Green – Brackley route operating half-hourly most of the day and hourly in the evenings and on weekends. Costs have been calculated based on OCC's standard declining subsidy

profile – subsidy costs decline each year as patronage/revenue levels rise, ultimately to the point the that service requires no subsidy after eight years.

Costs:
Monday to Friday core service (half hourly 6am – 6pm, 2 buses): £300,000 per year
Monday to Friday evenings / early am (hourly, 5am – 6am, 6pm – 10pm, 1 bus): £50,000 per year
Saturdays and Sundays (hourly, 5am – 10pm, 1 bus): £75,000 per year

Year 1 cost	£425,000
Year 2 cost	£375,000
Year 3 cost	£325,000
Year 4 cost	£275,000
Year 5 cost	£225,000
Year 6 cost	£175,000
Year 7 cost	£125,000
Year 8 cost	£75,000
Total	£2,000,000

The rate of subsidy decline is £50,000 per year.

Costs have been based on bus operating costs of £50 per hour during core times and £40 per hour at other times.

OCC would endeavour to integrate the route with others to provide longer distance direct journey opportunities (e.g. Oxford – Bicester – Barnard's Green).

We have considered the situation where the western and eastern sites come forward in isolation, which is quite likely, since they are proposed via separate planning applications. The potential passenger numbers from a single site are unlikely to ever be enough for financial sustainability of a half hourly service. A lesser lower level of service would reduce the attractiveness of public transport, and it is highly unlikely the predicted modal share would be achieved.

The proportion of the contribution split based on size would be £714,000 east and £1,286,000 western, which is almost exactly the split of the differences in costs for each bus (one bus does all day and weekends, the other does just 6-6 Mon-Fri).

The eastern site contribution would pay for one bus – operating M-F core service hourly, while the western site would pay for one bus – operating M-F core service hourly + evenings and weekends hourly

This would allow OCC to be able to procure a sensible proportion of the total service if one site comes forward independently of the other.

OCC considers that the modal share target will be challenging to achieve due to the isolated location. The application does not specify the number of parking spaces. Alongside travel plan incentives to support use of the bus service, we would want parking provision to reflect modal share targets, supported by parking demand management.

Bus stop locations:

The two bus stop locations proposed, one within each part of the development, are well located for the development. They are however located off-line of a Bicester to Brackley bus route – to serve them will increase the overall bus journey time and lessen the attractiveness of the bus for passengers travelling that are not going to the development. This is particularly the case for the western side of the development. However, locating the stops on the B4100 would increase the walking distance to the development and lessen the attractiveness of bus for passengers travelling to the development. On balance, the proposed stop locations are probably the best within the constraints of the current development proposal. If the layout of the development is revised, it would be beneficial to investigate whether more efficient stop locations can be found, particularly for the western part of the site, without the stops becoming too remote from the building entrances they serve.

Bus stop facilities:

Both bus stops should have a bus shelter (at least three bays long with seating) provided and maintained by the site. In addition, a separate bus stop pole, flag and timetable cases should be provided to OCC specification. The shelters must be suitable for OCC to install real time information displays, with ducting provided. A contribution will be sought for the provision of these displays.

Travel Plan

A draft Framework Travel Plan has been produced for this application, as part of the Environmental Statement, but it requires further site-based information before it can meet the criteria outlined within appendix 7 of the OCC guidance document 'Transport for New Developments – Transport Assessments and Travel Plans 2014'. I have added some specific points below for information.

- As the site is adjacent to another large site and employees will be travelling to a similar destination it would be advantageous to open a dialogue with the adjacent site to discuss possible joint working opportunities. It is therefore encouraged that this is included as an action for the TPC and identified within the action plan.

- Information about on site facilities should be included. Levels and type of cycle parking, changing facillities, restaurant facillities (reducing the need to leave the site during the day) etc.

- A dedicated cycle route to Bicester has been discussed within the document but this has not been included within the action plan. Similarly with information about EV charging points?

- Anticipated number of occupiers on site?

- Estimated date of occupation?

- What are the barriers to the promotion of sustainable, active travel in this location? How will these be mitigated?

- How will deliveries be managed?

It is requested that an amended travel plan is submitted as a separate document.

Cycle parking and EV charging points for both cycles and vehicles should be provided within the site boundary. Cycle parking must be covered and secure and conveniently located near to the entrance to each building.

As each of the units will be occupied independently by different organisations, a Framework Travel Plan and associated monitoring fee (£2,379 index linked) will be required for the site. Depending on the individual sizes of the units it is likely that each organisation will also be required to produce either a Full Travel Plan (with associated monitoring fee) or Travel Plan Statement. However, as I am unable to find definitive sizes, I am unable to confirm the exact requirements. I have therefore included a copy of the threshold and monitoring fee table relevant to this application for information.

B8 Storage or distribution • wholesale warehouses; • distribution centres; • repositories.	**B8 Storage or distribution -** This class includes open air storage.	Over 7500m^2	Travel Plan	2,379
		3000-7499 m^2	Travel Plan	2,379
		2000-2999 m^2	Travel Plan Statement	None

Traffic impact

A Transport Assessment has been provided, covering both the western and eastern sites, and considering them individually and cumulatively. The TA acknowledges that further modelling work is required to make use of the local, detailed VISSIM Model that National Highways holds for M40 Junction 10, including Baynards Green roundabout. This was recommended as part of our preapplication advice and is a vital part of understanding the traffic impact of the site, given the proximity of the access junctions to Baynards Green, and the complex interaction of the various junctions that form M40 Junction 10. Modelling the roundabouts individually (as has been done in this TA) is not sufficient, largely because traffic is not free flowing at each due to their proximity. Traffic queueing on the A43 at Baynards Green could lead to exit blocking for the M40 northbound off slip, which would then present a safety hazard due to queueing on the M40, so this needs to be examined carefully. Lack of this modelling in the current application is a reason for objection.

The TA also acknowledges that further modelling must be carried out to take into account the Growth Deal scheme. Again, lack of this modelling in the current application is a reason for objection.

At the time of writing, discussions are ongoing to scope out the further traffic modelling work that will be necessary, in conjunction with National Highways. The Highway Authority will submit further representations in due course, to take into account this work.

I have the following further comments on the TA:

Future year baseline traffic: Traffic counts were carried out in June 2021, when traffic volumes were still below pre-pandemic levels. No assumptions can be made that future traffic volumes will remain lower than pre-pandemic levels. These counts have then been growthed up using TEMPRO. Instead, future year flows from the Bicester Transport Model should be used, as this takes into account the concentration of development locally. This data is being used for transport assessments of other strategic developments in the area.

Committed development: Cumulative assessment should take into account the Oxfordshire Strategic Railfreight Interchange. It is formally registered with the Planning Inspectorate and public consultation is expected in spring 2022. It is therefore moving forward on a scale of certainty of delivery. The published scoping report provides sufficient information on land use to make assumptions about lorry movements, and additional information could be provided. OCC considers that it should be taken into account in the cumulative assessment, at least in a form of sensitivity test. Emerging proposals for significant employment development at Junction 9 should also be taken into account, **as should the consented Great Wolf resort and other significant development proposed in the area.**

Trip generation: The proposed trip generation is based on surveys obtained or carried out by the applicant for comparable sites. The full survey report should be provided.

Trip distribution: Light traffic has been distributed on the basis of 2011 Census travel to work data for an MSOA in NE Bicester. I do not follow the discussion in paragraph 5.3.5. Although I understand why the MSOA in which the proposal is located, has not been used (there is very little employment in the ward), I don't follow the justification for using a ward in Bicester, where it is very likely that employment would attract a large proportion of employees from the immediate surrounding area. A site remote from Bicester would certainly attract a high proportion of employees from Bicester, as it is the nearest town, but I think would attract more people from other settlements than would a site in Bicester.

HGV distribution: This has been based on DfT data using a 2006 base year, which is considered too old as it would not take into account the pattern of development since then. A more recent dataset should be used or an alternative methodology for distribution should be discussed with OCC and NH. A gravity model would be more appropriate.

Trip assignment: For both light and heavy traffic, tables should be provided to show how the assignment was arrived at. Given the desire to locate on the M40 corridor, the proportions predicted to travel via M40 N and S look surprisingly low.

Junction capacity assessment: M40 Junction 10 has not been assessed, which is unacceptable for a development of this scale, which will clearly have an impact on the junction. The TA shows that the development would increase the traffic on the A43 approaching the junction by 7%, which demonstrates a significant impact that must be assessed.

Junctions 10 software has been used to assess the site access roundabouts and Baynards Green roundabout, as well as the A4095/B4100 junction at Bicester. For reasons stated above this is not sufficient for the first three. Notwithstanding that, I query whether the assessments are reliable because the queue lengths at Baynards Green have not been validated against the traffic surveys, albeit those surveys themselves are not reliable due to the fact they were carried out when traffic conditions were not back to pre-pandemic levels. Even taking the output tables at face value, the roundabout is showing as over capacity in the base year and the development, individually and cumulatively with the eastern site, makes the RFC worse.

At the A4095/B4100 junction, the queue lengths are not validated and the queue lengths are not borne out by anecdote. The planned improvement scheme there will deliver additional capacity, but that additional capacity is intended to release housing growth at Bicester.

I will leave NH to comment on the M40 slip roads and the merge/diverge assessments.

Interim mitigation scheme: A slight increase in flare on the approach to Baynards Green roundabout has been proposed. This is shown to bring about only marginal benefit on some arms and makes one arm worse. The scheme would cause significant disruption to construct at this very busy junction.

Public rights of way

Footpath 109/5/10 is proposed to be diverted as it passes through the site. OCC would like to see this dedicated as a bridleway at the same time as any diversion, which would allow for cycling, and complete a missing link between Stoke Lyne Bridleway 367/29 and Ardley Bridleway 109/2. This could be a 3m wide tarmac path with a verge on either side. See map and annotations below. This comment is made without prejudice to the desirability/outcome of any application to divert PRoW. The existing/altered footpath connection to opposite the services should be retained.

The preferred alignment would be as shown below, and make use of the 3m wide cycle connection to the site, although as stated above, it would be better within the site rather than alongside the B4100. An improved crossing point leading across the B4100 into the service area site, would provide an onward connection to brideway 367/29. As the area of highway land on the western side of the service area access is quite wide, it should be separated from the access road by a verge until it can connect with the access road at a safe point.

It is suggested that a bridleway/cyclepath margin is provided for within the red line of the site rather than trying to upgrade footpath 367/28 which has a potentially hazardous road crossing.

As part of the S278 works, it is also requested that the bridleway crossing of the B4100 at the western end of the site, is improved by creating a more level and suitably surfaced landing area on the northern side, as well as veg clearance to provide improved visibility.

A contribution of £65,000 is requested towards upgrading public rights of way to enable cycling between the site and Fewcott and/or Fritwell. This offers onward connections via quiet roads, including to Heyford Park. This contribution would be spent on OCC Countryside negotiating upgraded access rights and undertaking surface and furniture measures to provide access for cyclists/riders

on a number of route options between the site and Fewcott as well as improvements for bridleway to Fritwell – plus other minor works within 3km of the site. This would further improve the possibilities of sustainable access to the site, with Heyford Park becoming a more important potential source of employees over the next few years.

S106 obligations and their compliance with Regulation 122(2) Community Infrastructure Levy Regulations 2010 (as amended):

£TBC Highway Works Contribution indexed from TBC using Baxter Index
Towards: Capacity improvements at M40 J10 including Baynards Green Roundabout

Justification: A high proportion of the development traffic will pass through Baynards Green and the rest of Junction 10. A scheme of improvements is planned for the junction, which is required to accommodate planned growth. Subject to further modelling, additional works may be required to accommodate the traffic from this development.

Calculation: TBC - Contribution towards the planned scheme will be proportionate based on contributions to be secured from development at Heyford, with additional amount as required to provide for additional capacity.

£1,286,000 Public Transport Service Contribution indexed from November 2021 using RPI-x
Towards: Bus services serving the site.

Justification: A range of sustainable travel options to the site is required to make the site sustainable in planning terms. The existing bus service between Bicester and Brackley is unlikely to continue past the end of its current contract, which would leave the site with no public transport.

Calculation: See commentary above.

£8,904 Public Transport Infrastructure Contribution indexed from Sept 2020 using Baxter Index
Towards: Provision of Real Time Information unit in the bus shelter which are to be provided by the developer.

Justification: To encourage public transport use, people will need the reassurance that the bus is on its way, especially given local traffic congestion.

Calculation: The amount will be based on the cost to OCC to provide the unit, together with a commuted sum for maintenance.

£TBCTravel Plan Monitoring Fee indexed from December 2020 using RPI-x

Justification: To ensure that the travel plan is delivered and revised as required in order to be effective, OCC will need to monitor it over its life.

Calculation: The amount is based on the staff cost for OCC to monitor the travel plan, based on an estimate of the time it will take over the life of the plan.

£65,000 Public Rights of Way Contribution indexed from November 2021 using Baxter

Justification: The improvements are required to ensure that a range of sustainable travel options are provided to the site, as well as ensuring safe and suitable access from the nearest settlements. In particular this would assist in making it possible to cycle to the site from the nearby large and growing settlement at Heyford Park.

Calculation: The amount is based on a desk top estimate for negotiating upgraded access rights and undertaking surface and furniture measures. OCC would agree to a longstop of 10 years in the event that if it is not possible to negotiate upgraded rights.

S278 Highway Works:

An obligation to enter into a S278 Agreement will be required to secure mitigation/improvement works, including:

- Access junction- details to be agreed, including bus turning facility and bus stop
- Footway/cycleway linking the site with Elmsbrook, Bicester
- Crossing facilities over the B4100 at the service area, plus minor improvements to bridleway crossing to west of site

Notes:
This is to be secured by means of S106 restriction not to implement development (until S278 agreement has been entered into. The trigger by which time S278 works are to be completed shall also be included in the S106 agreement. With this site, the safety of construction traffic access will be critical, so the junction may be required to be constructed prior to construction activity on the rest of the site. The footway/cycleway would be required prior to first occupation.

Identification of areas required to be dedicated as public highway and agreement of all relevant landowners will be necessary in order to enter into the S278 agreements. A detailed survey of the highway boundary should be carried out to ensure that the adopted highway abuts the land holding. This may not be the case where there is a

ditch, and all highway record plans provided by OCC contain a caveat about this. Such 'gaps' can lead to significant delays to S278 agreements.

S38 Highway Works – [Spine Road][/ On-Site Rights of Way]:

An obligation to provide a bus turning loop will be required for the development. The S106 agreement will secure delivery via future completion of a S38 agreement.

Planning Conditions:

In the event that permission is to be given, the following planning conditions should be attached:

No development shall commence unless and until full details of the means of access between the land and the highway, including, position, layout, construction, drainage and vision splays have been submitted to and approved in writing by the Local Planning Authority. The means of access shall be constructed in strict accordance with the approved details and shall be retained and maintained as such thereafter. Agreed vision splays shall be kept clear of obstructions higher than 0.6m at all times.
Reason - In the interests of highway safety and to comply with Policy ESD15 of the Cherwell Local Plan 2011-2031 Part 1 and Government guidance contained within the National Planning Policy Framework.

No development shall commence unless and until full specification details (including construction, layout, surfacing and drainage) of the turning areas and parking spaces within the curtilage of the site, arranged so that motor vehicles may enter, turn round and leave in a forward direction and vehicles may park off the highway, have been submitted to and approved in writing by the Local Planning Authority. The turning area and car parking spaces shall be constructed in accordance with the approved details prior to the first occupation of the development shall be retained as such for the parking and manoeuvring of vehicles at all times thereafter.
Reason - In the interests of highway safety and to comply with Policy ESD15 of the Cherwell Local Plan 2011-2031 Part 1 and Government guidance contained within the National Planning Policy Framework.

Prior to the first use or occupation of the development hereby permitted, covered cycle parking facilities shall be provided on the site in accordance with details which shall be firstly submitted to and approved in writing by the Local Planning Authority. Thereafter, the covered cycle parking facilities shall be permanently retained and maintained for the parking of cycles in connection with the development.
Reason - In the interests of sustainability, to ensure a satisfactory form of development and to comply with Government guidance contained within the National Planning Policy Framework.

Prior to the first occupation of the development, a scheme for the provision of vehicular electric charging points to serve the development shall be submitted to and approved in writing by the Local Planning Authority. The vehicular electric charging points shall be provided in accordance with the approved details prior to the first occupation of the unit they serve, and retained as such thereafter.
Reason - To comply with Policies SLE 4, ESD 1, ESD 3 and ESD 5 of the adopted Cherwell Local Plan 2011-2031 Part 1 and to maximise opportunities for sustainable transport modes in accordance with paragraph 110(e) of the National Planning Policy Framework

Prior to commencement of the development hereby approved, a Construction Traffic Management Plan (CTMP) shall be submitted to and approved in writing by the Local Planning Authority. Thereafter, the development shall not be carried out other than in accordance with the approved CTMP.
Reason: In the interests of highway safety and the residential amenities of neighbouring occupiers and to comply with Government guidance contained within the National Planning Policy Framework.

Prior to the first occupation of the development hereby approved, a Travel Plan, prepared in accordance with the Department of Transport's Best Practice Guidance Note "Using the Planning Process to Secure Travel Plans", shall be submitted to and approved in writing by the Local Planning Authority. Thereafter, the development shall be implemented and operated in accordance with the approved details.
Reason - In the interests of sustainability and to ensure a satisfactory form of development, in accordance with Government guidance contained within the National Planning Policy Framework.

The development shall not be occupied until a signage strategy for the site has been submitted and approved in writing by the Local Planning Authority. The development shall thereafter be completed and signage installed in accordance with the approved details prior to the first use of any building on the site.
Reason - To ensure that traffic is directed along the most appropriate routes and to comply with Government guidance contained within the National Planning Policy Framework.

Subject to further traffic modelling: The development shall not be occupied until the planned scheme of enlargement and signalisation of Baynards Green roundabout, or other similar capacity improvement scheme as agreed with National Highways, has been implemented at Baynards Green junction.

Officer's Name: Joy White
Officer's Title: Principal Transport Planner
Date: 2 November 2021

Application no: 21/03268/OUT
Location: NW Of Baynards House, Ardley

Lead Local Flood Authority

Recommendation:

Objection

Detailed comments:

Unable to find FRA in the submission.

Where car parking spaces and access roads are proposed, water quality standards must be met. Proposed development needs a water quality assessment in accordance with Section 4 and Section 26 of SuDS Manual.

Proposed development must meet local standards, L19, "At least one surface feature should be deployed within the drainage system for water quality purposes, or more features for runoff which may contain higher levels of pollutants in accordance with the CIRIA SuDS Manual C753. Only if surface features are demonstrated as not viable, then approved proprietary engineered pollution control features such as vortex separators, serviceable/ replaceable filter screens, or pollution interceptors may be used"

Furthermore, a detailed surface water management strategy must be submitted in accordance with the Local Standards and Guidance for Surface Water Drainage on Major Development in Oxfordshire

In line with this guidance, runoff must be managed at source (i.e. close to where it falls) with residual flows then conveyed downstream to further storage or treatment components, where required. The proposed drainage should mimic the existing drainage regime of the site as much as possible.

The applicant is required to provide a Surface Water Management Strategy in accordance with the following guidance:

The Sustainable Drainage Systems (SuDS) Policy, which came into force on the 6th April 2015 requires the use of sustainable drainage systems to manage runoff on all applications relating to major development. As well as dealing with surface water runoff, they are required to provide water quality, biodiversity and amenity benefits in line with

National Guidance. The Sustainable Drainage Systems (SuDS) Policy also implemented changes to the Town and Country Planning (Development Management Procedure) (England) Order 2010 to make the Lead Local Flood Authority (LLFA) a statutory Consultee for Major Applications in relation to surface water drainage. This was implemented in place of the SuDS Approval Bodies (SAB's) proposed in Schedule 3 of the Flood and Water Management Act 2010.

All full and outline planning applications for Major Development must be submitted with a Surface Water Management Strategy. A site-specific Flood Risk Assessment (FRA) is also required for developments of 1 hectare or greater in Flood Zone 1; all developments in Flood Zones 2 and 3 or in an area within Flood Zone 1 notified as having critical drainage problems; and where development or a change of use to a more vulnerable class may be subject to other sources of flooding.

Further information on flood risk in Oxfordshire, which includes access to view the existing fluvial and surface water flood maps, can be found on the Oxfordshire flood tool kit website. The site also includes specific flood risk information for developers and Planners.

The National Planning Policy Framework (NPPF), which was updated in July 2021 provides specific principles on flood risk (Section 14, from page 45). National Planning Practice Guidance (NPPG) provides further advice to ensure new development will come forward in line with the NPPF.

Paragraph 159 states; "Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere."

As stated in Paragraph 160 and 161 of the NPPF, we will expect a sequential approach to be used in areas known to be at risk now or in the future from any form of flooding.

The Non-statutory technical Standards for sustainable drainage systems were produced to provide initial principles to ensure developments provide SuDS in line with the NPPF and NPPG. Oxfordshire County Council have published the "Local Standards and Guidance for Surface Water Drainage on Major Development in Oxfordshire" to assist developers in the design of all surface water drainage systems, and to support Local Planning Authorities in considering drainage proposals for new development in Oxfordshire. The guide sets out the standards that we apply in assessing all surface water drainage proposals to ensure they are in line with National legislation and guidance, as well as local requirements.

The SuDS philosophy and concepts within the Oxfordshire guidance are based upon and derived from the CIRIA SuDS Manual (C753), and we expect all development to come forward in line with these principles.

In line with the above guidance, surface water management must be considered from the beginning of the development planning process and throughout – influencing site layout and design. The proposed drainage solution should not be limited by the proposed site layout and design.

Wherever possible, runoff must be managed at source (i.e. close to where it falls) with residual flows then conveyed downstream to further storage or treatment components, where required. The proposed drainage should mimic the existing drainage regime of the site. Therefore, we will expect existing drainage features on the site to be retained and they should be utilised and enhanced wherever possible.

Although we acknowledge it will be hard to determine all the detail of source control attenuation and conveyance features at an outline stage, we will expect the Surface Water Management Strategy to set parameters for each parcel/phase to ensure these are included when these parcels/phases come forward. Space must be made for shallow conveyance features throughout the site and by also retaining existing drainage features and flood flow routes, this will ensure that the existing drainage regime is maintained, and flood risk can be managed appropriately.

Drainage Pro-Form

Officer's Name: Sujeenthan Jeevarangan
Officer's Title: LLFA Planning Engineer
Date: 18 November 2021

Application no: 21/03268/OUT
Location: NW Of Baynards House, Ardley

Archaeology

Recommendation:

Objection

Key issues:

The site is located in an area of archaeological interest on the site of a medieval and post medieval green mentioned in historical records. An archaeological desk based assessment will need to be undertaken for the site to assess the potential of any proposed development to impact on archaeological deposits and heritage assets. The results of an archaeological field evaluation will also need to be submitted along with any planning application for the site.

Legal agreement required to secure:

Conditions:

Informatives:

Detailed comments:

The site is located in an area of archaeological interest immediately south of the site of a medieval and post medieval green mentioned in historical records. The area of the green has been suggested to be either the site of medieval jousting or a camp site for these jousts, horse racing and a rendezvous site during the C17th civil war. A number of possible Bronze or Iron Age banjo enclosures have been recorded in the vicinity of the site from aerial photographs and a ring ditch has been recorded 500m north east of the site.

An archaeological desk-based assessment will need to be undertaken for the site to assess the potential of any proposed development to impact on archaeological deposits and heritage assets.

A written scheme of investigation has been agreed for this desk-based assessment and a short statement on the historic environment has been submitted with this application. This submitted document however does not however appear to contain the whole assessment as set out in the agreed WSI. This will need to be submitted.

A programme of archaeological evaluation will need to be undertaken on the site and the report submitted ahead of the determination of any planning application. This must be carried out by a professionally qualified archaeological organisation and should aim to define the character and extent of the archaeological remains within the application area, and thus indicate the weight which should be attached to their preservation. This evaluation must be undertaken in line with the Chartered Institute for Archaeologists standards and guidance for archaeological evaluation including the submission and agreement of a suitable written scheme of investigation.

This information can be used for identifying potential options for minimising or avoiding damage to the archaeology and on this basis, an informed and reasonable decision can be taken.

Officer's Name: Richard Oram
Officer's Title: Archaeology Lead
Date: 27 October 2021

Annex A National Highways' assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommended Non-Approval

It is recommended that the application should not be approved for a further period of three months from the date of this response to allow the applicant to provide the additional information required.

Reasons

National Highways has engaged with the applicant and their consultants on this development proposal since the pre-application stage in July 2021.

National Highways previously issued a holding recommendation response for this application on 25 July 2022. In our response, we noted that more detailed information was required regarding the extent of the proposed geotechnical activity, as well as the associated potential impact on the operation of the adjacent SRN. It was also noted that the outcome of this would, in turn, affect our review of the proposed drainage arrangements for the site.

Following the submission of this additional information, National Highways will be in a position to provide comments regarding application 21/03266/F.

APPENDIX D

West Northants Council Response

West Northamptonshire Council

Town and Country Planning Act 1990 (As Amended)
Local Highway Authority (LHA) Response

Application Reference	21/03266/F		
Proposal	Site clearance, construction of new site access from the B4100, permanent and temporary internal roads, an internal roundabout and a foul drainage station, diversion of an existing overhead power cable and public right of way, and soft landscaping. **Amendment details** Full application for access associated with applications 21/03267/OUT & 21/03268/OUT Further information comprising site sections through Junction 10 sites and information on Bio Diversity Net gain for Piddington site, an off-site biodiversity area put forward by the applicants.		
Location	OS Parcel 2636 NW Of Baynards House, Ardley		
Case Officer	Joy White/David Lowin		
Date Consulted	31/03/2022	**Date Sent**	14/03/2022

Further to the response made in November 2021 by West Northants Council (WNC) acting as the local highwy authotity in respect of the above planning application, the LHA have the following observations and requests to make;

We understand that a Revised Transport Assessment is currently being prepared by the applicant for this site that includes tests via the Bicester Model that should identify other traffic flows than previously assumed and considered.

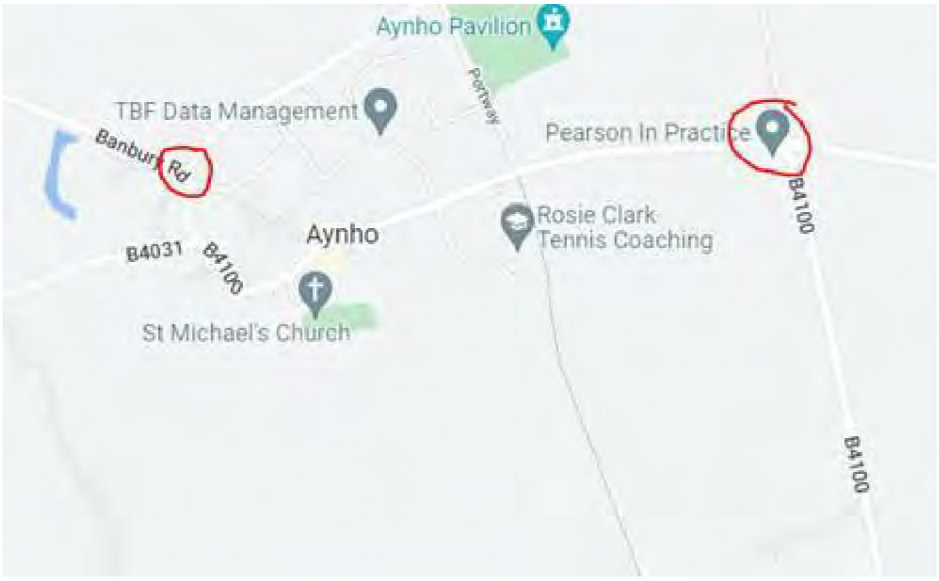
This is welcomed by the LHA as it has come to our attention that a number of residents in West Northants villages; predominantly those living at Aynho, fear that significant volumes of light traffic associated with this proposed site, will be attracted to using the local highway network through and around these villages. Whilst the LHA are fully aware and supportive of the fact that all taxed and insured vehicles should be able to travel freely on the network, we would request that a data counting exercise be undertaken in order to prove or disprove this suggestion.

The LHA therefore request that the consultant undertake counts of traffic coming from the north / west / east to the site, which will then allow us to consider actual traffic flows affecting Aynho and Croughton villages, which can then be used as base model data for the Bicester Transport Model future year tests and any detailed junction capacity assessments within Aynho that are the concern WNC.

We request that monitoring using manual classified counts be undertaken over three days in three neutral weeks, as detailed on the plan section overleaf, and a report provided to evidence traffic patterns.

Planning Permission does not give or imply permission for adoption of new highway or to implement any works within the highway and / or a Public Right of Way

West Northamptonshire Council



This will enable WNC to see through traffic from north to south and also left turners / right exits that go into Croughton. This could also identify B4031 west of the site traffic patterns

Should the residents fears prove to be founded then possibly it may be reasonable to request traffic that further horizontal traffic calming features be installed to support the residents in these villages.

Public Rights of Way

The application site is not affected by a Public Right of Way

[redacted]

Hayley Usher
Development Management Engineer

For Assistant Director for Highways and Waste
One Angel Square
Angel Street
Northampton NN1 1ED
Hayley.usher@westnorthants.gov.uk
www.westnorthants.gov.uk

Planning Permission does not give or imply permission for adoption of new highway or to implement any works within the highway and / or a Public Right of Way

The views, observations, comments and recommendations contained in this response represent those of West Northamptonshire Council as Local Highway Authority and in no other function or authority.

APPENDIX E

Tritax Symmetry Masterplan

Symmetry Park, Ardley

Illustrative Masterplan

Rev	Date	By	Description
P08	18/03/24	KM	Access Updated

Unit 01
1,041,000 sq.ft.

Unit 02
471,000 sq.ft.

Unit 03
204,000
sq.ft.

Unit 04
237,000
sq.ft.

Unit 05
252,000
sq.ft.

Unit 06
332,000
sq.ft.

Unit 07
145,000
sq.ft.

Unit 08
381,000 sq.ft.

ENERGY CENTRE

Lorry Park

M1 J15A

A43

M40 J10

B4100

B4100

B4100 to Bicester

111.3m

80.2m

46.8m

45.1m

46.7m

75.1m

201.9m

138.3m

Key:

Indicative Park Trail

Indicative Activity Hub

0 50 100 200 250
Metres at scale 1:2000

TRITAX SYMMETRY
A TRITAX BIG BOX COMPANY

SGP
Architects + Masterplanners

Waterfront House
2a Smith Way
Grove Park
Enderby
Leicester LE19 1SX

t: +44 (0)116 247 0557

www.stephengeorge.co.uk

Symmetry Park,
Ardley
M40 Junction 10

Drawing Name:
Illustrative Masterplan - Option 3 - NSA

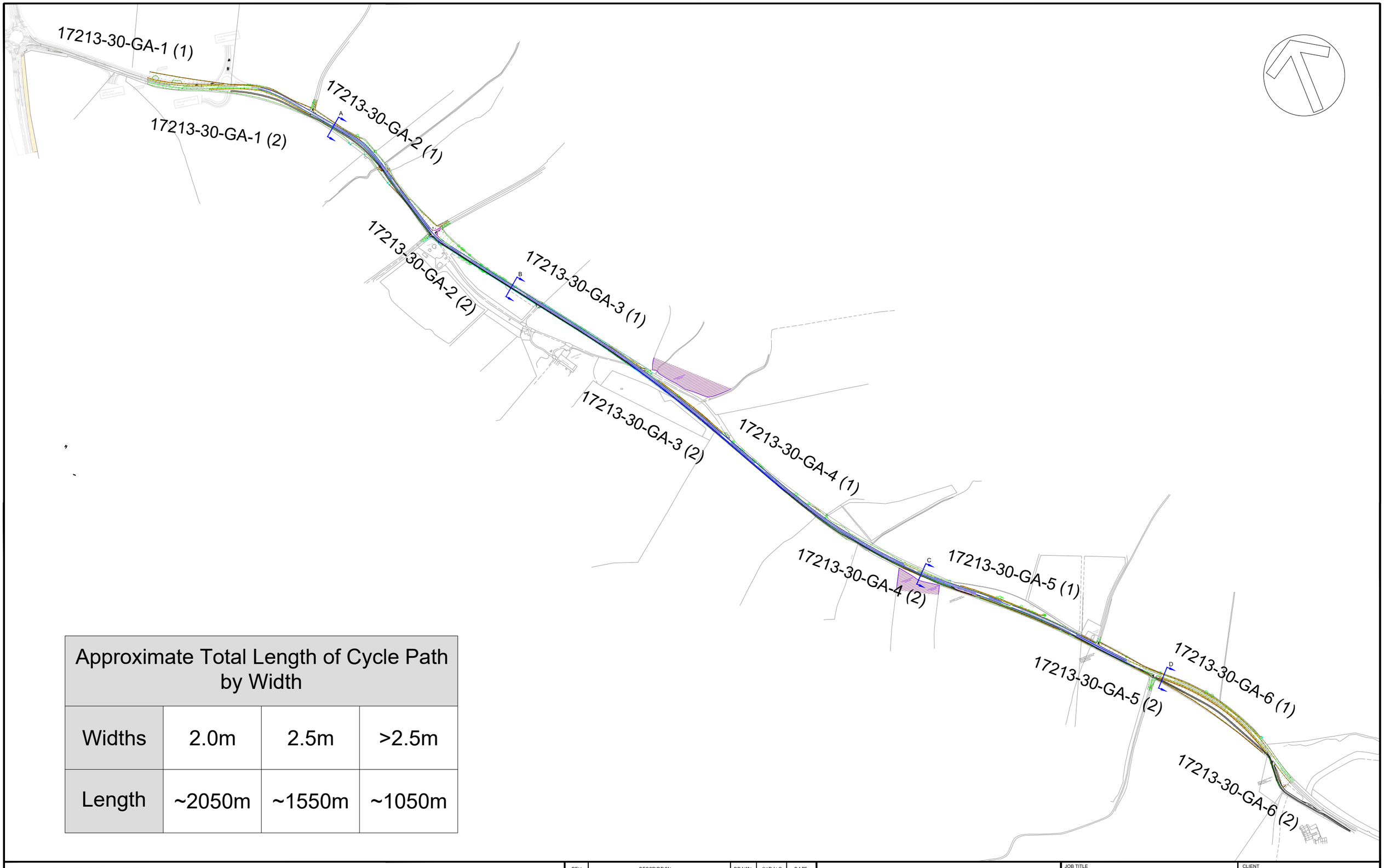
Drawing Stage:	PRELIMINARY
Suitability:	S0 - Work In Progress
SGP File Ref:	14-019-SGP-XX-XX-DR-A-001010-P8 Planning Issue.dwg

SGP Project No:	Date:	Drawn:	Team:	Scale:	Rev:
14-019	01/2023	KM	MMS	1:2000 @ A1	**P8**

Drawing Number:
14-019 - SGP - XX - XX - DR - A - 001010
Project Code | Originator | Volume | Level | Type | Role | Number

APPENDIX F

B4100 Active Travel Route – Testing Arrangement



Approximate Total Length of Cycle Path by Width			
Widths	2.0m	2.5m	>2.5m
Length	~2050m	~1550m	~1050m

REV	DESCRIPTION	DRAWN	INITIALS	DATE

DTA
Transport Planning Consultants

Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE	CLIENT
M40 JUNCTION 10	ALBION LAND

DRAWING TITLE

PROPOSED CYCLEWAY – CONCEPT PLAN

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
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KEY

- HIGHWAY MAINTAINABLE AT PUBLIC EXPENSE
- POTENTIAL VEGETATION IMPACT
- ANCIENT WOODLAND
- PROPOSED CYCLEWAY
- EXISTING CARRIAGEWAY
- EXISTING CARRIAGEWAY EDGE WITH KERB
- CARRIAGEWAY EDGE WITHOUT KERB
- EXISTING FENCELINE
- BANK/DITCH
- PROPOSED ROAD MARKINGS

B 4100

Bus shelter

Bus shelter

3.00m

0 20 40 Meters

REV	DESCRIPTION	DRAWN	INITIALS	DATE

DTA
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JOB TITLE	M40 JUNCTION 10
CLIENT	ALBION LAND
DRAWING TITLE	PROPOSED CYCLEWAY CONCEPT PLAN GENERAL ARRANGEMENT

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:500@A1	BM	APR 24	17213-30-GA-1	H

A

A

KEY

- HIGHWAY MAINTAINABLE AT PUBLIC EXPENSE
- POTENTIAL VEGETATION IMPACT
- ANCIENT WOODLAND
- PROPOSED CYCLEWAY
- EXISTING CARRIAGEWAY
- EXISTING CARRIAGEWAY EDGE WITH KERB
- CARRIAGEWAY EDGE WITHOUT KERB
- EXISTING FENCELINE
- BANK/DITCH
- PROPOSED ROAD MARKINGS

Swift House

REV	DESCRIPTION	DRAWN	INITIALS	DATE

DTA
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JOB TITLE	CLIENT
M40 JUNCTION 10	ALBION LAND

DRAWING TITLE

PROPOSED CYCLEWAY
CONCEPT PLAN
GENERAL ARRANGEMENT

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:500@A1	BM	APR 24	17213-30-GA-2	H

B

DESIGNATED ANCIENT WOODLAND

1.00m 2.00m

118.8m

KEY

- HIGHWAY MAINTAINABLE AT PUBLIC EXPENSE
- POTENTIAL VEGETATION IMPACT
- ANCIENT WOODLAND
- PROPOSED CYCLEWAY
- EXISTING CARRIAGEWAY
- EXISTING CARRIAGEWAY EDGE WITH KERB
- CARRIAGEWAY EDGE WITHOUT KERB
- EXISTING FENCELINE
- BANK/DITCH
- PROPOSED ROAD MARKINGS

REV	DESCRIPTION	DRAWN	INITIALS	DATE

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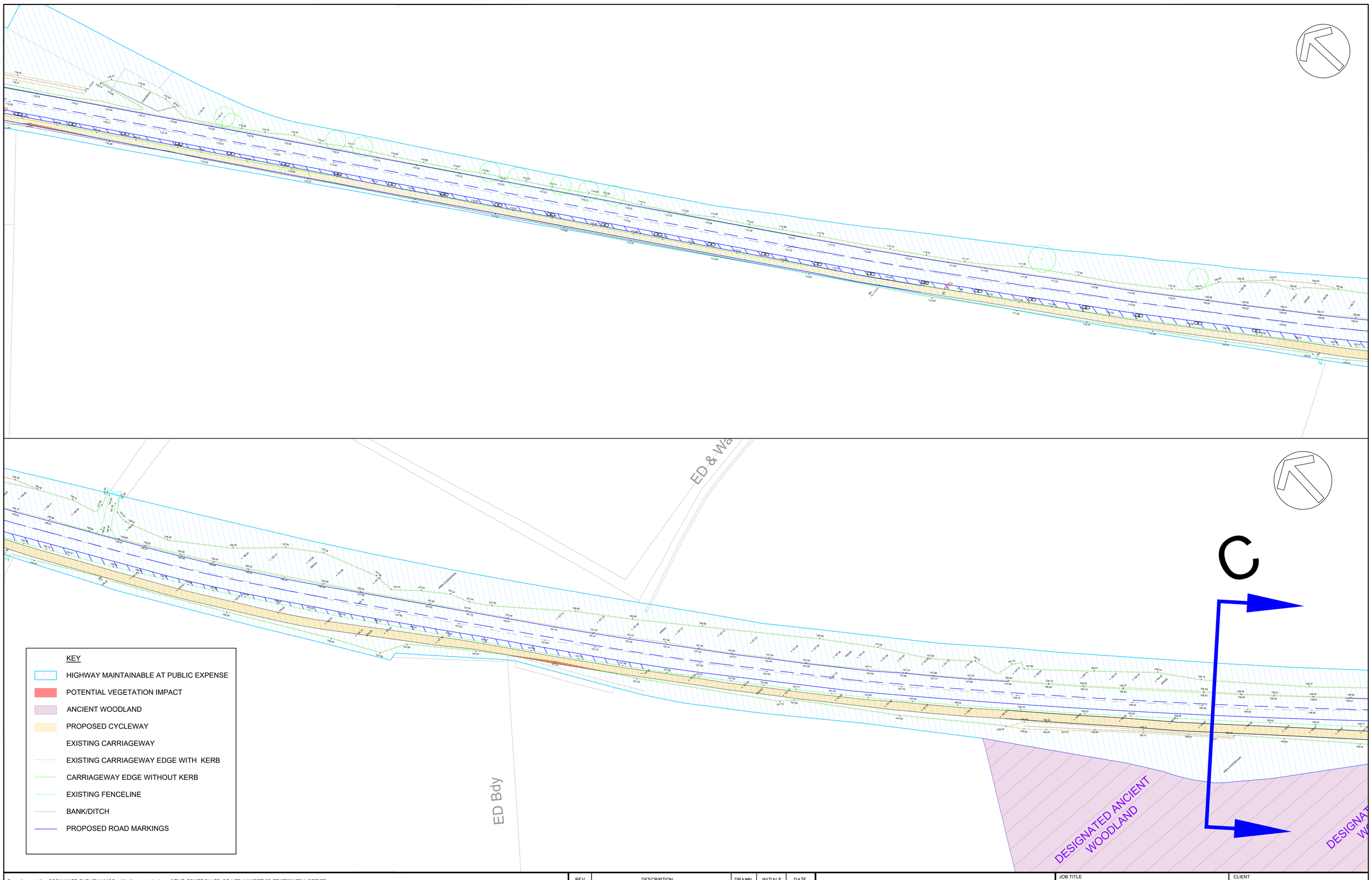
JOB TITLE	M40 JUNCTION 10
CLIENT	ALBION LAND
DRAWING TITLE	PROPOSED CYCLEWAY CONCEPT PLAN GENERAL ARRANGEMENT
SCALE	1:500@A1
DRAWN BY	BM
DATE	APR 24
DRAWING No	17213-30-GA-3
REVISION	H



REV	DESCRIPTION	DRAWN	INITIALS	DATE

DTA
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JOB TITLE	CLIENT
M40 JUNCTION 10	ALBION LAND

DRAWING TITLE
PROPOSED CYCLEWAY
CONCEPT PLAN
GENERAL ARRANGEMENT

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
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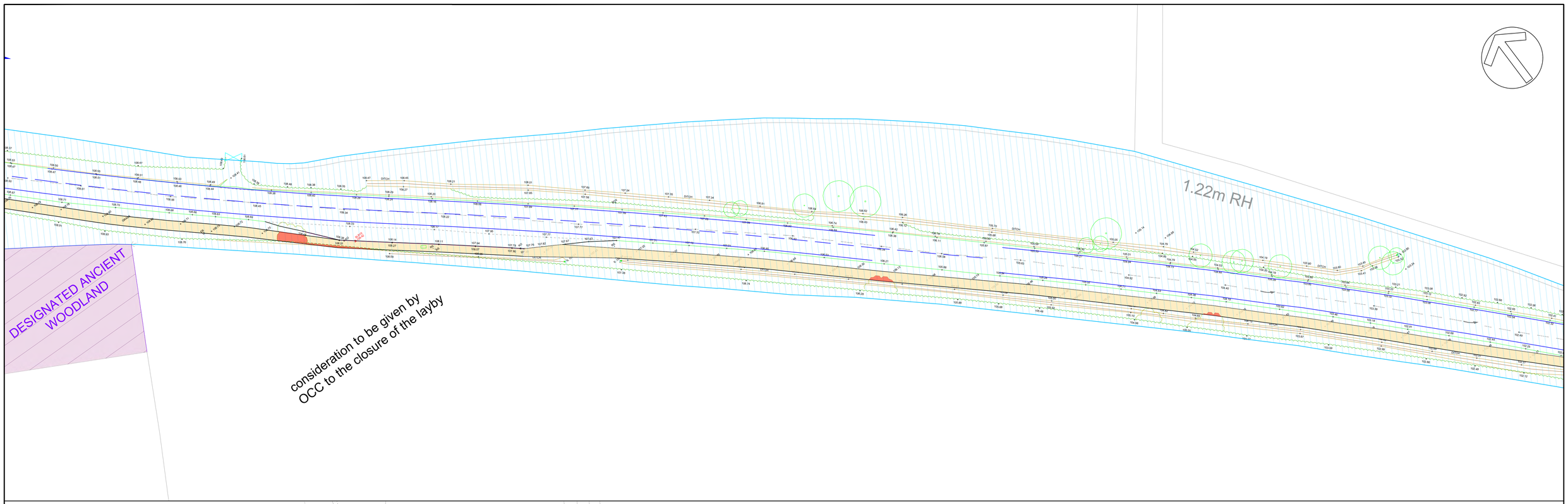

REV	DESCRIPTION	DRAWN	INITIALS	DATE

DTA
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Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
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JOB TITLE	CLIENT
M40 JUNCTION 10	ALBION LAND

DRAWING TITLE
PROPOSED CYCLEWAY
CONCEPT PLAN
GENERAL ARRANGEMENT

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:500@A1	BM	APR 24	17213-30-GA-5	H

D

Options available here subject to discussion of layby retention/capacity with OCC

2.50m

0 20 40 Meters

KEY

- HIGHWAY MAINTAINABLE AT PUBLIC EXPENSE
- POTENTIAL VEGETATION IMPACT
- ANCIENT WOODLAND
- PROPOSED CYCLEWAY
- EXISTING CARRIAGEWAY
- EXISTING CARRIAGEWAY EDGE WITH KERB
- CARRIAGEWAY EDGE WITHOUT KERB
- EXISTING FENCELINE
- BANK/DITCH
- PROPOSED ROAD MARKINGS

REV	DESCRIPTION	DRAWN	INITIALS	DATE

DTA
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www.dtatransportation.co.uk

JOB TITLE	M40 JUNCTION 10
CLIENT	ALBION LAND
DRAWING TITLE	PROPOSED CYCLEWAY CONCEPT PLAN GENERAL ARRANGEMENT
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DRAWN BY	BM
DATE	APR 24
DRAWING No	17213-30-GA-6
REVISION	H

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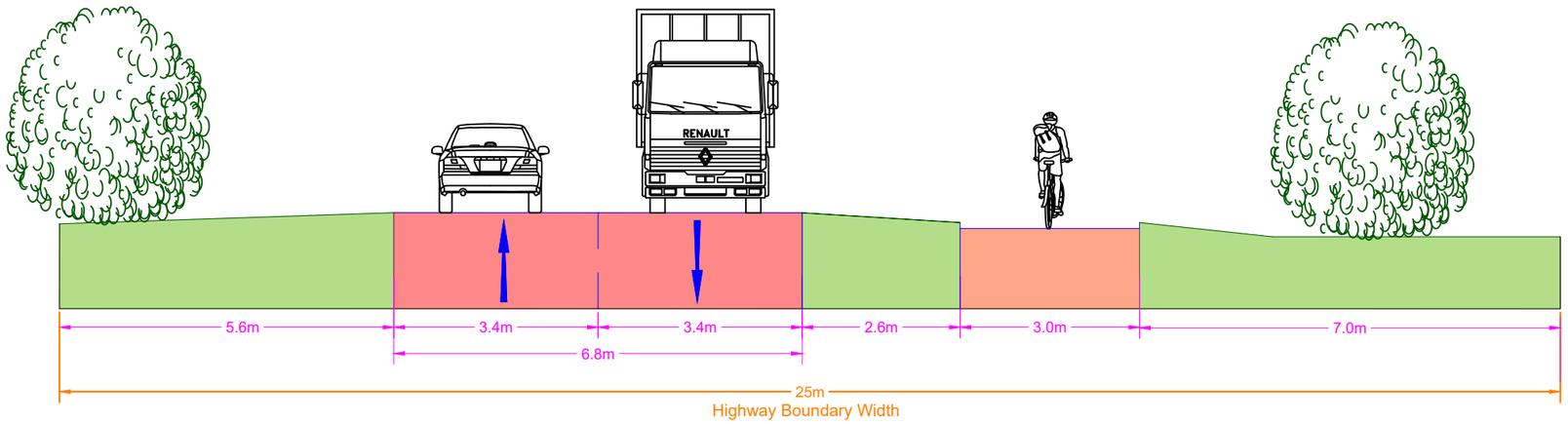

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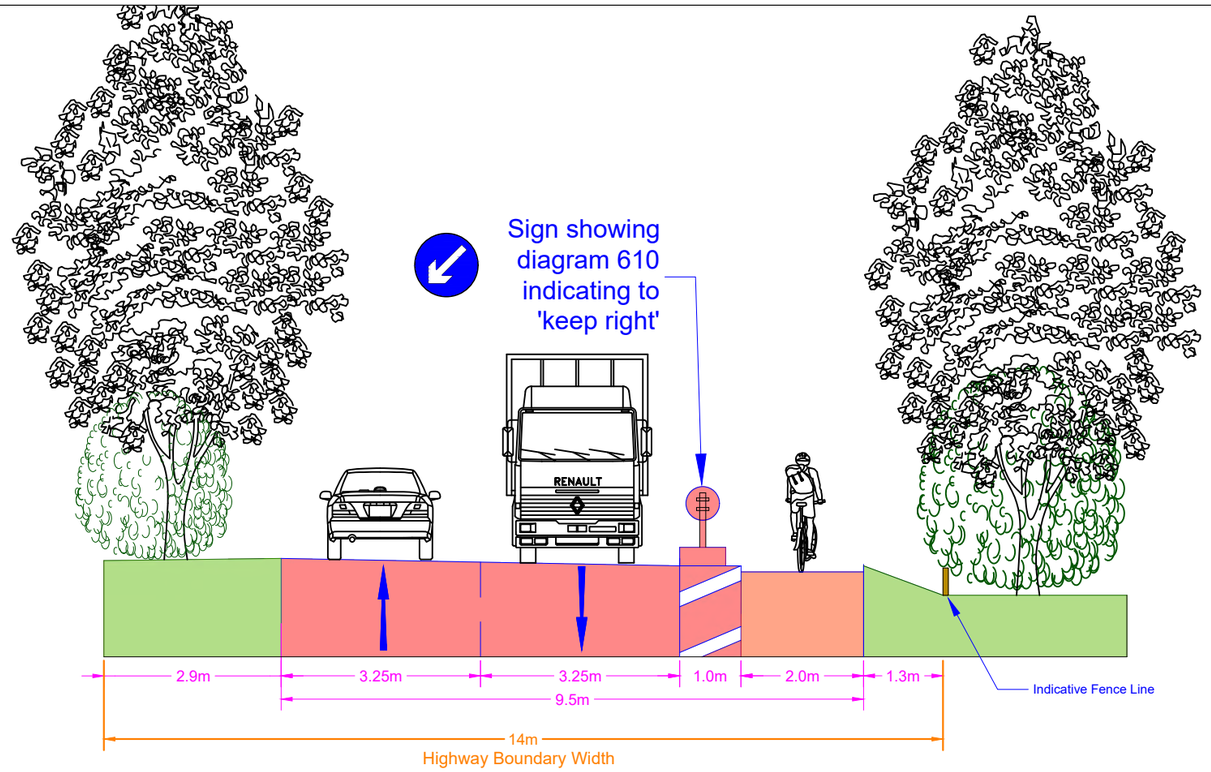

- All vegetation indicative
- Cycleway
- Carrigeway
- Carrigeway Hatching

REV	DESCRIPTION	DRAWN	INITIALS	DATE

DTA
Transport Planning Consultants

Forester House, Doctors Lane,
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Warwickshire B95 5AW
Tel: +44(0)1564 793598
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www.dtatransportation.co.uk

JOB TITLE	CLIENT
M40 JUNCTION 10	ALBION LAND

DRAWING TITLE
PROPOSED CYCLEWAY
CONCEPT PLAN
CROSS SECTIONS

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
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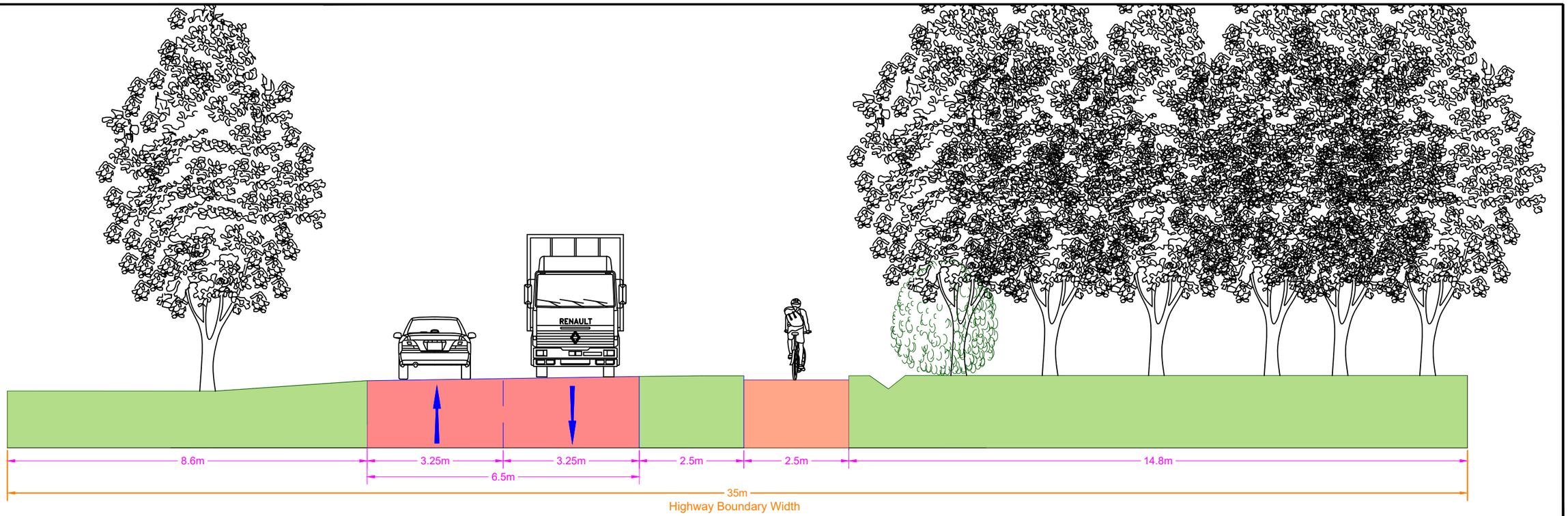
C



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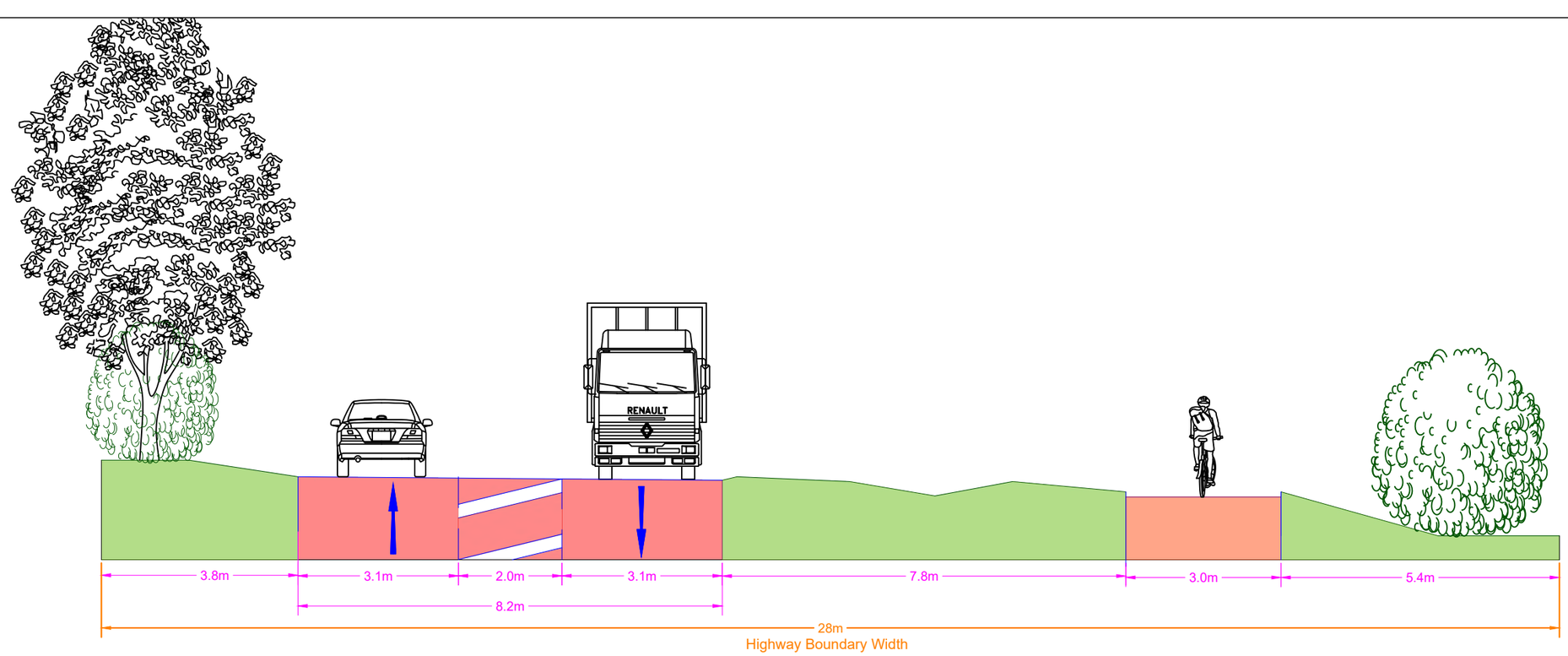

- All vegetation indicative
- Cycleway
- Carrigeway
- Carrigeway Hatching

REV	DESCRIPTION	DRAWN	INITIALS	DATE

DTA
Transport Planning Consultants

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Warwickshire B95 5AW
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JOB TITLE	CLIENT
M40 JUNCTION 10	ALBION LAND

DRAWING TITLE
PROPOSED CYCLEWAY
CONCEPT PLAN
CROSS SECTIONS

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:100@A3	BM	APR 24	17213-30-CS-2	H

APPENDIX G

Bicester Traffic Model Uncertainty Log

A099211-05 Bicester Transport Model
BTM_UncertaintyLog_Post2022Update_Clean_(2026-2031)-Tritax

Summary of Spreadsheet: Uncertainty log for Bicester Transport Model (2022 Update Version)

Original Author: Sacha Pearson

Notes: This version of the uncertainty log has been created specifically in relation to the Tritax Symmetry Barnards Green project. The 2026 and 2031 Reference Case scenarios produced for that project removed the Baynards Green improvement works, as per email correspondance between Sacha Pearson (Tetra Tech) and James Bancroft (Vectos) of 18th October 2022.

SUMMARY OF WORKSHEETS	
Tab Name	**Brief Explanation**
Residential	Presents data for residential developments
Employment	Presents data for employment developments
Retail	Presents data for retail developments
Education	Presents data for education developments
Infrastructure	Presents data for infrastucture schemes

CHECK LOG		
Date	**Initials**	**Description**
05/07/2022	SP	Spreadsheet created from file 'BTM_UncertaintyLog_Post2022Update_ZoneDistribution'

ISSUE LOG		
Date	**Initials**	**Description**
05/07/2022	SP	Issued to Jubb in relation to Hawkwell Village development
06/07/2022	SP	Issued to Vectos in relation to Tritax Symmetry Baynards Green development
17/01/2023	SP	Inf144 (HPA Mitigation: M40 J10 - Signals on Baynards Green roundabout) removed
17/01/2023	SP	Issued to Vectos in relation to Tritax Symmetry Baynards Green development

ID	Name	Description / Planning Reference / Notes	Dev Type	2026 (2)	2031 (2)	Certainty
Res101	Bicester Community Hospital Kings End	12/00809/F	C3Dwellings	14	14	Completed (March 2017)
Res102	Former Oxfordshire County Council Highways Depot	Competed by mid 2016 so traffic is in the base model traffic counts	C3Dwellings	62	62	Completed (March 2016)
Res103	Gavray Drive (Bicester 13)	15/02074/OUT, 17/01253/REM	C3Dwellings	100	300	More Than Likely
Res104	Graven Hill (Bicester 2)	11/01494/OUT. 17/02107/LDO	C3Dwellings	846	1496	More Than Likely
Res105	Kingsmere (South West Bicester) - Phase 1	06/00967/OUT. 14/010207/OUT. 16/00192/REM. 11/01840/F. 13/00433/OUT. 17/01849/F. 18/01721/OUT.	C3Dwellings	1740	1740	Near Certain
Res106	Land at Skimmingdish Lane	14/00697/F	C3Dwellings	46	46	Completed (Sept 2019)
Res107	Land South of Church Lane (Old Place Yard and St Edburgs)	16/00043/F. 20/02405/F	C3Dwellings	14	14	Near Certain
Res108	Land South of Talisman Road	09/01592/OUT. 13/01226/REM	C3Dwellings	125	125	Completed (March 2018)
Res109	North West Bicester Eco-Town Exemplar Project	10/01780/HYBRID. 21/01227/F.	C3Dwellings	396	396	Near Certain
Res110a	North West Bicester Phase 2 (Himley Village)	14/02121/OUT. 21/02339/REM	C3Dwellings	500	500	Near Certain
Res110b	North West Bicester Phase 2 (remainder)	17/00455/HYBRID. 14/02121/OUT. 14/01641/OUT. 14/01384/OUT. 21/01630/OUT.	C3Dwellings	0	1080	More Than Likely
Res111	South East Bicester (Wretchwick Green) (Bicester 12)	16/01268/OUT	C3Dwellings	150	1050	More Than Likely
Res112	South West Bicester Phase 2 (Bicester 3)	13/00847/OUT. 18/00647/REM. 18/01777/REM. 19/02225/REM.	C3Dwellings	709	709	Near Certain
Res113	St Edburg's School, Cemetery Road	17/01578/OUT	C3Dwellings	10	10	More Than Likely
Res114	Winners Bargain Centres, Victoria Road	Completed in late 2016 so traffic will not be in the base traffic counts	C3Dwellings	42	42	Completed (Sept 2016)
Res115	Windfall Allowance (<10 dwellings)	Note: This allowance cannot be included in the model due to lack of location details.	C3Dwellings	183	208	-
Res116	Land at Bessemer Close / Launton Road	15/02074/OUT. 17/01253/REM.	C3Dwellings	70	70	Completed (Dec 2019)
Res117	Cattlemarket	01/00073/CDC	C3Dwellings	40	40	More Than Likely
Res118	Former RAF Upper Heyford	Local Plan allocation (2015) - Villages 5. 10/01642/OUT. 13/01811/OUT. 16/00627/REM. 16/00263/F. 16/00627/REM. 16/02446/F. 19/00446/F. 15/01357/F. 18/00825/HYBRID.	C3Dwellings	1374	2124	Near Certain
Res118a	Upper Heyford	These two sites (represented by different zones in the BTM) comprise the total dwellings detailed in the AMR reports for	C3Dwellings	761	761	Near Certain
Res118b	Heyford Park Allocation		C3Dwellings	613	1363	Near Certain
Res119	Transco Depot, Launton Road	Competed by mid 2016 so traffic is in the base model traffic counts	C3Dwellings	23	23	Completed (Dec 2013)
Res120	West of Chapel St. & Bryan House	Competed by mid 2016 so traffic is in the base model traffic counts	C3Dwellings	5	5	Completed (sept 2013)
Res121	Inside Out Interiors, 85-87 Churchill Road, Bicester	16/02461/OUT. 19/01276/REM.	C3Dwellings	10	10	More Than Likely
Res122	Kings End Antiques, Kings End, Bicester	19/02311/OUT	C3Dwellings	10	10	More Than Likely
Res123	Bicester Gateway Business Park, Wendlebury Road, Bicester (Phase 1B)	20/00293/OUT	C3Dwellings	160	273	More Than Likely
Res124	The Paddocks, Chesterton	14/01737/OUT. 16/00219/REM.	C3Dwellings	45	45	More Than Likely
Res125	Land East Of Jersey Cottages Station Road, Ardley	18/01881/F	C3Dwellings	13	13	More Than Likely
Res126	Land North Of Oak View, Weston On The Green	13/01796/OUT. 16/00574/REM. 17/01458/OUT. 18/02066/F.	C3Dwellings	24	24	More Than Likely

Bicester Transport Model Uncertainty Log - 2022 Update
Residential Developments

ID	Name	Description / Planning Reference / Notes	Dev Type			Certainty
				2026	2031	
Ret1	Bicester Village Phase 4	**15/00082/F**: Demolition of existing Tesco food store, and petrol filling station to provide an extension to the Bicester Village retail outlet centre. Comprises 5,181 sqm (GIA) of class A retail floorspace. Development was completed by 2019, but after base model was validated using 2016 traffic count data.	A1	5181	5181	Completed
Ret2	Bicester Gateway (Kingsmere Retail) (Bicester 3)	**16/02505/OUT**: Bicester Gateway (Kingsmere Retail) Four Class A1 (retail) units, one Class A3 (cafe/restaurants) unit, a Class D2 (gym) unit. The planning application form sets the development quantum at 7,832sqm of A1, 443sqm of A3 and 967sqm of D2 (a total of 9,242sqm). The TA that accompanied the planning application used slightly different floor areas to calculate trips, these being 7,472sqm of non-food retail (A1), 891sqm of food retail (A1), 494sqm for a restaurant (A3) and 1,056sqm for a gym (D2) which gives a total of 9,913sqm. The development was under construction in July 2019 and open by 2021.	A1 / A3 / D2	9913	9913	Completed
Ret3	McDonalds Drive-thru	**17/00889/F:** Two storey drive-thru restaurant (class A3/A5) with flor area of 548sqm. Development was completed by 2019, but after base model was validated using 2016 traffic count data.	A1 / A5	548	548	Completed

Notes: (1) Completion rates are in square metres (sqm) of floor area.

Bicester Transport Model Uncertainty Log - 2022 Update
Retail Development

ID	Name	Description / Planning Reference / Notes	Dev Type	2026	2031	Certainty
Emp101	NW Bicester (Bicester 1)	**20/02454/REM**: Reserved Matters application to 19/00347/OUT - layout, scale, appearance and landscaping details for Phase 2 of the employment development (23,226 sqm flexible B1c and / or B2 / and/or B8 floorspace), associated utilities and infrastructure and swale (SuDS) and strategic green infrastructure landscaping. **19/00349/REM**: Reserved Matters to 19/00347/OUT - layout, scale, appearance and landscaping details for Phase 1 of the employment development (21,584 sq.m flexible B1c / B2 / B8 floorspace) and earthworks for Phase 2 of the	B2	15,900	15,900	Completed
			B8	37,100	37,100	
			Total	**44,810**	**44,810**	
Emp102	Graven Hill (Bicester 2)	Subsequent planning applications (15/02159/OUT, 16/01802/OUT, 18/00325/OUT, 19/00937/OUT) have varied the planning conditions, however the quantum of B-class employment uses is unchanged. **11/01494/OUT**: Redevelopment of former MOD sites including employment floorspace comprising up to B1(a) 2,160sqm, B1(b) 2,400sqm, B1(c) and B2 20,520sqm and B8 uses up to 66,960sqm. The TA that accompanied the application did not differentiate between B1(c) and B2, and uses TRICS data for a combined 'B1(c)/B2 Light Industry' land use.	B1(a)	1,080	2,160	Near Certain
			B1(b)	1,200	2,400	
			B2	10,260	20,520	
			B8	34,079	68,158	
			Total	**46,619**	**93,238**	
Emp103	Bicester Business Park (Bicester 4)	**17/02534/OUT**: The erection of a business park of up to 60,000 sq.m (GEA) of flexible Class B1(a) office / Class B1(b) research & development floorspace. Outline permission was granted in May 2020. The TA that accompanied the planning application used pre-agreed trip rates and did not differentiate between B1(a) and B1(b) uses. B1(a) has therefore been used as a worst case scenario.	B1(a)	30,000	60,000	Near Certain
Emp104	Bicester Gateway (Bicester 10)	**20/00293/OUT**: Outline application (Phase 1B) for approximately 4,413 sqm B1 office space (47,502 sqft) GIA, approximately 15,030 sqm (161,800 sqft) GIA of residential space (comprising approximately 273 residential units). The 273 dwellings have been included in the updated residential element of the uncertainty log, **therefore the B1 area from 16/02586/OUT is superseded by the 4,413 sqm**.	B1(a)	4,413	4,413	Near Certain
		16/02586/OUT: Phase 1 of the proposed new business park ("Bicester Gateway") comprising up to 14,972 sqm (Gross External Area) of B1 employment based buildings, plus a hotel (up to 149 bedrooms). The application form details 10,000sqm of B1(a) and 2,726sqm of B1(b) [internal floor area], however the TA that accompanied the planning application calculated traffic based purely on B1(a) office trip rates from TRICS.	Hotel employees	50	50	Completed
Emp105	NE Bicester Business Park (Bicester 11)	**15/01012/OUT**: Land North East Of Skimmingdish Lane: Development of up to 48,308sqm of employment floorspace (Class B1c, B2, B8 and ancillary B1a uses). The TA that accompanied the application accounted for traffic being generated from 14,492 sqm of B2 and 33,816 sqm of B8 land use.	B2	14,492	14,492	Completed
			B8	33,816	33,816	
			Total	**48,308**	**48,308**	
Emp106	Wretchwick Green (Bicester 12)	**16/01268/OUT** - Outline application for residential development including up to 1,500 dwellings, **up to 7ha of employment land for B1 and / or B8 uses**, a local centre with retail and community use and up to a 3 Form Entry Primary School. The TA that accopanied the planning application did not specify a split of B1 / B8 use, and did not calculate trips - instead it used traffic data directly from the BTM. The B1 / B8 floor areas from the previous Uncertainty Log have therefore been maintained.	B1(c)	22,733	45,465	Near Certain
			B8	15,913	31,826	
			Total	**38,646**	**77,291**	
Emp107	SE Bicester (Symetry Park) (Bicester 12)	**21/01330/F**: Full Planning Permission for **23,195sqm** of logistics floor space within Class B8 of the Town and Country Planning Use Classes Order 1987, including ancillary Class E(g)(i) (offices) (**Unit C**). NOTE: This is on the same plot of land as Unit C in application 19/00388/F. **21/01331/F**: Full Planning Permission for 22,986sqm of logistics floor space within class B8 of the Town and Country Planning Use Classes Order 1987, including 1,399sqm ancillary Class E(g)(i) offices, comprising (i) Unit C1: 15,267sqm of Class B8 and 729sqm of ancillary Class E(g)(i) offices, (ii) Unit C2: 7,719sqm of Class B8 and 670sqm of ancillary Class E(g)(i) offices. NOTE: These are on the same plot of land as Unit C in application 19/00388/F. **20/00530/F**: (Symmetry Park **Phase 2**) Full planning application for **4,635sqm** of logistics floor space, within Class B8, including ancillary Class B1 (a) office.	B8 (Units A1 and A2)	18,394	18,394	Near Certain
			B8 (Unit B)	14,200	14,200	
			B8 (Unit C)	23,195	23,195	
			B8 (Phase 2)	4,635	4,635	
			Total	**60,424**	**60,424**	
Emp114	Bicester Village Phase 4	**15/00082/F**: Demolition of existing Tesco food store, petrol, filling station and part of the existing Bicester Village retail outlet centre, to provide an extension to provide new A class floor space. The TA accompanying the planning application details that there would be 5,181 sqm (GIA) retail floorspace.	Retail employment	5,181	5,181	Completed
Emp115	Bicester Gateway (Kingsmere Retail)	**16/02505/OUT**: Bicester Gateway (Kingsmere - Retail) Four Class A1 (retail) units, one Class A3 (cafe/restaurants) unit, a Class D2 (gym) unit. The planning application form sets the development quantum at 7,832sqm of A1, 443sqm of A3 and 967sqm of D2 (a total of 9,242sqm). The TA that accompanied the planning application used slightly different floor areas to calculate trips, these being 7,472sqm of non-food retail (A1), 891sqm of food retail (A1), 494sqm for a restaurant (A3) and 1,056sqm for a gym (D2) which gives a total of 9,913sqm. The development was under construction in July 2019 and open by 2021.	Retail / leisure employment	9,913	9,913	Near Certain
Emp116	McDonalds Drive-thru	**17/00889/F**: Two storey drive-thru restaurant (class A3 / A5) - 548sqm	Retail employment	548	548	Completed
Emp117	Heyford Park Consented [2]	1700 jobs in total predicted. Already 1509 jobs in 2016, therefore scope for an additional 191 jobs.	Number of Jobs	191	191	Near Certain
Emp118	Heyford Park Allocated	**18/00825/HYBRID**: Hybrid planning application that includes 35175sqm of new employment buildings, comprising up to 6330sqm Class B1(a), 13635sqm B1(b/c), 9250sqm Class B2, and 5960sqm B8. The TA that accompanied the planning aplication calculated employment trips based on there being B1(a), B2 and B8 development.	B1(a)	3165	6330	Near Certain
			B2	11443	22885	
			B8	2980	5960	
			Total	**17,588**	**35,175**	
Emp119	Great Wolf Lodge, Chesterton	**19/02550/F**: Redevelopment of part of golf course to provide new leisure resort (sui generis) incorporating waterpark, family entertainment centre, hotel, conferencing facilities and restaurants. Under the Employment secion of the planning application form it is noted that the proposed development would have 460 equivalent number of full time employees.	Number of Jobs	460	460	Near Certain
Emp120	Ardley Energy Recovery Facility [3]	This development was operational in 2016, so car / goods vehicle traffic flows from the development at that time will have been included in the base traffic count data, all be it that the site is not specifically modelled as a zone in the BTM. The proposed increase in waste to be processed will increase goods vehicle movements by **10 two-way trips per day**, as set out in the reports that accompanied the 2017 application. **CDC Ref 17/02104/CM, County Ref: MW/0085/17**: Application seeking to increase the maximum limit of waste that can be processed by the Ardley Energy Recovery Facility (ERF) from 300,000 tonnes per annum to 326,300 tonnes per annum. **CDC Ref: 08/02472/CM, County Ref: MW/0044/08**: The construction and operation of an energy from waste facility. The application form notes that there will be 40 employees.	Number of Jobs	0	0	Completed
Emp121	Bicester Heritage (Hotel)	**18/01253/F**: Erection of hotel and conference facility (Permission granted March 2020). Planning form details a floor area of 18,003sqm, 343 bedrooms and 180 full-time equivalent employees. The TA that accompanied the planning application calculated trips based on number of bedrooms and using TRICS.	Number of Jobs	180	180	Near Certain
Emp122	Bicester Heritage (Experience Quarter)	**21/01224/OUT**: Outline planning application for Automotive Experience Quarter comprising Commercial, Business and Services uses (Class E), Light Industrial (Class B2), Local Community and Learning Uses (Class F) and vehicle circuits (Sui Generis). **Note: Application has not been decided yet – currently under consultation**. The TA that accompanied the planning application calculates trips on a first principals basis, and assumes circa 200 full-time	Number of Jobs	100	200	More than likely
			Number of Visitors	313	625	More than likely
Emp123	Bicester Heritage (Extension to technical site)	**18/01333/F**: Extension to existing Technical Site to provide new employment units comprising flexible B1(c) light industrial, B2 (general industrial), B8 (storage or distribution) uses with ancillary offices, storage, display and sales. The TA that accompanied the planning application details that there will be 6,530sqm of B1c / B2 / B8, but calulcates traffic generation based on traffic surveys of the existing site, and does not break the overall floor area down into individual land use classes. OCC have indicated that as of April 2022 the development has been built and occupied. Note: Veicular access will be via the eixisitng priotity junction onto the A4221 Buckingham Road.	B1(c)	2,177	2,177	Completed
			B2	2,177	2,177	
			B8	2,177	2,177	
			Total	**6,530**	**6,530**	
Emp124	Bicester Heritage (Innovation Quarter)	**19/02708/OUT**: Provide new employment units comprising B1 (Business), B2 (General Industrial), B8 (Storage) and D1 (Education) uses with ancillary offices, storage, display and sales. The planning application form details that there will be 21,994sqm of non-residential floorspace, while the TA that accompanied the planning application details that there will be 21,194sqm of light industrial/workshops/vehicle maintenance/repair workshops (B1c, B2 & B8). The TA calulcates traffic generation based on traffic surveys of the existing site, and does not break the overall floor area down into individual land use classes.	B1(c)	3,666	7,331	Near Certain
			B2	3,666	7,331	
			B8	3,666	7,331	
			Total	**10,997**	**21,994**	
Emp125	Bicester Catalyst	**19/01740/HYBRID**: 'Hybrid' planning application comprising: - Outline planning permission for B1 development (Use Classes B1a and/or B1b and/or B1c); highway works (including provision of a new roundabout at the junction between Vendee Drive and Wendlebury Road). - Full planning permission for a health and racquets club, associated access and car parking, outdoor tennis courts, air dome, outdoor swimming pool, spa garden and terrace, and associated landscaping. The planning application fom details that the development will employ 1159 staff. The planing statement details that the health and racquets club would generate in the order of 110 jobs. **20/02779/REM**: Reserved Matters application to 19/01740/HYBRID - layout, scale, appearance and landscaping details for Phase 1 of the employment development (5,126 sqm GIA), enabling works for later phases and SuDS Swale delivery, with associated landscaping, utilities and access.	Number of Jobs (B1)	1,049	1,049	Under Construction
			Number of Jobs (Health Club)	110	110	

Notes: (1) Completion rates are in square metres (sqm) of floor area, unless specified otherwise.
(2) Heyford Park consented data is in number of jobs rather than floor area
(3) This development was operational in 2016 so car / goods vehicle traffic flows will have been included in the base traffic count data. The extra 10 two-way HGV trips resulting from the increase in waste limit is not significant and will not be speciifcally modelled.

Bicester Transport Model Uncertainty Log - 2022 Update
Employment Development

ID	Name	Description / Planning Reference / Notes	Dev Type			Certainty
				2026	2031	
Sch101	Bicester – SW (Kingsmere)	Due to open 2019	600 place secondary school	600	600	Near Certain
Sch102	Bicester – SW (Kingsmere)	Possibly +420 places, most likely after 2021 but by 2026	Primary: Probably 2fe	420	420	More Than Likely
Sch103	Bicester – S (Graven Hill)	Start delayed but still expected by 2026 (comment from CDC in October 2021)	Primary: 2 - 3fe	630	630	Near Certain
Sch104	Bicester – NW (Ecotown)	+210 places in 2017; probably another +210 places by 2021; by 2026 say another +420 places; another +420 places possible by 2031 or might be later.	3 - 4 primaries	840	1260	More Than Likely
Sch105	Bicester – NW (Ecotown)	Assume +600 by 2026; possibly another +600 by 2031	Secondary: size tbc	600	1200	More Than Likely
Sch106	Bicester – SE	Possibly +420 places, most likely after 2021 but by 2026	Primary: 2fe	420	420	More Than Likely
Sch107	Longfield	Longfield increase this year from 1.5fe to 2fe	Primary	79	101	Completed
Sch108	Launton	Launton is looking at going up from 175 to 210 places from 2017, subject to consultation	Primary	35	35	Hypothetical
Sch109	St Edburgs	St Edburg's is now 2fe in its new location, with actual pupil numbers still to rise.	Primary	348	528	Completed
Sch110	Upper Heyford committed	These are additional places as part of the existing permission	Primary	0	280	Near Certain
Sch111	Upper Heyford committed	These are additional places as part of the existing permission	Secondary	0	180	Near Certain
Sch112	Upper Heyford allocation	These are additional places for the allocation	Primary	0	315	Reasonably Foreseeable
Sch113	Upper Heyford allocation	These are additional places for the allocation	Secondary	0	315	Reasonably Foreseeable

Notes: (1) Completion rates are in number of pupils.

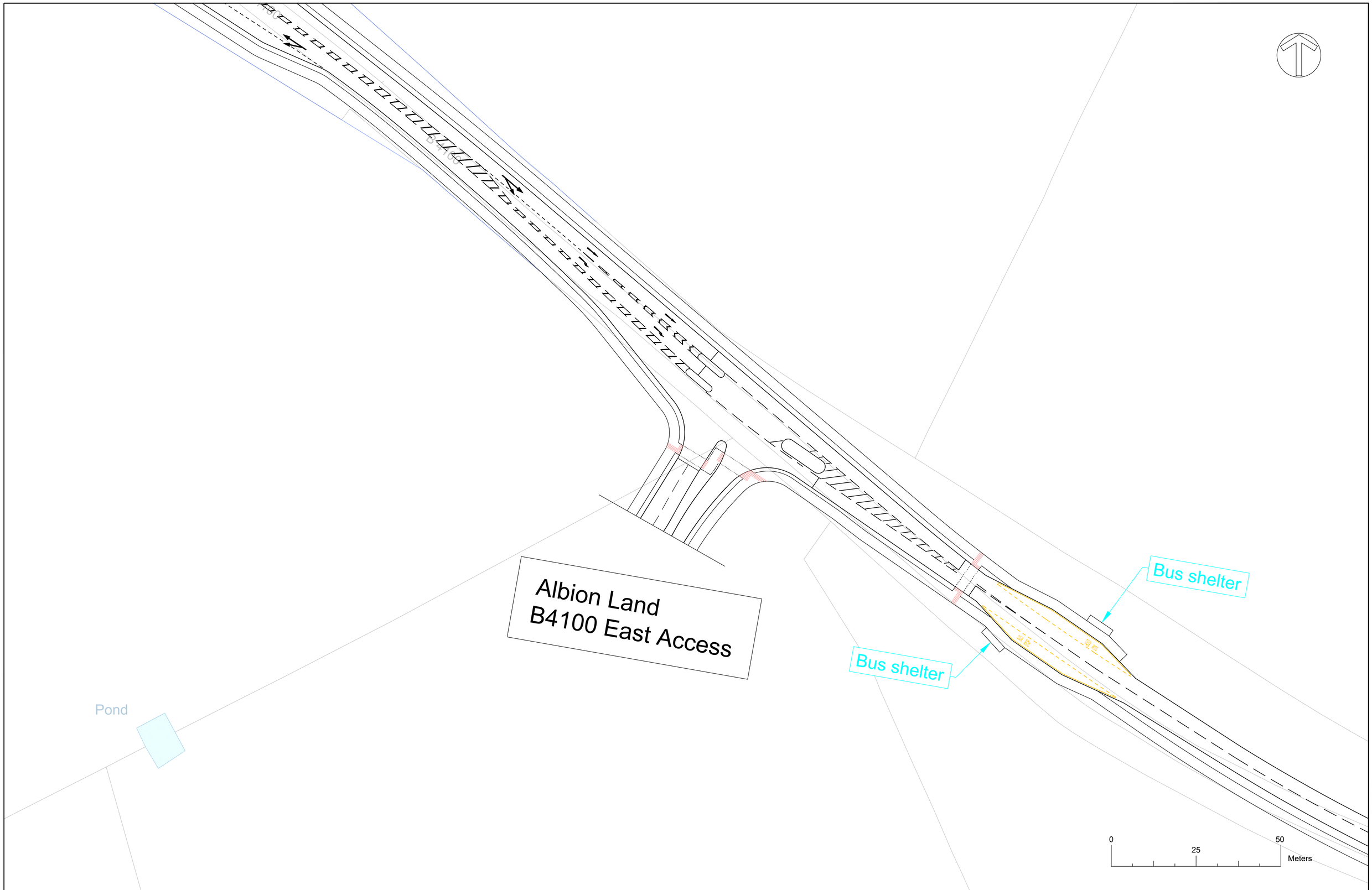
Bicester Transport Model Uncertainty Log - 2022 Update
Education Development

ID	Name	Description / Planning Reference / Notes	Dev Type	2026	2031	Certainty
Inf101	London Road level crossing	Closure time was a total of 16 minutes during the 2016 base surveys. Do Minimum to assume total closure every hour for 31 minutes from 2026.	Infrastructure	Yes	Yes	Near Certain
Inf102	NW Bicester: Exemplar site and Himley Village [1]	Iinternal road network required to serve the Exemplar and Himley Village development sites.	Infrastructure	Yes	Yes	Near Certain
Inf103	NW Bicester: Strategic Link Road	This comprises the full NW Bicester Strategic Link Road	Infrastructure	No	Yes	More Than Likely
Inf104	SE Bicester Wretchwick Green	Associated Infrastructure	Infrastructure	Yes	Yes	Near Certain
Inf105	SE Bicester Additional Area	Access Arrangements	Infrastructure	Yes	Yes	More Than Likely
Inf106	Proposed new Garden Town motorway junction	(location to be determined)	Infrastructure	No	No	Hypothetical
Inf107	A41 infrastructure improvements and bus priority	Potential bus priority improvements on A41 from Jn 9 to Boundary Way.	Infrastructure	No	No	Hypothetical
Inf108	Vendee Drive improvements	To be determined	Infrastructure	No	No	Hypothetical
Inf109	Western peripheral corridor	Realigning the A4095 Howes Lane, including a new tunnel under the railway	Infrastructure	No	Yes	Near Certain
Inf110	Western peripheral corridor	Improvements to Lord's Lane / B4100 roundabout	Infrastructure	Yes	Yes	More Than Likely
Inf111	Eastern peripheral corridor	Replace level crossing on Charbridge Lane with a road bridge. Level crossing had been removed by April 2021 (based on google street view)	Infrastructure	Yes	Yes	Completed
Inf112	Eastern peripheral corridor	Upgrade the A4421 Charbridge Lane to dual facility plus junction improvements - to Charbridge Lane/ Bicester Rd roundabout	Infrastructure	No	No	Hypothetical
Inf113	Eastern peripheral corridor	Upgrade the A4421 Skimmingdish Lane to dual facility plus junction improvements (to A4421/Bicester Rd roundabout)	Infrastructure	No	No	Hypothetical
Inf114	Eastern peripheral corridor:	A link through the SE development site to aid connectivity and provide capacity	Infrastructure	Yes	Yes	More Than Likely
Inf115	Pioneer Road roundabout improvements	Design agreed and costed - fully grant funded and contract about to be let for imminent construction start (these comments provided by CDC in October 2021). Construction underway in November 2021 based on google street view.	Infrastructure	Yes	Yes	Near Certain
Inf155b	Ploughley Road	Ploughley Road / A41 Junction Improvements	Infrastructure	Yes	Yes	Near Certain
Inf116	Southern peripheral corridor:	A new south east link road - route options	Infrastructure	No	No	Hypothetical
Inf117	London Road level crossing solution	Hypothetial, therefore not included	Infrastructure	No	No	Hypothetical
Inf118	Oxford Rd / Pingle Drive juncrion	Upgrading of roundabout to signal controlled junction. Work completed by September 2018 (based on google street view)	Infrastructure	Yes	Yes	Completed
Inf119	A41/ Neunkirchen Way Roundabout (Rodney House)	Signalisation of priority roundabout. Construction underway in Sept 2018 and scheme complete by July 2019 (based on google street view)	Infrastructure	Yes	Yes	Completed
Inf120	A41 Oxford Rd / Boundary Way roundabout	Upgrading of priority roundabout to signal controlled 'hamburger' junction. Construction underway in Sept 2016 and scheme complete by May 2017 (based on google street view)	Infrastructure	Yes	Yes	Completed
Inf122	Bus Route S5/X5	Inter Urban 8ph (2 pk via Kingsmere) Expected to be 4bph (2bph peak via Kingsmere) later in 2022	Infrastructure	Yes	Yes	Near Certain
Inf123	Bus Route 25A (Now renamed 250)	This is as per 2016 - Will be amended to operate Heyfords – Bicester only in early 2023. Funding secured to beyond 2031	Infrastructure	1ph	1ph	
Inf124	Bus Route E1	NW Bicester NE - Exists, but funding expires May 2023	Infrastructure	No	No	More Than Likely
Inf125	Bus Route E2	NW Bicester SE - Dependent on progress of development north of Middleton Stoney Road	Infrastructure	No	6ph	More Than Likely
Inf126	Bus Route E3	NW Bicester NE - Likely to supersede bus service E1 – but hopefully there will not be a funding gap	Infrastructure	No	6ph	More Than Likely
Inf127	Bus Route 21	Highfield 2ph - Exists, commercial service	Infrastructure	Yes	Yes	Near Certain
Inf128	Bus Route SEB	SE Bicester 2ph - Services 29/H5 provides 2bph to Graven Hill/Ambrosden, contract until December 2024	Infrastructure	Yes	Yes	More Than Likely
Inf129	Bus Route GH	Graven Hill 2ph - See above, but likely service will exist beyond 2024 as additional funds secured from Graven Hill and Health Hub. Wretchwick Green will also provide funds for bus services once it is delivered	Infrastructure	Yes	Yes	More Than Likely
Inf130	Bus Route 26	Kingsmere 2ph - Exists – agreement was for 8 years after occupation of Phase 2 so probably until about 2028. Can be absorbed into other services (Heyford/Himley/Great Wolf) if needed	Infrastructure	Yes	Yes	More Than Likely
Inf131	Reading – Bedford with a headway of 60 minutes all day;	East West Rail comprises four new services:	Infrastructure	Yes	Yes	More Than Likely
Inf132	Reading – Milton Keynes with a headway of 60 minutes all day;	East West Rail comprises four new services:	Infrastructure	Yes	Yes	More Than Likely
Inf133	Bletchley – Milton Keynes with a headway of 60 minutes all day;	East West Rail comprises four new services:	Infrastructure	Yes	Yes	More Than Likely
Inf134	Milton Keynes – Marylebone with a headway of 60 minutes all day.	East West Rail comprises four new services:	Infrastructure	Yes	Yes	More Than Likely
Inf135	Evergreen3 from Chiltern Railway	Consists of the creation of a new service between Oxford and London Marylebone, with a headway of 30 minutes all day.	Infrastructure	N/A	N/A	Completed
Inf136	Kingsmere Retail Mitigation Scheme	**16/02505/OUT**: Bicester Gateway (Kingsmere Retail) Four Class A1 (retail) units, one Class A3 (cafe/restaurants) unit, a Class D2 (gym) unit. The highway improvement works set out in Appendix G the TA comprise changes on the A41 to the Pioneer Way, Lakeview Drive and B4030 junctions. These works were under construction in July 2019 and complete by 2021.	Infrastructure	Yes	Yes	Near Certain
Inf137	Bicester 10 transport mitigation	**16/02586/OUT**: TA that accompanied this application details improvements at the A41 / Vendee Drive Roundabout (increased flare lengths on Vendee Drive and Charles Shoulder Way arms) and the Vendee Drive /Wendlebury Road Priority Junction (conversion to a mini-roundabout).	Infrastructure	Yes	Yes	Near Certain
Inf138	Bicester 11 Transport Mitigation	**15/01012/OUT**: Land North East Of Skimmingdish Lane: Development of up to 48,308sqm of employment floorspace (Class B1c, B2, B8 and ancillary B1a uses). Highway access via a new ghost island junction onto Skimmingdish Lane. Highway mitigation include signal pedestrian crossing on Skimmingdish Lane and alterations to A4421 / Lauton Road roundabout to increase the SE arm to two lanes at the give-way line. Development was built by Sept 2018 (based on google street view).	Infrastructure	Yes	Yes	Completed
Inf139	Skimmingdish Lane housing site mitigation	**14/00697/F**: Land To Rear Of Tangmere Close And Scampton Close, Skimmingdish Lane, Bicester (46 dwellings). Highway access via a new ghost island junction onto Skimmingdish Lane. Construction of development had not begun in May 2017, though access junction had been constructed. Development was built by Sept 2018 (based on google street view).	Infrastructure	Yes	Yes	Completed
Inf140	A4095 / A4260 Shipton Junction	Quarry site access requirements. Signalisation of the existing A4095 / A4260 staggared priority crossraods junction.	Infrastructure	No	Yes	Near Certain
Inf141	Bicester 4	**17/02534/OUT**: The erection of a business park of up to 60,000 sq.m (GEA) of flexible Class B1(a) office / Class B1(b) research & development floorspace. The TA that accompanied the planning application detailed highway improvement works at the A41 / Lakeland Drive signal junction (additional right turn lane into Lakeland Drive and additional southbound ahead lane on the A41) and the Oxford Road / Middleton Stoney Road mini roundabout (additional lane at southbound give-way line). Outline permission was granted in May 2020 and none of the improvement works were in place by 2021.	Infrastructure	Yes	Yes	Near Certain
Inf142	Heyford Park Existing Permission Infrastructure	This comprises the access roads required to allow connection to the highway network only e.g. access junctions on Camp Road.	Infrastructure	Yes	Yes	Completed
Inf143	HPA Mitigation: Public transport	Increased bus services to to HPA site	Infrastructure	Yes	Yes	Near Certain
Inf145	HPA Mitigation: M40 J10	Signals on Padbury roundabout	Infrastructure	Yes	Yes	Near Certain
Inf146	HPA Mitigation: B430 / Unammed Road Junction	Existing three arm priority junction changed to signal controllled junction	Infrastructure	No	Yes	Near Certain
Inf147	HPA Mitigation:Hopcrofts Holt Junction	Increased capacity at existing signal controlled junction	Infrastructure	No	Yes	Near Certain
Inf148	HPA Mitigation: Middleton Stoney Junction	Improvements to existing four arm signal controlled junction in the centre of Middleton Stoney	Infrastructure	Yes	Yes	Near Certain
Inf149	HPA Mitigation: Ardley Village B430 Signalisation	Existing staggered priority crossroads changed to a signal junction	Infrastructure	Yes	Yes	Near Certain
Inf150	HPA Mitigation: Chilgrove Drive / Camp Road Junction Upgrade	Existing staggered priority crossroads changed to a signal junction	Infrastructure	Yes	Yes	Near Certain
Inf151	Great Wolf Lodge, Chesterton	**19/02550/F**: Redevelopment of part of golf course to provide new leisure resort (sui generis) incorporating waterpark, family entertainment centre, hotel, conferencing facilities and restaurants. Vehicular access will be provided via a new ghost island priority junction onto the A4095.	Infrastructure	Yes	Yes	Near Certain
Inf152	Bicester Heritage (Hotel)	**18/01253/F**: Erection of hotel and conference facility. Vehicular access will be provided via a new ghost island priority junction onto the A4221 Buckingham Road.	Infrastructure	Yes	Yes	Near Certain
Inf153	Bicester Heritage (Experience Quarter)	**21/01224/OUT**: Outline planning application for Automotive Experience Quarter comprising Commercial, Business and Services uses (Class E), Light Industrial (Class B2), Local Community and Learning Uses (Class F) and vehicle circuits (Sui Generis). Vehicular access will be provided via a new ghost island priority junction onto the A4221 Buckingham Road.	Infrastructure	Yes	Yes	More Than Likely
Inf154	Bicester Heritage (Innovation Quarter)	**19/02708/OUT**: Provide new employment units comprising B1(c), B2, B8 and D1. Vehicular access will be provided via a new ghost island priority junction onto the A4221 Skimmingdish Lane. Note: Egress from the site onto Skimmingdish Lane will be left turn only.	Infrastructure	Yes	Yes	Near Certain
Inf155	Bicester Catalyst	**19/01740/HYBRID**: Outline planning permission for B1 development; highway works (including provision of a new roundabout at the junction between Vendee Drive and Wendlebury Road). Full planning permission for a health and racquets club. Vehicular access into the development will be via the new four-arm roundabout that will replace the existing Vendee Drive / Wendlebury Road three-arm priority junction.	Infrastructure	Yes	Yes	Completed

Bicester Transport Model Uncertainty Log - 2022 Update
Infrastructure Schemes

APPENDIX H

Albion Land Eastern Parcel Access General Arrangement



REV	DESCRIPTION	DRAWN	INITIALS	DATE

DRAWING STATUS	CHECKED BY	DATE

david tucker associates
transport planning consultants

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Fax: +44(0)1564 793983
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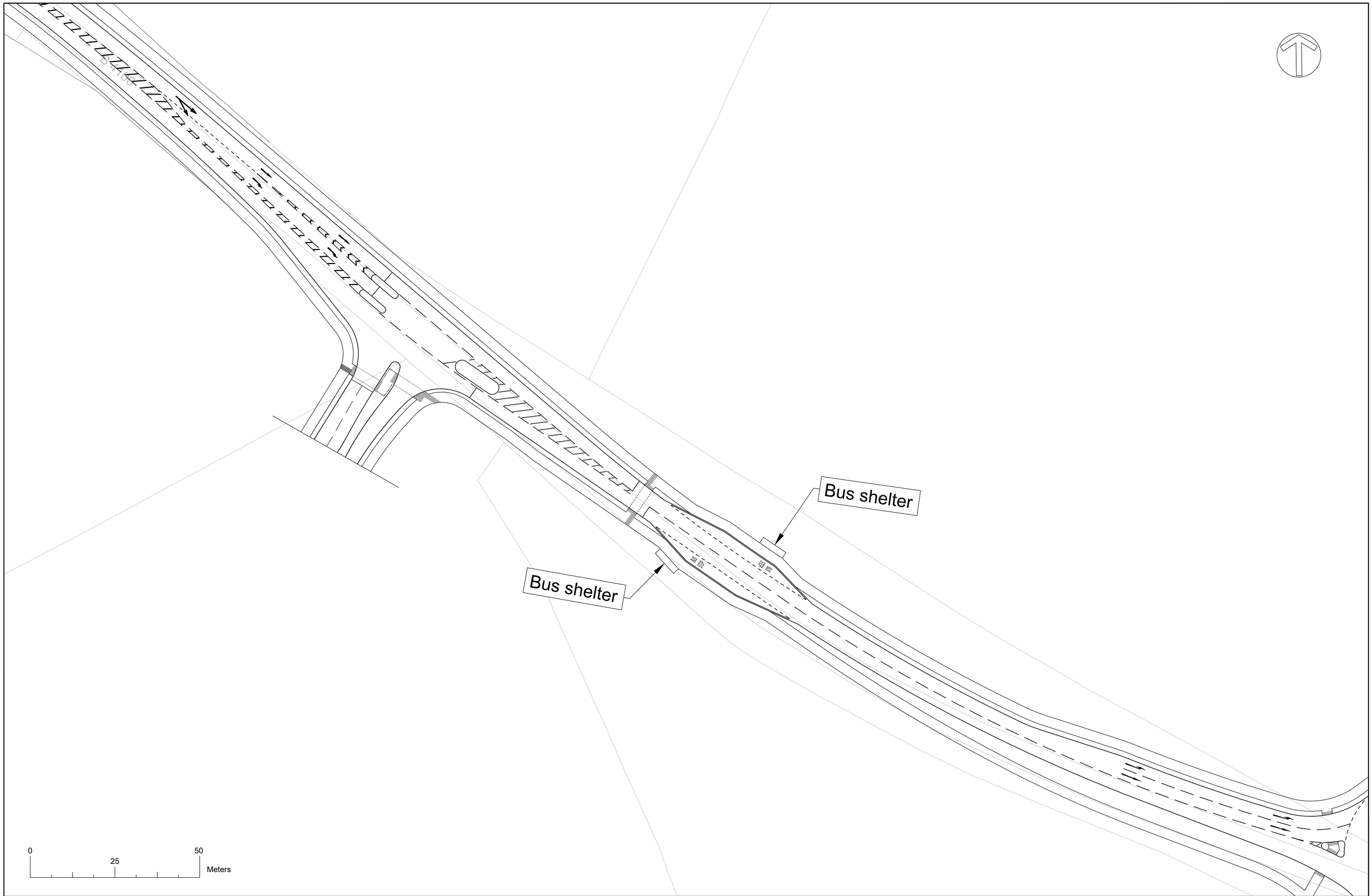
JOB TITLE	CLIENT
M40 JUNCTION 10	ALBION LAND

DRAWING TITLE

EASTERN ACCESS GENERAL ARRANGEMENT
ALL ONLY

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:500@A1		13/03/24	17213-34-GA	A



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JOB TITLE: M40 JUNCTION 10

CLIENT: ALBION LAND

DRAWING TITLE: EASTERN ACCESS GENERAL ARRANGEMENT WITH B4100 BUS STOPS & CROSSING

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:500@A1	A	06/03/24	17213-35-GA	A

APPENDIX I

Albion Land Eastern Parcel Access LINSIG

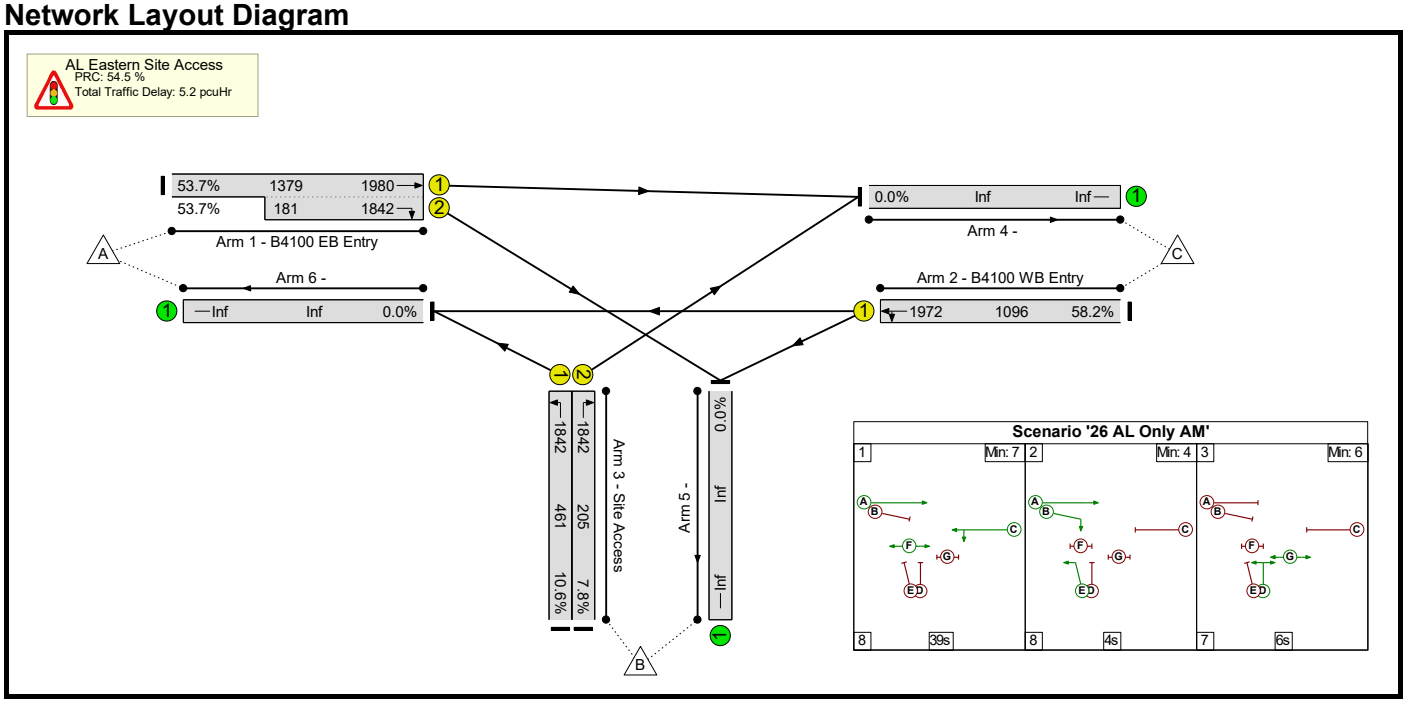
Basic Results Summary

User and Project Details

Project:	**M40 Junction 10**
Title:	**Eastern Site Access**
Location:	B4100 nr Baynards Green
Client:	Albion Land
Additional detail:	
File name:	Eastern Site Access (May24).lsg3x
Author:	BM
Company:	David Tucker Associates
Address:	Henley-in-Arden

Scenario 1: '26 AL Only AM' (FG11: '2026 BTM DEV 5 (AL Only) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Eastern Site Access	-	-	-		-	-	-	-	-	-	**58.2%**	**0**	**0**	**0**	**5.2**	-	-
AL Eastern Site Access	-	-	-		-	-	-	-	-	-	**58.2%**	**0**	**0**	**0**	**5.2**	-	-
1/1+1/2	B4100 EB Entry Ahead Right	U	A B		1	53:7	-	838	1980:1842	1379+181	53.7 : 53.7%	-	-	-	2.1	9.2	6.3
2/1	B4100 WB Entry Left Ahead	U	C		1	39	-	638	1972	1096	58.2%	-	-	-	2.6	14.4	9.0
3/1	Site Access Left	U	D	E	1	17	10	49	1842	461	10.6%	-	-	-	0.3	25.2	0.8
3/2	Site Access Right	U	D		1	7	-	16	1842	205	7.8%	-	-	-	0.2	38.4	0.3

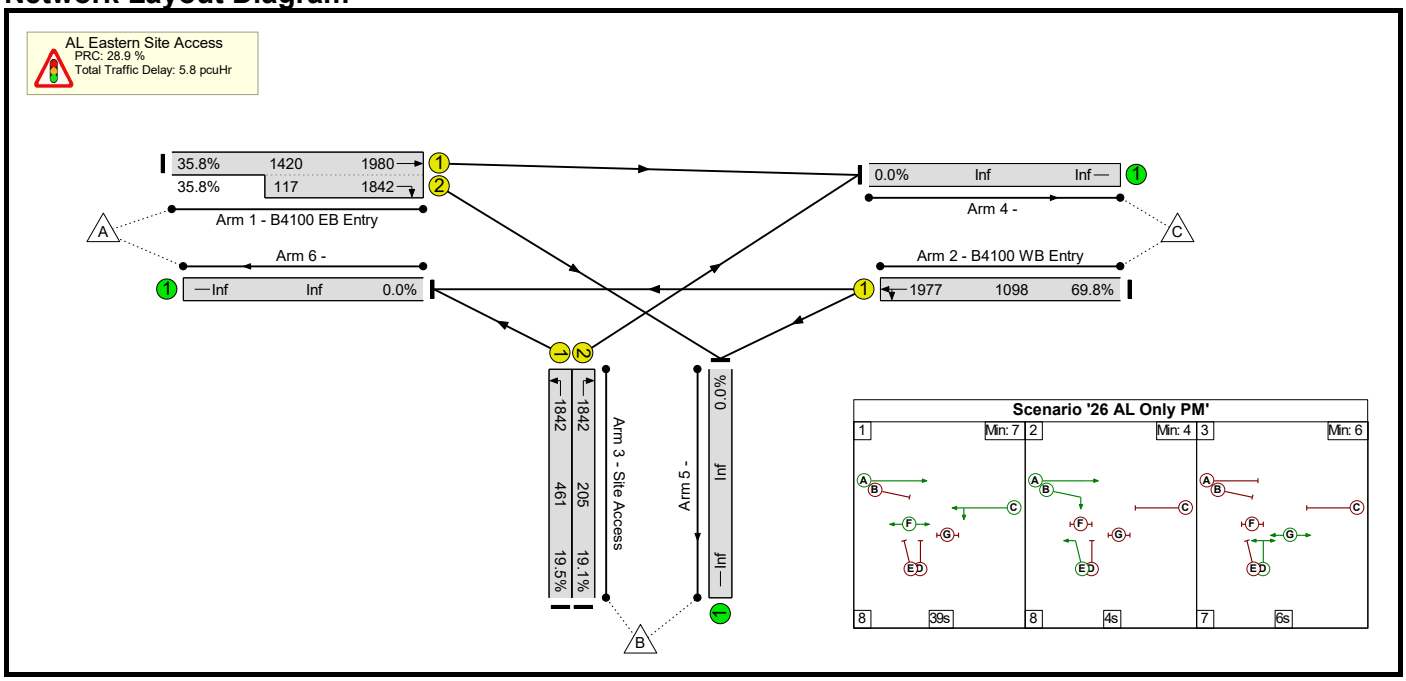
C1 PRC for Signalled Lanes (%): 54.5 Total Delay for Signalled Lanes (pcuHr): 5.20 Cycle Time (s): 72

PRC Over All Lanes (%): 54.5 Total Delay Over All Lanes(pcuHr): 5.20

Basic Results Summary

Scenario 2: '26 AL Only PM' (FG12: '2026 BTM DEV 5 (AL Only) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Eastern Site Access	-	-	-		-	-	-	-	-	-	**69.8%**	**0**	**0**	**0**	**5.8**	-	-
AL Eastern Site Access	-	-	-		-	-	-	-	-	-	**69.8%**	**0**	**0**	**0**	**5.8**	-	-
1/1+1/2	B4100 EB Entry Ahead Right	U	A B		1	53:7	-	550	1980:1842	1420+117	35.8 : 35.8%	-	-	-	1.0	6.8	3.7
2/1	B4100 WB Entry Left Ahead	U	C		1	39	-	767	1977	1098	69.8%	-	-	-	3.6	17.0	12.2
3/1	Site Access Left	U	D	E	1	17	10	90	1842	461	19.5%	-	-	-	0.7	26.2	1.5
3/2	Site Access Right	U	D		1	7	-	39	1842	205	19.1%	-	-	-	0.4	40.0	0.8

C1

PRC for Signalled Lanes (%): 28.9
PRC Over All Lanes (%): 28.9

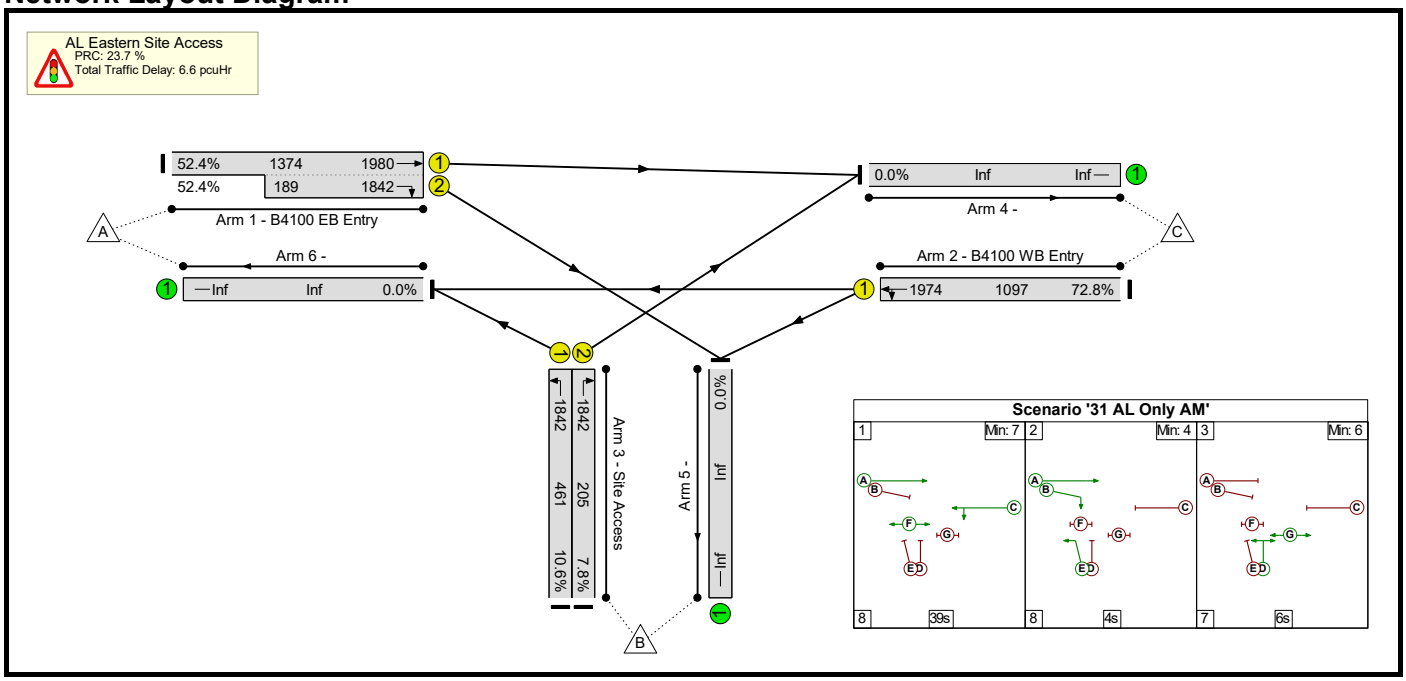
Total Delay for Signalled Lanes (pcuHr): 5.76
Total Delay Over All Lanes(pcuHr): 5.76

Cycle Time (s): 72

Basic Results Summary

Scenario 3: '31 AL Only AM' (FG13: '2031 BTM DEV 5 (AL Only) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Eastern Site Access	-	-	-		-	-	-	-	-	-	**72.8%**	**0**	**0**	**0**	**6.6**	-	-
AL Eastern Site Access	-	-	-		-	-	-	-	-	-	**72.8%**	**0**	**0**	**0**	**6.6**	-	-
1/1+1/2	B4100 EB Entry Ahead Right	U	A B		1	53:7	-	819	1980:1842	1374+189	52.4 : 52.4%	-	-	-	2.1	9.2	6.1
2/1	B4100 WB Entry Left Ahead	U	C		1	39	-	798	1974	1097	72.8%	-	-	-	4.0	17.9	13.1
3/1	Site Access Left	U	D	E	1	17	10	49	1842	461	10.6%	-	-	-	0.3	25.2	0.8
3/2	Site Access Right	U	D		1	7	-	16	1842	205	7.8%	-	-	-	0.2	38.4	0.3

C1

PRC for Signalled Lanes (%): 23.7

PRC Over All Lanes (%): 23.7

Total Delay for Signalled Lanes (pcuHr): 6.57

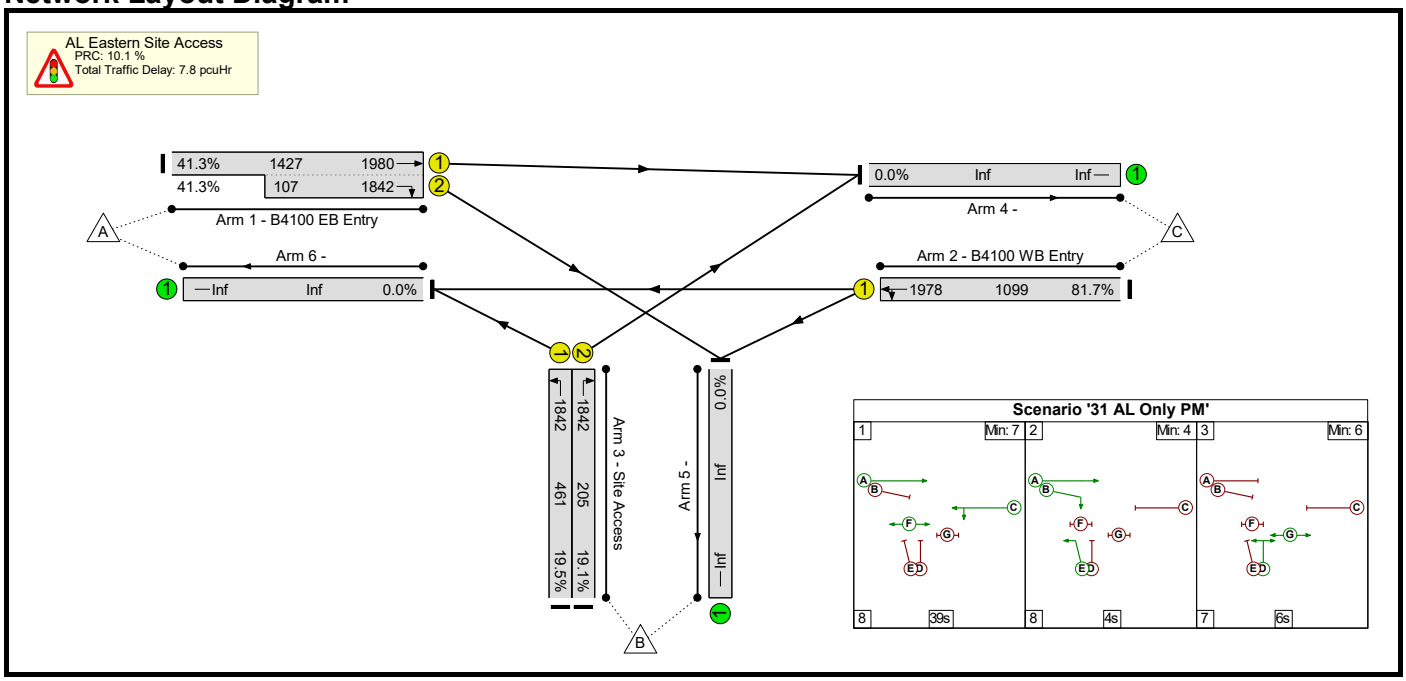
Total Delay Over All Lanes(pcuHr): 6.57

Cycle Time (s): 72

Basic Results Summary

Scenario 4: '31 AL Only PM' (FG14: '2031 BTM DEV 5 (AL Only) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Eastern Site Access	-	-	-		-	-	-	-	-	-	**81.7%**	**0**	**0**	**0**	**7.8**	-	-
AL Eastern Site Access	-	-	-		-	-	-	-	-	-	**81.7%**	**0**	**0**	**0**	**7.8**	-	-
1/1+1/2	B4100 EB Entry Ahead Right	U	A B		1	53:7	-	633	1980:1842	1427+107	41.3 : 41.3%	-	-	-	1.2	7.0	4.4
2/1	B4100 WB Entry Left Ahead	U	C		1	39	-	898	1978	1099	81.7%	-	-	-	5.4	21.8	16.7
3/1	Site Access Left	U	D	E	1	17	10	90	1842	461	19.5%	-	-	-	0.7	26.2	1.5
3/2	Site Access Right	U	D		1	7	-	39	1842	205	19.1%	-	-	-	0.4	40.0	0.8

C1 PRC for Signalled Lanes (%): 10.1 Total Delay for Signalled Lanes (pcuHr): 7.76 Cycle Time (s): 72

PRC Over All Lanes (%): 10.1 Total Delay Over All Lanes(pcuHr): 7.76

Basic Results Summary

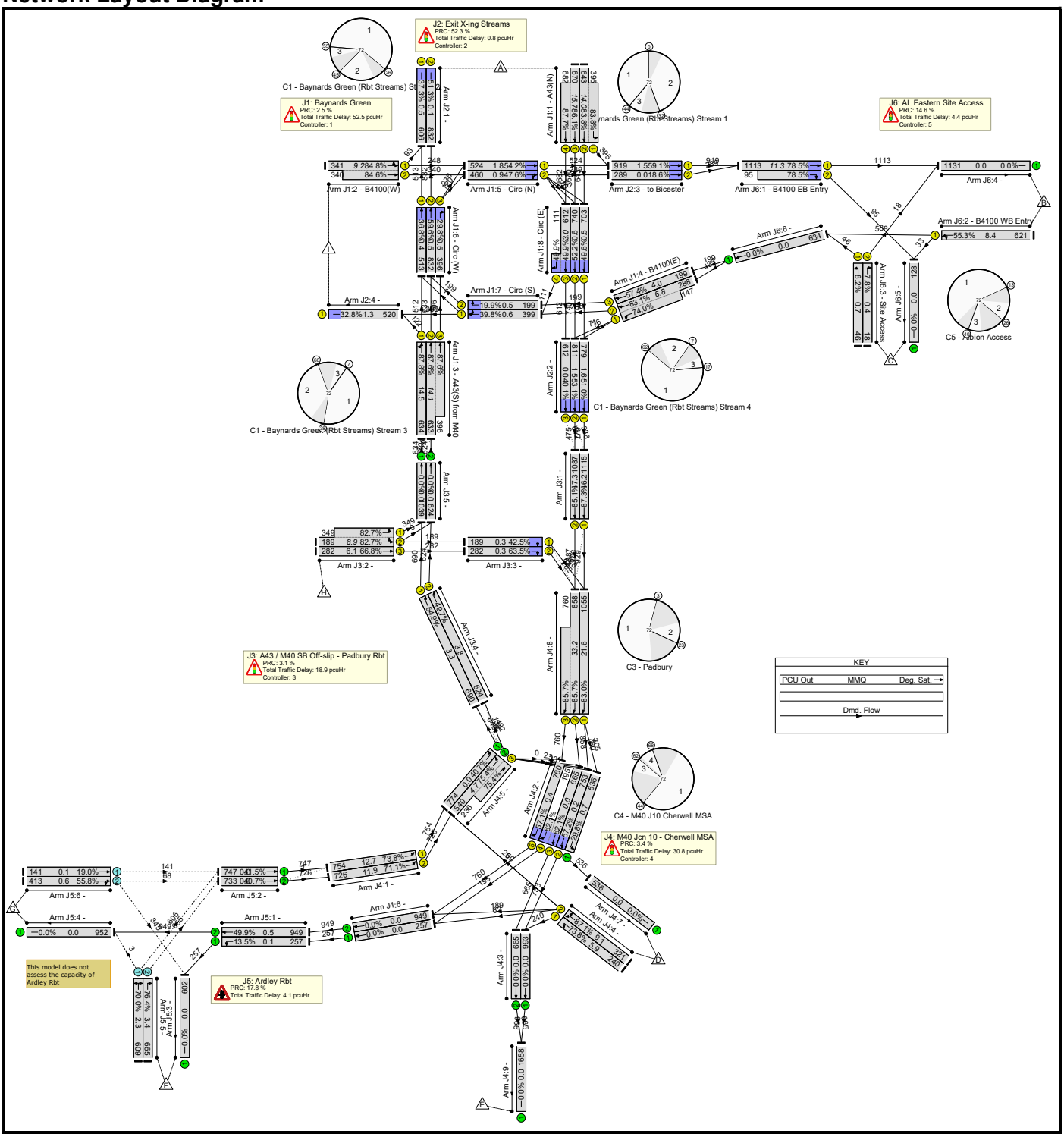
User and Project Details

Project:	**Tritax Ardley**
Title:	**M40 Jcn 10 Cherwell & Baynards Green**
Location:	
Client:	Tritax
Model Assumptions:	Only 'with dev' flows are presented in this model. They are based upon Tetra Tech BTM Scenario 4 outputs.
Additional detail:	
File name:	216285 M40 Cherwell Jcn10 Network v1_2.lsg3x
Author:	R Bishop
Company:	Vectos SLR
Address:	

Basic Results Summary

Scenario 1: 'AM 2026 BTM' (FG1: 'AM 2026 BTM', Plan 1: 'AM')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: M40 Jcn 10 Cherwell && Baynards Green	-	-	-		-	-	-	-	-	-	**87.8%**	**1828**	**0**	**0**	**111.5**	-	-
J1: Baynards Green	-	-	-		-	-	-	-	-	-	**87.8%**	**0**	**0**	**0**	**52.5**	-	-
1/2+1/1	A43(N) Ahead Left	U	C1:B		1	27	-	1038	2000:1924	767+471	83.8 : 83.8%	-	-	-	7.9 (5.1+2.8)	27.5 (28.6:25.7)	14.0
1/3+1/4	A43(N) Ahead	U	C1:B		1	27	-	1352	2000:2000	778+778	86.1 : 87.7%	-	-	-	10.8 (5.4+5.5)	28.9 (28.8:29.0)	15.7
2/1+2/2	B4100(W) Ahead Left	U	C1:E		1	14	-	681	1930:1930	402+402	84.8 : 84.6%	-	-	-	7.8 (3.9+3.9)	41.4 (41.4:41.4)	9.2
3/1	A43(S) from M40 Ahead Left	U	C1:H		1	25	-	634	2000	722	87.8%	-	-	-	7.9	44.8	14.5
3/2+3/3	A43(S) from M40 Ahead	U	C1:H		1	25	-	1029	2000:1953	722+452	87.6 : 87.6%	-	-	-	10.5 (6.6+3.9)	36.7 (37.4:35.6)	14.1
4/2+4/1	B4100(E) Ahead Left	U	C1:K		1	12	-	435	1920:1859	347+199	83.1 : 74.0%	-	-	-	4.8 (3.2+1.6)	39.7 (39.6:39.8)	6.8
4/3	B4100(E) Ahead	U	C1:K		1	12	-	199	1920	347	57.4%	-	-	-	1.7	31.0	4.0
5/1	Circ (N) Ahead	U	C1:A		1	33	-	524	1990	967	54.2%	-	-	-	0.4	2.8	1.8
5/2	Circ (N) Right Ahead	U	C1:A		1	33	-	460	1990	967	47.6%	-	-	-	0.2	1.9	0.9
6/1	Circ (W) Ahead	U	C1:D		1	47	-	513	2050	1395	36.8%	-	-	-	0.0	0.1	0.4
6/2	Circ (W) Ahead	U	C1:D		1	47	-	832	2050	1395	59.6%	-	-	-	0.0	0.1	0.5
6/3	Circ (W) Right	U	C1:D		1	47	-	396	1950	1327	29.8%	-	-	-	0.0	0.3	0.5
7/1	Circ (S) Right Ahead	U	C1:G		1	35	-	399	1950	1002	39.8%	-	-	-	0.1	0.9	0.6
7/2	Circ (S) Right	U	C1:G		1	35	-	199	1950	1002	19.9%	-	-	-	0.0	0.4	0.5

Basic Results Summary

8/1	Circ (E) Ahead	U	C1:J		1	49	-	703	2000	1417	49.6%	-	-	-	0.1	0.3	0.5
8/2	Circ (E) Ahead	U	C1:J		1	49	-	740	2000	1417	52.2%	-	-	-	0.1	0.3	0.6
8/3+8/4	Circ (E) Right Ahead	U	C1:J		1	49	-	723	2000:1950	1227+223	49.9 : 49.9%	-	-	-	0.0 (0.0+0.0)	0.2 (0.2:0.2)	3.0
J2: Exit X-ing Streams	-	-	-		-	-	-	-	-	-	**59.1%**	**0**	**0**	**0**	**0.8**	-	-
1/1		U	C2:A		1	56	-	606	2050	1623	37.3%	-	-	-	0.0	0.1	0.5
1/2		U	C2:A		1	56	-	832	2050	1623	51.3%	-	-	-	0.0	0.1	0.1
2/1	Ahead	U	C2:C		1	54	-	779	2000	1528	51.0%	-	-	-	0.2	1.0	1.6
2/2	Ahead	U	C2:C		1	54	-	811	2000	1528	53.1%	-	-	-	0.2	0.9	1.5
2/3	Ahead	U	C2:C		1	54	-	612	2000	1528	40.1%	-	-	-	0.0	0.0	0.0
3/1	to Bicester Ahead	U	C2:E		1	55	-	919	2000	1556	59.1%	-	-	-	0.2	0.9	1.5
3/2	to Bicester Ahead	U	C2:E		1	55	-	289	2000	1556	18.6%	-	-	-	0.0	0.0	0.0
4/1		U	C2:G		1	56	-	520	2000	1583	32.8%	-	-	-	0.1	0.7	1.3
J3: A43 / M40 SB Off-slip - Padbury Rbt	-	-	-		-	-	-	-	-	-	**87.3%**	**0**	**0**	**0**	**18.9**	-	-
1/1	Ahead	U	C3:B		1	45	-	1115	2000	1278	87.3%	-	-	-	4.3	13.9	16.2
1/2	Ahead	U	C3:B		1	45	-	1087	2000	1278	85.1%	-	-	-	3.7	12.2	17.3
2/2+2/1	Ahead Left	U	C3:C		1	15	-	538	1900:1900	229+422	82.7 : 82.7%	-	-	-	6.1 (2.1+4.1)	41.1 (39.5:42.0)	8.9
2/3	Ahead	U	C3:C		1	15	-	282	1900	422	66.8%	-	-	-	3.0	38.2	6.1
3/1	Right	U	C3:D		1	15	-	189	2000	444	42.5%	-	-	-	0.1	1.3	0.3
3/2	Right	U	C3:D		1	15	-	282	2000	444	63.5%	-	-	-	0.1	1.6	0.3
4/1	Ahead	U	C3:A		1	45	-	690	1967	1257	54.9%	-	-	-	0.8	4.3	3.3
4/2	Ahead	U	C3:A		1	45	-	624	1967	1257	49.7%	-	-	-	0.8	4.5	3.8
J4: M40 Jcn 10 - Cherwell MSA	-	-	-		-	-	-	-	-	-	**87.1%**	**0**	**0**	**0**	**30.8**	-	-
1/1	Ahead	U	C4:H		1	38	-	754	1886	1022	73.8%	-	-	-	4.0	19.2	12.7
1/2	Ahead	U	C4:H		1	38	-	726	1886	1022	71.1%	-	-	-	3.7	18.3	11.9

Basic Results Summary

2/1	Left	U	-		-	-	-	536	1800	1800	29.8%	-	-	-	0.2	1.4	0.7
2/2	Ahead	U	C4:C		1	47	-	753	1973	1315	57.2%	-	-	-	0.0	0.1	0.2
2/3+2/4	Ahead Right	U	C4:C		1	47	-	860	1973:1995	1071+314	62.1 : 62.1%	-	-	-	0.0 (0.0+0.0)	0.0 (0.0:0.0)	0.0
2/5	Right	U	C4:D		1	47	-	760	1995	1330	57.1%	-	-	-	0.0	0.2	0.4
4/1	Left	U	C4:F		1	12	-	240	1800	325	73.8%	-	-	-	3.2	48.4	5.9
4/2	Right Left	U	C4:E		1	13	-	321	1896	369	87.1%	-	-	-	5.5	61.7	9.1
5/1	Left	U	-		-	-	-	774	1900	1900	40.7%	-	-	-	0.0	0.0	0.0
5/2+5/3	U-Turn Left	U	- C4:A		-	-	-	776	1900:1877	716+313	75.4 : 75.4%	-	-	-	1.8 (0.0+1.8)	8.2 (0.0:26.9)	4.7
8/1	Ahead	U	C4:B		1	46	-	1055	1948	1272	83.0%	-	-	-	5.7	19.4	21.6
8/2+8/3	Ahead	U	C4:B		1	46	-	1618	1948:1948	1001+887	85.7 : 85.7%	-	-	-	6.6 (4.1+2.5)	14.7 (17.1:11.9)	33.2
J5: Ardley Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**76.4%**	**1828**	**0**	**0**	**4.1**	**-**	**-**
1/1	Left	U	-		-	-	-	257	1900	1900	13.5%	-	-	-	0.1	1.1	0.1
1/2	Ahead	U	-		-	-	-	949	1900	1900	49.9%	-	-	-	0.5	1.9	0.5
2/1	Ahead	U	-		-	-	-	747	1800	1800	41.5%	-	-	-	0.0	0.0	0.0
2/2	Ahead	U	-		-	-	-	733	1800	1800	40.7%	-	-	-	0.0	0.0	0.0
5/1	Right Left	O	-		-	-	-	609	1800	870	70.0%	609	0	0	1.2	6.8	2.3
5/2	Right	O	-		-	-	-	665	1800	870	76.4%	665	0	0	1.6	8.7	3.4
6/1	Ahead	O	-		-	-	-	141	1800	740	19.0%	141	0	0	0.1	3.0	0.1
6/2	Ahead Right	O	-		-	-	-	413	1800	740	55.8%	413	0	0	0.6	5.5	0.6
J6: AL Eastern Site Access	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**78.5%**	**0**	**0**	**0**	**4.4**	**-**	**-**
1/1+1/2	B4100 EB Entry Ahead Right	U	C5:A C5:B		1	53:7	-	1208	1980:1842	1417+121	78.5 : 78.5%	-	-	-	1.6 (1.0+0.7)	4.8 (3.1:24.8)	11.3
2/1	B4100 WB Entry Left Ahead	U	C5:C		1	40	-	621	1972	1123	55.3%	-	-	-	2.3	13.3	8.4
3/1	Site Access Left	U	C5:D	C5:E	1	21	13	46	1842	563	8.2%	-	-	-	0.3	21.3	0.7

Basic Results Summary

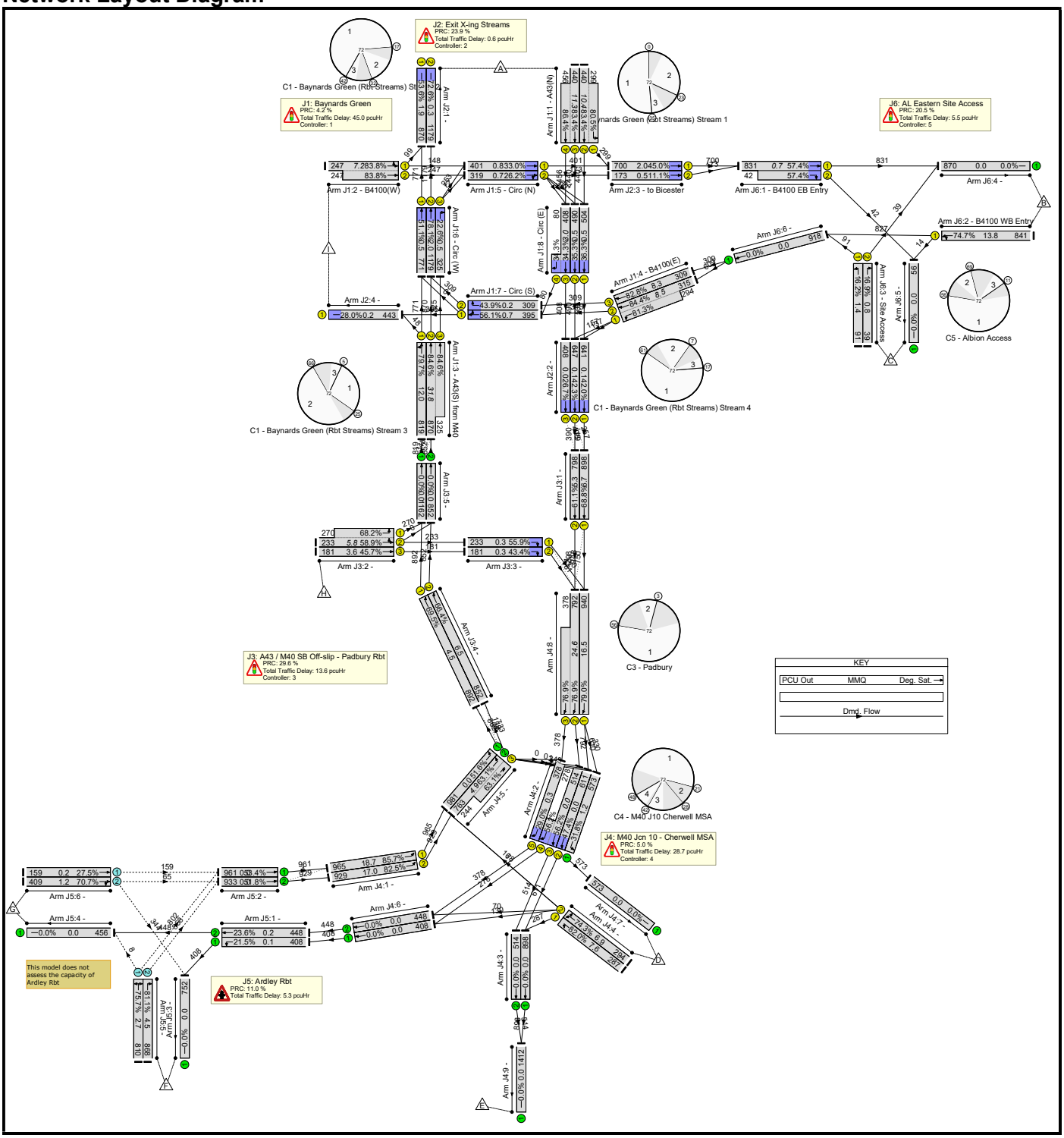
3/2	Site Access Right	U	C5:D		1	8	-	18	1842	230	7.8%	-	-	-	0.2	36.5	0.4

C1 - Baynards Green (Rbt Streams)	Stream: 1 PRC for Signalled Lanes (%):	2.6	Total Delay for Signalled Lanes (pcuHr):	19.42	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 2 PRC for Signalled Lanes (%):	6.1	Total Delay for Signalled Lanes (pcuHr):	7.91	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 3 PRC for Signalled Lanes (%):	2.5	Total Delay for Signalled Lanes (pcuHr):	18.51	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 4 PRC for Signalled Lanes (%):	8.3	Total Delay for Signalled Lanes (pcuHr):	6.68	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 1 PRC for Signalled Lanes (%):	75.6	Total Delay for Signalled Lanes (pcuHr):	0.04	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 2 PRC for Signalled Lanes (%):	69.5	Total Delay for Signalled Lanes (pcuHr):	0.43	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 3 PRC for Signalled Lanes (%):	52.3	Total Delay for Signalled Lanes (pcuHr):	0.22	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 4 PRC for Signalled Lanes (%):	174.0	Total Delay for Signalled Lanes (pcuHr):	0.11	Cycle Time (s):	72
C3 - Padbury	PRC for Signalled Lanes (%):	3.1	Total Delay for Signalled Lanes (pcuHr):	18.91	Cycle Time (s):	72
C4 - M40 J10 Cherwell MSA	PRC for Signalled Lanes (%):	3.4	Total Delay for Signalled Lanes (pcuHr):	28.78	Cycle Time (s):	72
C5 - Albion Access	PRC for Signalled Lanes (%):	14.6	Total Delay for Signalled Lanes (pcuHr):	4.38	Cycle Time (s):	72
	PRC Over All Lanes (%):	2.5	Total Delay Over All Lanes(pcuHr):	111.46		

Basic Results Summary

Scenario 2: 'PM 2026 BTM' (FG2: 'PM 2026 BTM', Plan 2: 'PM')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: M40 Jcn 10 Cherwell && Baynards Green	-	-	-		-	-	-	-	-	-	**86.4%**	**2246**	**0**	**0**	**98.8**	-	-
J1: Baynards Green	-	-	-		-	-	-	-	-	-	**86.4%**	**0**	**0**	**0**	**45.0**	-	-
1/2+1/1	A43(N) Ahead Left	U	C1:B		1	18	-	739	2000:1924	528+372	83.4 : 80.5%	-	-	-	7.2 (4.4+2.8)	35.2 (35.9:34.0)	10.4
1/3+1/4	A43(N) Ahead	U	C1:B		1	18	-	896	2000:2000	528+528	83.4 : 86.4%	-	-	-	9.0 (4.4+4.6)	36.1 (35.9:36.2)	11.3
2/1+2/2	B4100(W) Ahead Left	U	C1:E		1	10	-	494	1930:1930	295+295	83.8 : 83.8%	-	-	-	6.5 (3.3+3.3)	47.5 (47.5:47.5)	7.2
3/1	A43(S) from M40 Ahead Left	U	C1:H		1	36	-	819	2000	1028	79.7%	-	-	-	4.7	20.7	12.0
3/2+3/3	A43(S) from M40 Ahead	U	C1:H		1	36	-	1195	2000:1953	1028+384	84.6 : 84.6%	-	-	-	6.3 (4.7+1.6)	18.9 (19.3:17.9)	31.8
4/2+4/1	B4100(E) Ahead Left	U	C1:K		1	13	-	609	1920:1859	373+361	84.4 : 81.3%	-	-	-	5.9 (3.0+2.9)	34.9 (34.7:35.1)	8.5
4/3	B4100(E) Ahead	U	C1:K		1	13	-	309	1920	373	82.8%	-	-	-	4.3	49.7	8.3
5/1	Circ (N) Ahead	U	C1:A		1	42	-	401	1990	1216	33.0%	-	-	-	0.2	1.9	0.8
5/2	Circ (N) Right Ahead	U	C1:A		1	42	-	319	1990	1216	26.2%	-	-	-	0.1	1.2	0.7
6/1	Circ (W) Ahead	U	C1:D		1	51	-	771	2050	1509	51.1%	-	-	-	0.0	0.1	0.5
6/2	Circ (W) Ahead	U	C1:D		1	51	-	1179	2050	1509	78.1%	-	-	-	0.3	0.9	2.0
6/3	Circ (W) Right	U	C1:D		1	51	-	325	1950	1435	22.6%	-	-	-	0.0	0.3	0.5
7/1	Circ (S) Right Ahead	U	C1:G		1	24	-	395	1950	704	56.1%	-	-	-	0.3	3.0	0.7
7/2	Circ (S) Right	U	C1:G		1	24	-	309	1950	704	43.9%	-	-	-	0.0	0.0	0.2

Basic Results Summary

8/1	Circ (E) Ahead	U	C1:J		1	48	-	504	2000	1389	36.3%	-	-	-	0.0	0.3	0.5
8/2	Circ (E) Ahead	U	C1:J		1	48	-	490	2000	1389	35.3%	-	-	-	0.0	0.3	0.5
8/3+8/4	Circ (E) Right Ahead	U	C1:J		1	48	-	488	2000:1950	1191+233	34.3 : 34.3%	-	-	-	0.0 (0.0+0.0)	0.2 (0.2:0.3)	3.0
J2: Exit X-ing Streams	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**72.6%**	**0**	**0**	**0**	**0.6**	**-**	**-**
1/1		U	C2:A		1	56	-	870	2050	1623	53.6%	-	-	-	0.2	0.7	1.9
1/2		U	C2:A		1	56	-	1179	2050	1623	72.6%	-	-	-	0.1	0.2	0.3
2/1	Ahead	U	C2:C		1	54	-	641	2000	1528	42.0%	-	-	-	0.0	0.2	0.1
2/2	Ahead	U	C2:C		1	54	-	647	2000	1528	42.3%	-	-	-	0.0	0.1	0.1
2/3	Ahead	U	C2:C		1	54	-	408	2000	1528	26.7%	-	-	-	0.0	0.1	0.0
3/1	to Bicester Ahead	U	C2:E		1	55	-	700	2000	1556	45.0%	-	-	-	0.2	1.1	2.0
3/2	to Bicester Ahead	U	C2:E		1	55	-	173	2000	1556	11.1%	-	-	-	0.1	1.3	0.5
4/1		U	C2:G		1	56	-	443	2000	1583	28.0%	-	-	-	0.0	0.3	0.2
J3: A43 / M40 SB Off-slip - Padbury Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**69.5%**	**0**	**0**	**0**	**13.6**	**-**	**-**
1/1	Ahead	U	C3:B		1	46	-	898	2000	1306	68.8%	-	-	-	2.5	9.9	6.7
1/2	Ahead	U	C3:B		1	46	-	798	2000	1306	61.1%	-	-	-	1.9	8.7	5.3
2/2+2/1	Ahead Left	U	C3:C		1	14	-	503	1900:1900	396+396	58.9 : 68.2%	-	-	-	4.5 (2.1+2.4)	32.2 (31.9:32.5)	5.8
2/3	Ahead	U	C3:C		1	14	-	181	1900	396	45.7%	-	-	-	1.7	33.3	3.6
3/1	Right	U	C3:D		1	14	-	233	2000	417	55.9%	-	-	-	0.1	1.6	0.3
3/2	Right	U	C3:D		1	14	-	181	2000	417	43.4%	-	-	-	0.1	1.4	0.3
4/1	Ahead	U	C3:A		1	46	-	892	1967	1284	69.5%	-	-	-	1.4	5.8	4.5
4/2	Ahead	U	C3:A		1	46	-	852	1967	1284	66.4%	-	-	-	1.4	6.1	6.5
J4: M40 Jcn 10 - Cherwell MSA	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.7%**	**0**	**0**	**0**	**28.7**	**-**	**-**
1/1	Ahead	U	C4:H		1	42	-	965	1886	1126	85.7%	-	-	-	6.1	22.7	18.7
1/2	Ahead	U	C4:H		1	42	-	929	1886	1126	82.5%	-	-	-	5.3	20.4	17.0

Basic Results Summary

2/1	Left	U	-		-	-	-	573	1800	1800	31.8%	-	-	-	0.2	1.5	1.2
2/2	Ahead	U	C4:C		1	46	-	611	1973	1288	47.4%	-	-	-	0.0	0.0	0.0
2/3+2/4	Ahead Right	U	C4:C		1	46	-	792	1973:1995	914+494	56.2 : 56.2%	-	-	-	0.0 (0.0+0.0)	0.0 (0.0:0.0)	0.0
2/5	Right	U	C4:D		1	46	-	378	1995	1302	29.0%	-	-	-	0.0	0.1	0.3
4/1	Left	U	C4:F		1	13	-	287	1800	350	82.0%	-	-	-	4.3	54.6	7.6
4/2	Right Left	U	C4:E		1	14	-	294	1900	396	74.3%	-	-	-	3.6	43.9	6.9
5/1	Left	U	-		-	-	-	981	1900	1900	51.6%	-	-	-	0.0	0.0	0.0
5/2+5/3	U-Turn Left	U	- C4:A		-	-	-	1007	1900:1877	1209+386	63.1 : 63.1%	-	-	-	1.4 (0.0+1.4)	5.0 (0.0:20.8)	4.9
8/1	Ahead	U	C4:B		1	43	-	940	1948	1190	79.0%	-	-	-	4.1	15.8	16.5
8/2+8/3	Ahead	U	C4:B		1	43	-	1170	1948:1948	1030+491	76.9 : 76.9%	-	-	-	3.6 (2.6+1.0)	11.2 (11.8:10.0)	24.6
J5: Ardley Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**81.1%**	**2246**	**0**	**0**	**5.3**	**-**	**-**
1/1	Left	U	-		-	-	-	408	1900	1900	21.5%	-	-	-	0.1	1.2	0.1
1/2	Ahead	U	-		-	-	-	448	1900	1900	23.6%	-	-	-	0.2	1.2	0.2
2/1	Ahead	U	-		-	-	-	961	1800	1800	53.4%	-	-	-	0.0	0.0	0.0
2/2	Ahead	U	-		-	-	-	933	1800	1800	51.8%	-	-	-	0.0	0.0	0.0
5/1	Right Left	O	-		-	-	-	810	1800	1071	75.7%	810	0	0	1.5	6.8	2.7
5/2	Right	O	-		-	-	-	868	1800	1071	81.1%	868	0	0	2.1	8.7	4.5
6/1	Ahead	O	-		-	-	-	159	1800	579	27.5%	159	0	0	0.2	4.3	0.2
6/2	Ahead Right	O	-		-	-	-	409	1800	579	70.7%	409	0	0	1.2	10.5	1.2
J6: AL Eastern Site Access	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.7%**	**0**	**0**	**0**	**5.5**	**-**	**-**
1/1+1/2	B4100 EB Entry Ahead Right	U	C5:A C5:B		1	53:7	-	873	1980:1842	1449+73	57.4 : 57.4%	-	-	-	0.4 (0.1+0.3)	1.6 (0.5:23.9)	0.7
2/1	B4100 WB Entry Left Ahead	U	C5:C		1	40	-	841	1978	1126	74.7%	-	-	-	4.2	17.9	13.8
3/1	Site Access Left	U	C5:D	C5:E	1	21	13	91	1842	563	16.2%	-	-	-	0.6	22.1	1.4

Basic Results Summary

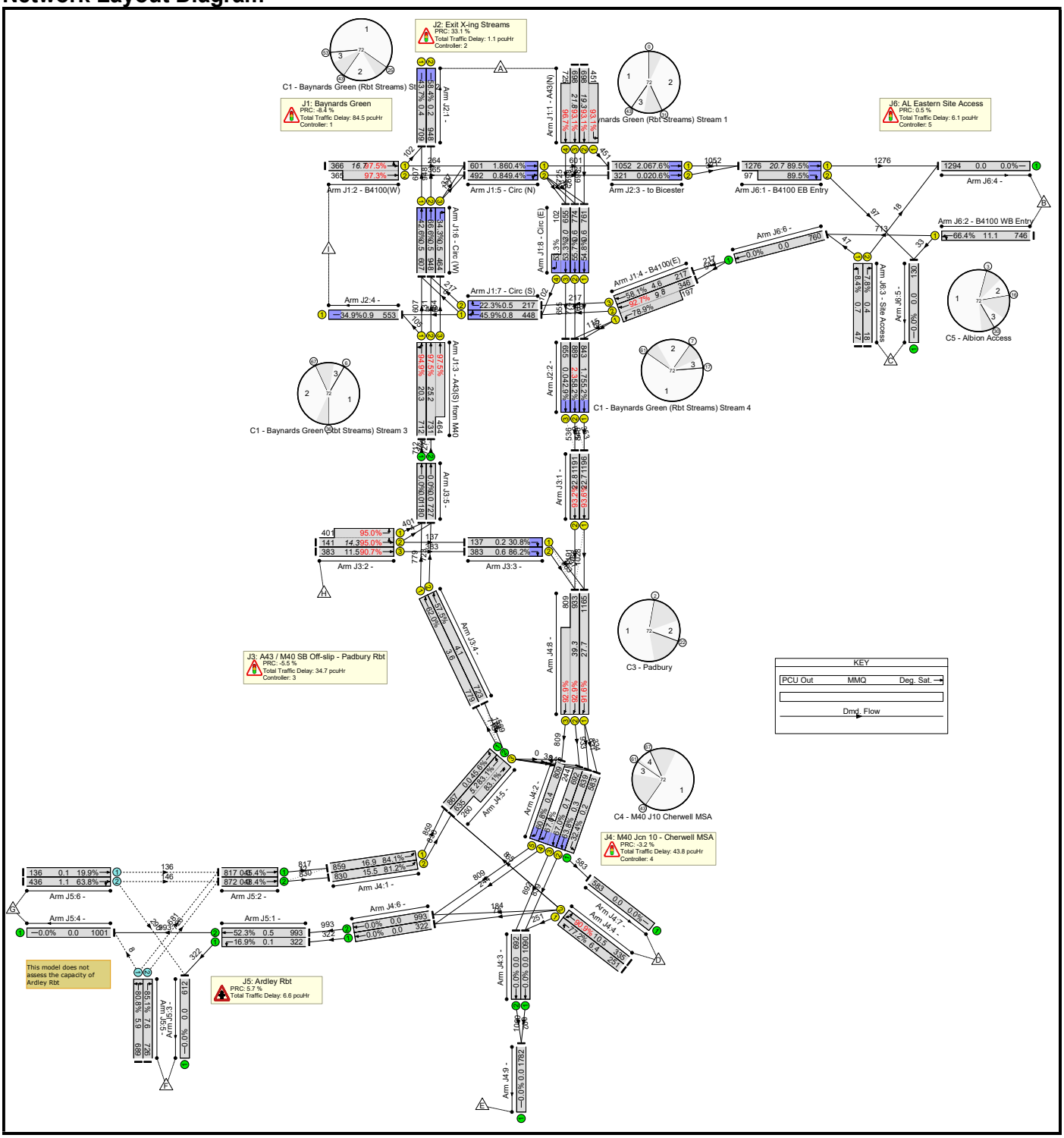
3/2	Site Access Right	U	C5:D		1	8	-	39	1842	230	16.9%	-	-	-	0.4	37.6	0.8

C1 - Baynards Green (Rbt Streams)	Stream: 1 PRC for Signalled Lanes (%):	4.2	Total Delay for Signalled Lanes (pcuHr):	16.50	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 2 PRC for Signalled Lanes (%):	7.4	Total Delay for Signalled Lanes (pcuHr):	6.85	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 3 PRC for Signalled Lanes (%):	6.3	Total Delay for Signalled Lanes (pcuHr):	11.33	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 4 PRC for Signalled Lanes (%):	6.7	Total Delay for Signalled Lanes (pcuHr):	10.29	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 1 PRC for Signalled Lanes (%):	23.9	Total Delay for Signalled Lanes (pcuHr):	0.23	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 2 PRC for Signalled Lanes (%):	112.5	Total Delay for Signalled Lanes (pcuHr):	0.06	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 3 PRC for Signalled Lanes (%):	100.0	Total Delay for Signalled Lanes (pcuHr):	0.28	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 4 PRC for Signalled Lanes (%):	221.7	Total Delay for Signalled Lanes (pcuHr):	0.03	Cycle Time (s):	72
C3 - Padbury	PRC for Signalled Lanes (%):	29.6	Total Delay for Signalled Lanes (pcuHr):	13.64	Cycle Time (s):	72
C4 - M40 J10 Cherwell MSA	PRC for Signalled Lanes (%):	5.0	Total Delay for Signalled Lanes (pcuHr):	27.06	Cycle Time (s):	72
C5 - Albion Access	PRC for Signalled Lanes (%):	20.5	Total Delay for Signalled Lanes (pcuHr):	5.53	Cycle Time (s):	72
	PRC Over All Lanes (%):	4.2	Total Delay Over All Lanes(pcuHr):	98.75		

Basic Results Summary

Scenario 3: 'AM 2031 BTM' (FG3: 'AM 2031 BTM', Plan 1: 'AM')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: M40 Jcn 10 Cherwell && Baynards Green	-	-	-		-	-	-	-	-	-	**97.5%**	**1987**	**0**	**0**	**176.9**	-	-
J1: Baynards Green	-	-	-		-	-	-	-	-	-	**97.5%**	**0**	**0**	**0**	**84.5**	-	-
1/2+1/1	A43(N) Ahead Left	U	C1:B		1	26	-	1149	2000:1924	750+485	93.1 : 93.1%	-	-	-	12.4 (7.8+4.6)	38.8 (40.1:36.9)	19.3
1/3+1/4	A43(N) Ahead	U	C1:B		1	26	-	1423	2000:2000	750+750	93.1 : 96.7%	-	-	-	16.3 (8.0+8.4)	41.3 (41.1:41.5)	21.8
2/1+2/2	B4100(W) Ahead Left	U	C1:E		1	13	-	731	1930:1930	375+375	97.5 : 97.3%	-	-	-	15.3 (7.7+7.7)	75.5 (75.6:75.5)	16.7
3/1	A43(S) from M40 Ahead Left	U	C1:H		1	26	-	712	2000	750	94.9%	-	-	-	12.2	61.8	20.3
3/2+3/3	A43(S) from M40 Ahead	U	C1:H		1	26	-	1195	2000:1953	750+476	97.5 : 97.5%	-	-	-	19.4 (12.0+7.4)	58.5 (59.2:57.5)	25.2
4/2+4/1	B4100(E) Ahead Left	U	C1:K		1	13	-	543	1920:1859	373+250	92.7 : 78.9%	-	-	-	6.0 (3.9+2.1)	39.8 (40.5:38.8)	9.8
4/3	B4100(E) Ahead	U	C1:K		1	13	-	217	1920	373	58.1%	-	-	-	1.7	28.5	4.6
5/1	Circ (N) Ahead	U	C1:A		1	34	-	601	1990	995	60.4%	-	-	-	0.4	2.4	1.8
5/2	Circ (N) Right Ahead	U	C1:A		1	34	-	492	1990	995	49.4%	-	-	-	0.2	1.5	0.8
6/1	Circ (W) Ahead	U	C1:D		1	48	-	607	2050	1424	42.6%	-	-	-	0.0	0.1	0.5
6/2	Circ (W) Ahead	U	C1:D		1	48	-	948	2050	1424	66.6%	-	-	-	0.0	0.1	0.5
6/3	Circ (W) Right	U	C1:D		1	48	-	464	1950	1354	34.3%	-	-	-	0.0	0.3	0.5
7/1	Circ (S) Right Ahead	U	C1:G		1	34	-	448	1950	975	45.9%	-	-	-	0.2	1.8	0.8
7/2	Circ (S) Right	U	C1:G		1	34	-	217	1950	975	22.3%	-	-	-	0.0	0.4	0.5

Basic Results Summary

8/1	Circ (E) Ahead	U	C1:J		1	48	-	761	2000	1389	54.8%	-	-	-	0.1	0.4	0.6
8/2	Circ (E) Ahead	U	C1:J		1	48	-	774	2000	1389	55.7%	-	-	-	0.1	0.4	0.6
8/3+8/4	Circ (E) Right Ahead	U	C1:J		1	48	-	757	2000:1950	1228+191	53.3 : 53.3%	-	-	-	0.0 (0.0+0.0)	0.2 (0.2:0.2)	3.0
J2: Exit X-ing Streams	-	-	-		-	-	-	-	-	-	**67.6%**	**0**	**0**	**0**	**1.1**	-	-
1/1		U	C2:A		1	56	-	709	2050	1623	43.7%	-	-	-	0.0	0.1	0.4
1/2		U	C2:A		1	56	-	948	2050	1623	58.4%	-	-	-	0.0	0.2	0.2
2/1	Ahead	U	C2:C		1	54	-	843	2000	1528	55.2%	-	-	-	0.3	1.2	1.7
2/2	Ahead	U	C2:C		1	54	-	889	2000	1528	58.2%	-	-	-	0.4	1.6	2.3
2/3	Ahead	U	C2:C		1	54	-	655	2000	1528	42.9%	-	-	-	0.0	0.0	0.0
3/1	to Bicester Ahead	U	C2:E		1	55	-	1052	2000	1556	67.6%	-	-	-	0.3	1.1	2.0
3/2	to Bicester Ahead	U	C2:E		1	55	-	321	2000	1556	20.6%	-	-	-	0.0	0.0	0.0
4/1		U	C2:G		1	56	-	553	2000	1583	34.9%	-	-	-	0.1	0.6	0.9
J3: A43 / M40 SB Off-slip - Padbury Rbt	-	-	-		-	-	-	-	-	-	**95.0%**	**0**	**0**	**0**	**34.7**	-	-
1/1	Ahead	U	C3:B		1	45	-	1196	2000	1278	93.6%	-	-	-	7.6	22.8	22.7
1/2	Ahead	U	C3:B		1	45	-	1191	2000	1278	93.2%	-	-	-	7.3	21.9	22.8
2/2+2/1	Ahead Left	U	C3:C		1	15	-	542	1900:1900	148+422	95.0 : 95.0%	-	-	-	10.5 (2.6+7.9)	69.7 (66.7:70.8)	14.3
2/3	Ahead	U	C3:C		1	15	-	383	1900	422	90.7%	-	-	-	6.9	65.3	11.5
3/1	Right	U	C3:D		1	15	-	137	2000	444	30.8%	-	-	-	0.0	1.3	0.2
3/2	Right	U	C3:D		1	15	-	383	2000	444	86.2%	-	-	-	0.3	3.2	0.6
4/1	Ahead	U	C3:A		1	45	-	779	1967	1257	62.0%	-	-	-	1.0	4.8	3.6
4/2	Ahead	U	C3:A		1	45	-	723	1967	1257	57.5%	-	-	-	1.0	4.9	4.1
J4: M40 Jcn 10 - Cherwell MSA	-	-	-		-	-	-	-	-	-	**92.9%**	**0**	**0**	**0**	**43.8**	-	-
1/1	Ahead	U	C4:H		1	38	-	859	1886	1022	84.1%	-	-	-	5.8	24.3	16.9
1/2	Ahead	U	C4:H		1	38	-	830	1886	1022	81.2%	-	-	-	5.1	22.2	15.5

Basic Results Summary

2/1	Left	U	-		-	-	-	583	1800	1800	32.4%	-	-	-	0.2	1.5	0.2
2/2	Ahead	U	C4:C		1	47	-	839	1973	1315	63.8%	-	-	-	0.0	0.1	0.3
2/3+2/4	Ahead Right	U	C4:C		1	47	-	936	1973:1995	1033+364	67.0 : 67.0%	-	-	-	0.0 (0.0+0.0)	0.0 (0.1:0.0)	0.1
2/5	Right	U	C4:D		1	47	-	809	1995	1330	60.8%	-	-	-	0.1	0.3	0.4
4/1	Left	U	C4:F		1	12	-	251	1800	325	77.2%	-	-	-	3.6	51.4	6.4
4/2	Right Left	U	C4:E		1	13	-	335	1896	369	90.9%	-	-	-	6.7	71.5	10.5
5/1	Left	U	-		-	-	-	867	1900	1900	45.6%	-	-	-	0.0	0.0	0.0
5/2+5/3	U-Turn Left	U	- C4:A		-	-	-	895	1900:1877	764+313	83.1 : 83.1%	-	-	-	1.9 (0.0+1.9)	7.6 (0.0:26.1)	5.2
8/1	Ahead	U	C4:B		1	46	-	1165	1948	1272	91.6%	-	-	-	8.7	27.0	27.7
8/2+8/3	Ahead	U	C4:B		1	46	-	1742	1948:1948	1004+871	92.9 : 92.9%	-	-	-	11.7 (6.2+5.5)	24.2 (23.8:24.6)	39.3
J5: Ardley Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.1%**	**1987**	**0**	**0**	**6.6**	**-**	**-**
1/1	Left	U	-		-	-	-	322	1900	1900	16.9%	-	-	-	0.1	1.1	0.1
1/2	Ahead	U	-		-	-	-	993	1900	1900	52.3%	-	-	-	0.5	2.0	0.5
2/1	Ahead	U	-		-	-	-	817	1800	1800	45.4%	-	-	-	0.0	0.0	0.0
2/2	Ahead	U	-		-	-	-	872	1800	1800	48.4%	-	-	-	0.0	0.0	0.0
5/1	Right Left	O	-		-	-	-	689	1800	853	80.8%	689	0	0	2.1	11.1	5.9
5/2	Right	O	-		-	-	-	726	1800	853	85.1%	726	0	0	2.9	14.2	7.6
6/1	Ahead	O	-		-	-	-	136	1800	684	19.9%	136	0	0	0.1	3.3	0.1
6/2	Ahead Right	O	-		-	-	-	436	1800	684	63.8%	436	0	0	0.9	7.2	1.1
J6: AL Eastern Site Access	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.5%**	**0**	**0**	**0**	**6.1**	**-**	**-**
1/1+1/2	B4100 EB Entry Ahead Right	U	C5:A C5:B		1	53:7	-	1373	1980:1842	1426+108	89.5 : 89.5%	-	-	-	2.4 (1.8+0.7)	6.4 (5.0:25.0)	20.7
2/1	B4100 WB Entry Left Ahead	U	C5:C		1	40	-	746	1973	1124	66.4%	-	-	-	3.2	15.5	11.1
3/1	Site Access Left	U	C5:D	C5:E	1	21	13	47	1842	563	8.4%	-	-	-	0.3	21.4	0.7

Basic Results Summary

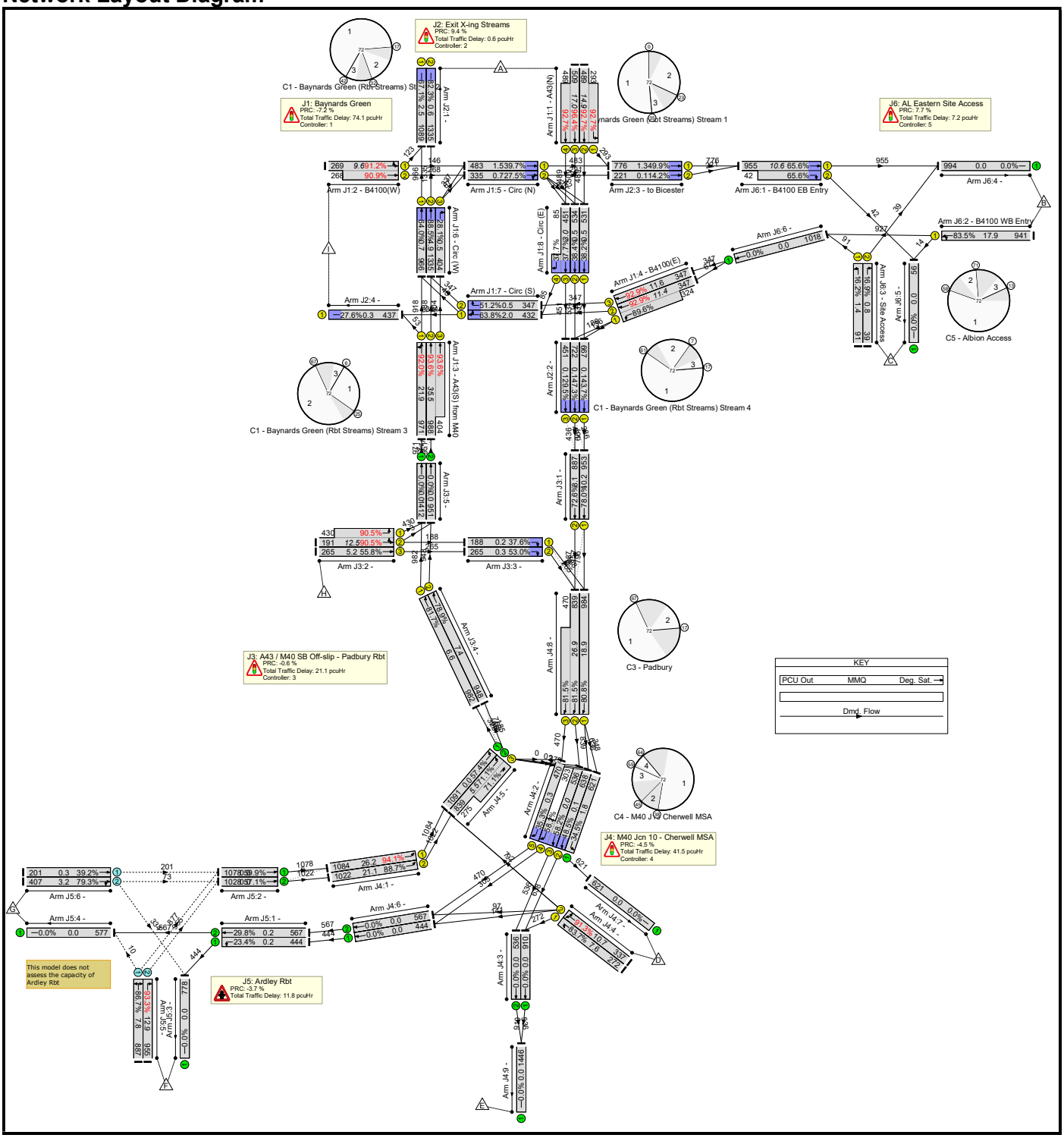
3/2	Site Access Right	U	C5:D		1	8	-	18	1842	230	7.8%	-	-	-	0.2	36.5	0.4

C1 - Baynards Green (Rbt Streams)	Stream: 1 PRC for Signalled Lanes (%):	-7.4	Total Delay for Signalled Lanes (pcuHr):	29.32	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 2 PRC for Signalled Lanes (%):	-8.4	Total Delay for Signalled Lanes (pcuHr):	15.43	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 3 PRC for Signalled Lanes (%):	-8.3	Total Delay for Signalled Lanes (pcuHr):	31.89	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 4 PRC for Signalled Lanes (%):	-3.0	Total Delay for Signalled Lanes (pcuHr):	7.91	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 1 PRC for Signalled Lanes (%):	54.1	Total Delay for Signalled Lanes (pcuHr):	0.05	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 2 PRC for Signalled Lanes (%):	54.7	Total Delay for Signalled Lanes (pcuHr):	0.67	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 3 PRC for Signalled Lanes (%):	33.1	Total Delay for Signalled Lanes (pcuHr):	0.32	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 4 PRC for Signalled Lanes (%):	157.7	Total Delay for Signalled Lanes (pcuHr):	0.09	Cycle Time (s):	72
C3 - Padbury	PRC for Signalled Lanes (%):	-5.5	Total Delay for Signalled Lanes (pcuHr):	34.71	Cycle Time (s):	72
C4 - M40 J10 Cherwell MSA	PRC for Signalled Lanes (%):	-3.2	Total Delay for Signalled Lanes (pcuHr):	41.69	Cycle Time (s):	72
C5 - Albion Access	PRC for Signalled Lanes (%):	0.5	Total Delay for Signalled Lanes (pcuHr):	6.11	Cycle Time (s):	72
	PRC Over All Lanes (%):	-8.4	Total Delay Over All Lanes(pcuHr):	176.95		

Basic Results Summary

Scenario 4: 'PM 2031 BTM' (FG4: 'PM 2031 BTM', Plan 2: 'PM')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: M40 Jcn 10 Cherwell && Baynards Green	-	-	-		-	-	-	-	-	-	**96.4%**	**2450**	**0**	**0**	**156.3**	-	-
J1: Baynards Green	-	-	-		-	-	-	-	-	-	**96.4%**	**0**	**0**	**0**	**74.1**	-	-
1/2+1/1	A43(N) Ahead Left	U	C1:B		1	18	-	782	2000:1924	528+316	92.7 : 92.7%	-	-	-	10.8 (6.9+3.9)	49.5 (50.6:47.8)	14.9
1/3+1/4	A43(N) Ahead	U	C1:B		1	18	-	998	2000:2000	528+528	96.4 : 92.7%	-	-	-	14.2 (7.3+6.9)	51.2 (51.3:51.0)	17.0
2/1+2/2	B4100(W) Ahead Left	U	C1:E		1	10	-	537	1930:1930	295+295	91.2 : 90.9%	-	-	-	8.8 (4.4+4.4)	59.3 (59.3:59.3)	9.6
3/1	A43(S) from M40 Ahead Left	U	C1:H		1	37	-	971	2000	1056	92.0%	-	-	-	10.2	37.7	21.9
3/2+3/3	A43(S) from M40 Ahead	U	C1:H		1	37	-	1392	2000:1953	1056+432	93.6 : 93.6%	-	-	-	13.3 (9.8+3.5)	34.3 (35.7:30.9)	35.5
4/2+4/1	B4100(E) Ahead Left	U	C1:K		1	13	-	671	1920:1859	373+361	92.9 : 89.6%	-	-	-	8.2 (4.2+4.0)	44.0 (43.8:44.3)	11.4
4/3	B4100(E) Ahead	U	C1:K		1	13	-	347	1920	373	92.9%	-	-	-	7.0	72.3	11.6
5/1	Circ (N) Ahead	U	C1:A		1	42	-	483	1990	1216	39.7%	-	-	-	0.3	2.1	1.5
5/2	Circ (N) Right Ahead	U	C1:A		1	42	-	335	1990	1216	27.5%	-	-	-	0.1	1.1	0.7
6/1	Circ (W) Ahead	U	C1:D		1	51	-	966	2050	1509	64.0%	-	-	-	0.1	0.3	0.7
6/2	Circ (W) Ahead	U	C1:D		1	51	-	1335	2050	1509	88.5%	-	-	-	0.6	1.6	4.9
6/3	Circ (W) Right	U	C1:D		1	51	-	404	1950	1435	28.1%	-	-	-	0.0	0.3	0.5
7/1	Circ (S) Right Ahead	U	C1:G		1	23	-	432	1950	677	63.8%	-	-	-	0.5	4.3	2.0
7/2	Circ (S) Right	U	C1:G		1	23	-	347	1950	677	51.2%	-	-	-	0.0	0.3	0.5

Basic Results Summary

8/1	Circ (E) Ahead	U	C1:J		1	48	-	531	2000	1389	38.2%	-	-	-	0.0	0.3	0.5
8/2	Circ (E) Ahead	U	C1:J		1	48	-	534	2000	1389	38.4%	-	-	-	0.1	0.3	0.5
8/3+8/4	Circ (E) Right Ahead	U	C1:J		1	48	-	536	2000:1950	1198+226	37.7 : 37.7%	-	-	-	0.0 (0.0+0.0)	0.2 (0.2:0.3)	3.0
J2: Exit X-ing Streams	-	-	-		-	-	-	-	-	-	**82.3%**	**0**	**0**	**0**	**0.6**	-	-
1/1		U	C2:A		1	56	-	1089	2050	1623	67.1%	-	-	-	0.2	0.7	2.5
1/2		U	C2:A		1	56	-	1335	2050	1623	82.3%	-	-	-	0.1	0.3	0.6
2/1	Ahead	U	C2:C		1	54	-	667	2000	1528	43.7%	-	-	-	0.0	0.1	0.1
2/2	Ahead	U	C2:C		1	54	-	722	2000	1528	47.3%	-	-	-	0.0	0.1	0.1
2/3	Ahead	U	C2:C		1	54	-	451	2000	1528	29.5%	-	-	-	0.0	0.1	0.1
3/1	to Bicester Ahead	U	C2:E		1	55	-	776	2000	1556	49.9%	-	-	-	0.1	0.7	1.3
3/2	to Bicester Ahead	U	C2:E		1	55	-	221	2000	1556	14.2%	-	-	-	0.0	0.2	0.1
4/1		U	C2:G		1	56	-	437	2000	1583	27.6%	-	-	-	0.0	0.3	0.3
J3: A43 / M40 SB Off-slip - Padbury Rbt	-	-	-		-	-	-	-	-	-	**90.5%**	**0**	**0**	**0**	**21.1**	-	-
1/1	Ahead	U	C3:B		1	43	-	953	2000	1222	78.0%	-	-	-	2.6	9.8	10.2
1/2	Ahead	U	C3:B		1	43	-	887	2000	1222	72.6%	-	-	-	2.0	8.2	8.1
2/2+2/1	Ahead Left	U	C3:C		1	17	-	621	1900:1900	211+475	90.5 : 90.5%	-	-	-	8.5 (2.5+6.1)	49.6 (47.0:50.7)	12.5
2/3	Ahead	U	C3:C		1	17	-	265	1900	475	55.8%	-	-	-	2.4	32.1	5.2
3/1	Right	U	C3:D		1	17	-	188	2000	500	37.6%	-	-	-	0.1	1.1	0.2
3/2	Right	U	C3:D		1	17	-	265	2000	500	53.0%	-	-	-	0.1	1.2	0.3
4/1	Ahead	U	C3:A		1	43	-	982	1967	1202	81.7%	-	-	-	2.8	10.1	6.6
4/2	Ahead	U	C3:A		1	43	-	948	1967	1202	78.9%	-	-	-	2.6	10.0	7.4
J4: M40 Jcn 10 - Cherwell MSA	-	-	-		-	-	-	-	-	-	**94.1%**	**0**	**0**	**0**	**41.5**	-	-
1/1	Ahead	U	C4:H		1	43	-	1084	1886	1153	94.1%	-	-	-	10.4	34.7	26.2
1/2	Ahead	U	C4:H		1	43	-	1022	1886	1153	88.7%	-	-	-	7.0	24.7	21.1

Basic Results Summary

2/1	Left	U	-		-	-	-	621	1800	1800	34.5%	-	-	-	0.3	1.5	1.8
2/2	Ahead	U	C4:C		1	47	-	638	1973	1315	48.5%	-	-	-	0.0	0.0	0.1
2/3+2/4	Ahead Right	U	C4:C		1	47	-	839	1973:1995	921+520	58.2 : 58.2%	-	-	-	0.0 (0.0+0.0)	0.0 (0.0:0.0)	0.0
2/5	Right	U	C4:D		1	47	-	470	1995	1330	35.3%	-	-	-	0.0	0.1	0.3
4/1	Left	U	C4:F		1	12	-	272	1800	325	83.7%	-	-	-	4.5	59.7	7.6
4/2	Right Left	U	C4:E		1	13	-	337	1899	369	91.3%	-	-	-	6.8	72.8	10.7
5/1	Left	U	-		-	-	-	1091	1900	1900	57.4%	-	-	-	0.0	0.0	0.0
5/2+5/3	U-Turn Left	U	- C4:A		-	-	-	1114	1900:1877	1180+387	71.1 : 71.1%	-	-	-	1.6 (0.0+1.6)	5.2 (0.0:21.1)	5.5
8/1	Ahead	U	C4:B		1	44	-	984	1948	1217	80.8%	-	-	-	5.0	18.4	18.9
8/2+8/3	Ahead	U	C4:B		1	44	-	1309	1948:1948	1029+577	81.5 : 81.5%	-	-	-	5.8 (4.4+1.4)	16.0 (18.9:10.8)	26.9
J5: Ardley Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**93.3%**	**2450**	**0**	**0**	**11.8**	**-**	**-**
1/1	Left	U	-		-	-	-	444	1900	1900	23.4%	-	-	-	0.2	1.2	0.2
1/2	Ahead	U	-		-	-	-	567	1900	1900	29.8%	-	-	-	0.2	1.3	0.2
2/1	Ahead	U	-		-	-	-	1078	1800	1800	59.9%	-	-	-	0.0	0.0	0.0
2/2	Ahead	U	-		-	-	-	1028	1800	1800	57.1%	-	-	-	0.0	0.0	0.0
5/1	Right Left	O	-		-	-	-	887	1800	1023	86.7%	887	0	0	3.2	12.9	7.8
5/2	Right	O	-		-	-	-	955	1800	1023	93.3%	955	0	0	6.1	23.0	12.9
6/1	Ahead	O	-		-	-	-	201	1800	513	39.2%	201	0	0	0.3	5.8	0.3
6/2	Ahead Right	O	-		-	-	-	407	1800	513	79.3%	407	0	0	1.9	16.5	3.2
J6: AL Eastern Site Access	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.5%**	**0**	**0**	**0**	**7.2**	**-**	**-**
1/1+1/2	B4100 EB Entry Ahead Right	U	C5:A C5:B		1	53:7	-	997	1980:1842	1455+64	65.6 : 65.6%	-	-	-	0.4 (0.2+0.2)	1.6 (0.9:19.0)	10.6
2/1	B4100 WB Entry Left Ahead	U	C5:C		1	40	-	941	1978	1126	83.5%	-	-	-	5.8	22.2	17.9
3/1	Site Access Left	U	C5:D	C5:E	1	21	13	91	1842	563	16.2%	-	-	-	0.6	22.1	1.4

Basic Results Summary

3/2	Site Access Right	U	C5:D		1	8	-	39	1842	230	16.9%	-	-	-	0.4	37.6	0.8

C1 - Baynards Green (Rbt Streams)	Stream: 1 PRC for Signalled Lanes (%):	-7.2	Total Delay for Signalled Lanes (pcuHr):	25.32	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 2 PRC for Signalled Lanes (%):	-1.4	Total Delay for Signalled Lanes (pcuHr):	9.53	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 3 PRC for Signalled Lanes (%):	-4.0	Total Delay for Signalled Lanes (pcuHr):	23.97	Cycle Time (s):	72
C1 - Baynards Green (Rbt Streams)	Stream: 4 PRC for Signalled Lanes (%):	-3.3	Total Delay for Signalled Lanes (pcuHr):	15.31	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 1 PRC for Signalled Lanes (%):	9.4	Total Delay for Signalled Lanes (pcuHr):	0.33	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 2 PRC for Signalled Lanes (%):	90.4	Total Delay for Signalled Lanes (pcuHr):	0.05	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 3 PRC for Signalled Lanes (%):	80.4	Total Delay for Signalled Lanes (pcuHr):	0.16	Cycle Time (s):	72
C2 - Baynards Green (Exit Streams)	Stream: 4 PRC for Signalled Lanes (%):	226.1	Total Delay for Signalled Lanes (pcuHr):	0.04	Cycle Time (s):	72
C3 - Padbury	PRC for Signalled Lanes (%):	-0.6	Total Delay for Signalled Lanes (pcuHr):	21.07	Cycle Time (s):	72
C4 - M40 J10 Cherwell MSA	PRC for Signalled Lanes (%):	-4.5	Total Delay for Signalled Lanes (pcuHr):	39.65	Cycle Time (s):	72
C5 - Albion Access	PRC for Signalled Lanes (%):	7.7	Total Delay for Signalled Lanes (pcuHr):	7.22	Cycle Time (s):	72
	PRC Over All Lanes (%):	-7.2	Total Delay Over All Lanes(pcuHr):	156.35		

APPENDIX J

Albion Land Eastern Parcel Road Safety Audit Stage 1

LAND ADJACENT TO M40 JUNCTION 10

Albion Land, B4100 East Access

Stage 1 Road Safety Audit
Prepared on behalf of Albion Land

March 2024

Gateway RSE

Road Safety Engineering

Project:	Land Adjacent to M40 Junction 10 Albion Land, B4100 East Access
Document:	Stage 1 Road Safety Audit
Design Organisation:	DTA Transport Planning
Overseeing Organisation:	Oxfordshire County Council
Client:	Albion Land
Gateway RSE ref:	SG/WP/2309-10 RSA1 v2.0
Issue date:	15/03/2024
Status:	Issued as v2.0
Authorised by:	SG

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CONTENTS

Appendices

1 INTRODUCTION

1.1 This report describes a Stage 1 Road Safety Audit (RSA) of highway works on the B4100 south of Baynards Green, within the District of Cherwell and the County of Oxfordshire. The audit brief, dated 20th October 2023 (ref. 17213-13), describes the scheme as follows:

> *A development of 280,000m² commercial warehousing (GFA) is proposed by Albion Land on two sites east and west of the A43. This RSA is to consider the eastern site only.*
>
> *A development of 300,000m² commercial warehousing (GFA) is proposed by Tritax Symmetry Land on land north of the B4100 and east of the A43.*
>
> *The eastern site access will serve up to 100,000m² GFA B8 use. A three-arm signal controlled junction is proposed in line with the requirements of DMRB CD123.*
>
> *A pedestrian and cycle route will be provided between the access to and from the roadside services. The route has yet to be determined as this is to be incorporated into a wider improvement scheme at the Baynards Green roundabout. This is not therefore within the scope of this RSA.*
>
> *A further pedestrian and cycle route is proposed eastwards towards the NW Bicester development. The route has yet to be determined and is not within the scope of this RSA.*

1.2 In March 2024 the Audit Team received an amended drawing showing modifications to the signal junction, bus stops with lay-bys and shelters to the east, extended shared use paths and a signal-controlled crossing.

1.3 The B4100 is a rural 2-lane single carriageway road running broadly southeast from the Baynards Green roundabout on the A43. It is unlit, has verges but no footways, and is subject to the national speed limit.

1.4 The Audit Team is aware of the following planned works (the final designs are subject to further discussion and approval) that do not form part of this Audit, although the Audit Team has considered the Albion Land East signal junction in both the existing and planned scenarios:

- Carriageway widening and signalisation of the Baynards Green Roundabout. It is understood that, if this scheme comes forward, the Albion East signal junction (the subject of this audit) would very likely be linked to the Baynards Green roundabout.
- A new 4-arm roundabout to the south on the B4100, serving the Tritax North and Tritax South development sites.
- A new 3-arm roundabout north of Baynards Green Roundabout, serving the Albion Land West development site.

1.5 This Road Safety Audit was carried out by Steve Giles and Wendy Palmer and consisted of a desktop study and a site visit, which was carried out between 12:00 and 12:45 on Monday 25th September 2023 (as part of a previous audit), when the weather was fine and the road surface dry. No traffic congestion was observed, and no pedestrian or cyclist movements occurred along the B4100.

1.6 The terms of reference for this RSA are as described in the Design Manual for Roads and Bridges (DMRB) document GG119. The Audit Team is independent of the project design team and has not been involved in the design process in any other capacity. The audit considers only the potential road safety implications of the scheme and has not verified compliance of the design with any other criteria.

1.7 The Audit Team has not been made aware of any Departures from Standard. Whilst reference may be made to design standards, this report is not intended to provide a design check.

1.8 Recommendations are aimed at addressing the identified potential road safety problems. However, there may be other acceptable ways to overcome a problem, considering wider constraints and opportunities; the Auditors would be pleased to discuss such alternative solutions as appropriate. The recommendations contained herein do not absolve the Designer of his/her responsibilities.

Collision Data

1.9 Personal Injury Collision (PIC) information is summarised by the Audit Brief, which described 13 collisions at or on the entry/exit lanes of the A43/B4100 roundabout. One PIC occurred close to the proposed 3-arm signal junction considered by this audit, involving two cars in a front/rear ('shunt') impact, causing slight injury to the front driver. Conditions were described as fine/dry/daylight.

Previous Road Safety Audit

1.10 A Stage 1 Road Safety Audit of a similar scheme was undertaken by this Audit Team in October 2023. It raised eight problems, two of which have been addressed and six are re-raised in this report. One new problem has been raised.

2 PROBLEMS IDENTIFIED BY THIS ROAD SAFETY AUDIT

General Matters

2.1 The Audit Team raises no concerns in respect of general matters.

Local Alignment

2.2 The Audit Team raises no concerns in respect of local alignment.

Junctions

2.3 Problem

Vehicle front/rear and loss of control collisions due to heavy braking.

Location: B4100 approaches to junction

Drivers travelling along the B4100 may be travelling at or close to the 50mph speed limit as they approach the new junction. They may need to brake hard to stop at a red/amber signal or the back of any traffic queue. This could lead to front/rear ('shunt') or loss of control type collisions.

Recommendation

Review the need for lighting and high friction surfacing, or a reduced speed limit.

2.4 Problem

Insufficient junction manoeuvring space may lead to collisions between vehicles or with other road users.

Location: Site access junction

No vehicle swept path drawings have been provided and it is not clear that large vehicles would be able to complete turning manoeuvres without overrunning opposing traffic lanes or pedestrian/cyclist areas. This may lead to collisions between vehicles or with other road users.

Recommendation

Carry out vehicle swept path analysis and, if necessary, adjust the junction geometry.

Walking, Cycling and Horse Riding

2.5 Problem

Inadequate refuge area may lead to pedestrian and cyclist injuries.

Location: Site access arm of the junction

The stagger distance on the refuge island within the development arm is limited and the Audit Team is concerned that pedestrians/cyclists may inadvertently attempt to cross the second leg without waiting for a second green signal. It is also not clear that refuge island widths will adequately protect cyclists from passing vehicles.

Recommendation

Increase the stagger distance on the development arm refuge island and check that refuge island width is adequate to accommodate cyclists without overhanging traffic lanes.

2.6 Problem

Overhanging branches/foliage may obstruct cyclists and/or cause them to lose control.

Location: Along the B4100

Branches/foliage may occasionally encroach into or over the proposed shared path along the B4100. This is likely to obstruct cyclists using the facility, leading to loss of control or collisions with pedestrians/vehicles.

Recommendation

Branches and other foliage should be cut back clear of the shared path, with sufficient horizontal and/or vertical clearance to minimise future maintenance and reduce the risk of future obstruction.

2.7 Problem

Level drop/ditch at back of shared path may lead to pedestrian and cyclist injuries.

Location: New sections of shared path

Finished levels are unknown at this Stage 1 Audit, but it seems likely that there will be a level drop at the rear of the proposed shared paths. In the event that pedestrians and cyclists stray from the shared path they may fall, causing injury or increased severity of injury.

Recommendation

The verge levels should be raised to remove the drop at the rear of the new shared paths, or a restraint system should be provided.

Road Signs, Carriageway Markings and Lighting

2.8 Problem

Collisions due to stop line overshoots at night.

Location: Approaches to junction

In the event of a power or signal failure, the junction may be inconspicuous at night, causing drivers unfamiliar with the local highway environment to overshoot the stop lines. This could lead to collisions with other vehicles, or pedestrians/cyclists, or (in the case of the development arm) the verge/ditch opposite.

Recommendation

Provide additional clear junction signs/road markings and lighting to increase junction conspicuity, particularly at night.

2.9 Problem

Horizontal and vertical clearances to signal heads/signs may lead to loss of control type collisions.

Location: Proposed junction, in particular splitter islands on south-eastbound approach

Horizontal and vertical clearances to signal heads/signs are unknown at this Stage 1 RSA. Street furniture with insufficient clearances may be struck by passing vehicles, leading to loss of control type collisions.

Recommendation

Suitable horizontal and vertical clearances should be provided to signal heads and signs.

2.10 Problem

Collisions due to obstruction of signal heads.

Location: Controlled crossing

It is not clear that forward visibility to both east-facing signal heads will be available if a bus is present in both lay-bus. In the event of bulb, this could lead to drivers striking pedestrians or cyclists on the crossing.

Recommendation

Check forward visibility to the east facing signal heads at the crossing when a bus is present in each lay-by. If necessary, provide additional signal heads to mitigate the risk of vehicles striking pedestrians or cyclists on the crossing.

3 AUDIT TEAM STATEMENT

3.1 We certify that this Road Safety Audit has been carried out in accordance with DMRB document GG119.

Audit Team Leader

Steve Giles
BEng (Hons), IEng, FIHE, MCIHT, MICE, CMILT, MSoRSA, HE Cert Comp
Senior Road Safety Engineer

Signed: [redacted]

Date: 15/03/2024

Audit Team Member(s)

Wendy Palmer
MCIHT, MSoRSA, FIHE, HE Cert Comp
Senior Road Safety Engineer

Signed: [redacted]

Date: 15/03/2024

APPENDIX A
Items Considered by this RSA

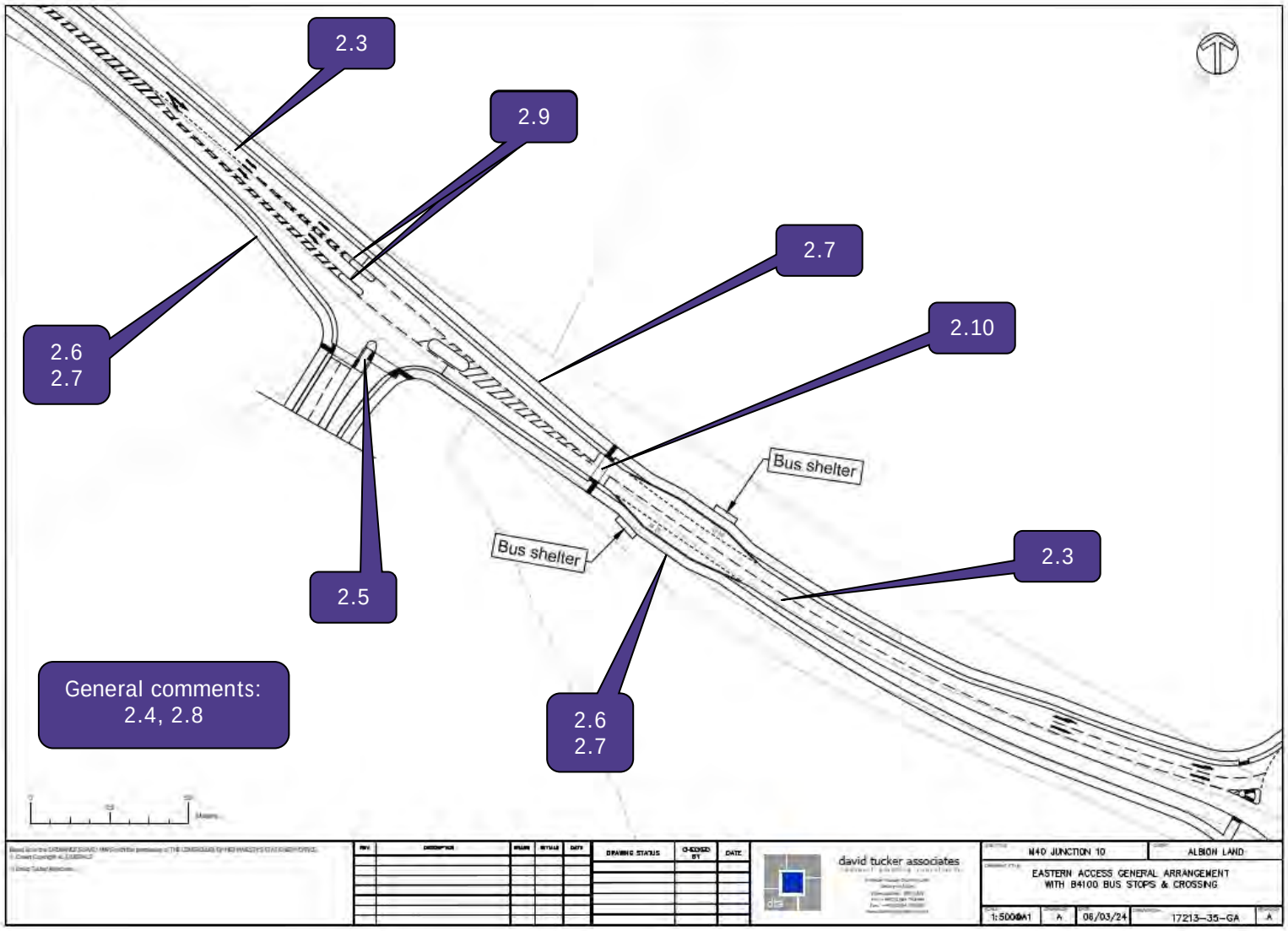
Items Considered by this Road Safety Audit

Document ref.	Rev.	Originator	Title
17213-35-GA	A	DTA Transport Planning	Eastern Access General Arrangement with B4100 Bus Stops & Crossing

Additional/background information provided to the Audit Team

- Audit Brief Ref. 17213-13, dated 20/10/2023 (DTA Transport Planning)
- Transport Assessment Ref. 17213-03E TA (DTA Transport Planning)
- Drg. No. 20005-SK-045 - Proposed Site Plan Option 10 (Cornish Architects)
- Drg. No. 216285/A/14 - A43/B4100 Baynards Green Roundabout Junction Improvement, General Arrangement (SLR)

APPENDIX B
Location Plan(s)


2.3
2.9
2.7
2.10
2.6
2.7
Bus shelter
Bus shelter
2.5
2.3
2.6
2.7
General comments:
2.4, 2.8
david tucker associates
M40 JUNCTION 10
ALBION LAND
EASTERN ACCESS GENERAL ARRANGEMENT
WITH B4100 BUS STOPS & CROSSING
1:500@A1
A
06/03/24
17213-35-GA
A

ROAD SAFETY AUDIT RESPONSE REPORT

Project Details

Project:	Land Adjacent to M40 Junction 10 Albion Land, B4100 East Access
GRSE Ref:	SG/WP/2309-10 RSA1 v2.0
Status:	Issued as v2.0
Issue date:	15/03/2024
Design Organisation:	DTA Transport Planning
Overseeing Organisation:	Oxfordshire County Council
Client:	Albion Land

Authorisation

Prepared by:	
Name:	Richard McCulloch
Position:	Associate Director
Organisation:	DTA Transport Planning
Approved by:	
Name:	Simon Parfitt
Position:	Director
Organisation:	DTA Transport Planning
Signed:	

The Scheme

The highway works considered by the Road Safety Audit comprise:

- A signal controlled 3-arm junction on the B4100
- Bus stops with lay-bys and shelters to the east
- Shared use paths and a signal-controlled crossing

Key Personnel

Overseeing Organisation:	Oxfordshire County Council
RSA Team:	Steve Giles, Senior Road Safety Engineer, Gateway RSE
	Wendy Palmer, Senior Road Safety Engineer, Gateway RSE
Design Organisation:	Richard McCulloch, Associate Director, DTA Transport Planning
	Simon Parfitt, Director, DTA Transport Planning

RSA Decision Log				
Item No.	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
2.3	Review the need for lighting and high friction surfacing, or a reduced speed limit.	Agree. Lighting, surfacing and speed limit will be reviewed at the detailed design stage.		
2.4	Carry out vehicle swept path analysis and, if necessary, adjust the junction geometry.	Agree. Swept path analysis has been undertaken as shown on DTA Drawing 17213-13i-TRK		
2.5	Increase the stagger distance on the development arm refuge island and check that refuge island width is adequate to accommodate cyclists without overhanging traffic lanes.	Agree. Stagger distances on the pedestrian/cycle crossings on the access and mainline can be increased at the detailed design stage. The refuge width can accommodate cyclists without overhang.		
2.6	Branches and other foliage should be cut back clear of the shared path, with sufficient horizontal and/or vertical clearance to minimise future maintenance and reduce the risk of future obstruction.	Agree. Realignment of the site boundaries to accommodate the access and shared path will consider future maintenance at the detailed design stage.		
2.7	The verge levels should be raised to remove the drop at the rear of the new shared paths, or a restraint system should be provided.	Agree. Level differences will be graded out or a restraint system will be provided at the detailed design stage.		
2.8	Provide additional clear junction signs/road markings and lighting to increase junction conspicuity, particularly at night.	Agree. The lighting strategy will be agreed at the detailed design stage		

RSA Decision Log				
Item No.	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
2.9	Suitable horizontal and vertical clearances should be provided to signal heads and signs.	Agree. There are no identified constraints to providing suitable clearances to signal heads and signs		
2.10	Check forward visibility to the east facing signal heads at the crossing when a bus is present in each lay-by. If necessary, provide additional signal heads to mitigate the risk of vehicles striking pedestrians or cyclists on the crossing.	Agree. The need for secondary signal heads will be confirmed at the detailed design stage.		

Design Organisation Statement:

On behalf of the design organisation, I certify that:
The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.

.....

Name: Simon Parfitt

Organisation: DTA Transport Planning

Position: Director

Date: 19th March 2024

Overseeing Organisation Statement:

On behalf of the overseeing organisation, I certify that:
The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Design Organisation.
The agreed RSA actions will be progressed.

.....

Name:

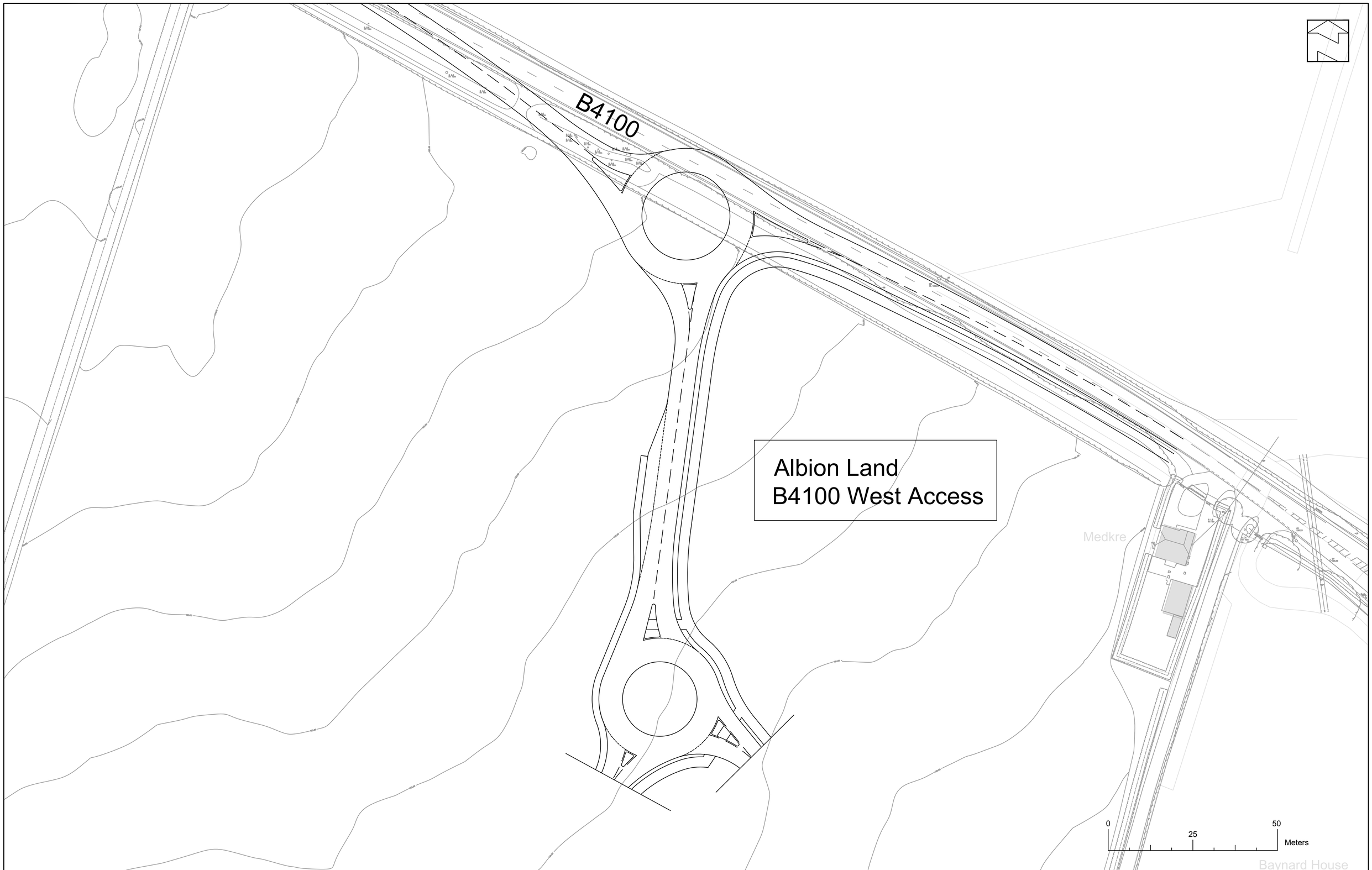
Organisation: Oxfordshire County Council

Position:

Date:

APPENDIX K

Albion Land Western Parcel Access General Arrangement



REV	DESCRIPTION	DRAWN	INITIALS	DATE

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JOB TITLE: M40 JUNCTION 10			CLIENT: ALBION LAND	
DRAWING TITLE: WESTERN ACCESS GENERAL ARRANGEMENT				
SCALE: 1:500@A1	DRAWN BY:	DATE: 18/03/24	DRAWING No: 17213-13-GA	REVISION: K