



South West Milton Keynes Consortium

SOUTH WEST MILTON KEYNES

Updated Proof of Evidence of Martin J Paddle BSc CEng
CWEM MICE FCIHT MCIWEM, in regard to Transport,
Highway and Accessibility Matters: PINS ref:
APP/Y0435/W/20/3252528 LPA ref: 15/00619/FUL

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TYPE OF DOCUMENT (VERSION) PUBLIC

PROJECT NO. 70069442

OUR REF. NO. SWMK: UPDATED PROOF OF EVIDENCE OF MARTIN J PADDLE

DATE: 13 APRIL 2021

South West Milton Keynes Consortium

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QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Final			
Date	April 2021			
Prepared by	Martin Paddle			
Signature				
Checked by				
Signature				
Authorised by				
Signature				
Project number	70069442			
Report number	Updated PoE			
File reference	70069442			



CONTENTS

	QUALIFICATIONS	15
1	INTRODUCTION AND SCOPE OF EVIDENCE	16
2	BACKGROUND TO DISCUSSIONS WITH HIGHWAY AUTHORITIES	19
	INTRODUCTION	19
	PREVIOUS DISCUSSIONS	19
	CONCLUDING COMMENTS	22
3	APPEAL DEVELOPMENT AND EXISTING CONDITIONS	24
	APPEAL DEVELOPMENT	24
	EXISTING LOCAL AND STRATEGIC ROAD NETWORK	25
	EXISTING WALKING NETWORK	25
	EXISTING PUBLIC RIGHTS OF WAY	26
	EXISTING CYCLING NETWORK	27
	EXISTING PUBLIC TRANSPORT	28
	RAIL SERVICES	29
	ACCESSIBILITY TO LOCAL FACILITIES	29
	PERSONAL INJURY COLLISIONS	33
	TRAFFIC SURVEYS	33
	CONCLUDING COMMENTS	33



4	PROPOSED DEVELOPMENT AND TRANSPORT STRATEGY	35
	DEVELOPMENT FRAMEWORK PLAN	36
	PEDESTRIANS & CYCLISTS	38
	STREET HIERARCHY	39
	BUS SERVICES	39
	TRAVEL DEMAND MANAGEMENT	42
	VEHICLE ACCESS POINTS	43
	ROAD SAFETY AUDITS	52
	CONCLUDING COMMENTS	53
5	PLANNING POLICIES, GUIDANCE AND STRATEGIES	55
	COMPLIANCE WITH POLICY	55
	ADOPTED AYLESBURY VALE DISTRICT LOCAL PLAN 2001-2011 (2004)	55
	ADOPTED PLAN:MK 2016 -2031 (MILTON KEYNES LOCAL PLAN) (2019)	56
	BUCKINGHAMSHIRE LOCAL TRANSPORT PLAN 4 (LTP4) (2016)	61
	MOBILITY STRATEGY FOR MILTON KEYNES 2018-2036 (LTP4) MOBILITY FOR ALL (2018)	63
	MILTON KEYNES COUNCIL STRATEGY FOR FIRST LAST MILE TRAVEL (2017)	68
	NATIONAL PLANNING POLICY FRAMEWORK (NPPF)	70
	DRAFT VALE OF AYLESBURY LOCAL PLAN (VALP) 2013-2033	74
	PLANNING PRACTICE GUIDANCE (PPG) (2014)	77
	BUCKINGHAMSHIRE COUNTYWIDE PARKING GUIDANCE (2015)	79



BUCKINGHAMSHIRE COUNTY COUNCIL HIGHWAYS DEVELOPMENT MANAGEMENT GUIDANCE: MANAGING THE TRANSPORT AND TRAVEL IMPACT OF NEW DEVELOPMENTS (2018)	79
BUCKINGHAMSHIRE'S SUSTAINABLE TRAVEL PLANS: GUIDELINES FOR DEVELOPERS (2020)	80
MILTON KEYNES STRATEGY FOR 2050	80
MILTON KEYNES LOCAL INVESTMENT PLAN (MARCH 2015)	81
CONCLUDING COMMENTS	81

6 APPROACH TO MODELLING 83

STRATEGIC MODELS	83
SPREADSHEET AND STATIC MODELS	87
MICROSIMULATION MODEL	88
MKC'S CURRENT POSITION	88
CONCLUDING COMMENTS	88

7 ASSESSMENT METHODOLOGY 90

TRIP GENERATION	90
TRIP DISTRIBUTION & ASSIGNMENT	93
COMMITTED DEVELOPMENT	94
BACKGROUND TRAFFIC GROWTH	94
SCENARIO TESTING	96
JUNCTION MODELS	97
CONCLUDING COMMENTS	98



8	ACCESS JUNCTIONS	100
	BUCKINGHAM ROAD ACCESS	100
	A421 LEFT IN ACCESS	101
	WHADDON ROAD ACCESS	102
9	IMPACT OFF-SITE PRIOR TO MITIGATION	104
	INTRODUCTION	104
	OFF-SITE JUNCTION CAPACITY ASSESSMENTS	104
	IMPACT ON VILLAGES	108
	IMPACT ON HIGHWAY SAFETY	113
	IMPACT ON PUBLIC TRANSPORT	115
	IMPACT ON WALKING AND CYCLING	115
	IMPACT ON THE STRATEGIC HIGHWAY NETWORK	116
	CONCLUDING COMMENTS	116
10	MITIGATION AND RESIDUAL IMPACT	117
	POLICY CONTEXT	117
	JUNCTION CAPACITY	117
	HIGHWAY SAFETY	128
	PUBLIC TRANSPORT	129
	WALKING AND CYCLING	129
	CONSTRUCTION	130
	FRAMEWORK TRAVEL PLAN AND DETAILED TRAVEL PLANS	130



	MITIGATION SUMMARY	130
	RESIDUAL IMPACT	132
	CONCLUDING COMMENTS	134
11	REVIEW BY BUCKINGHAMSHIRE COUNCIL	135
	BUCKINGHAMSHIRE COUNCIL'S STATEMENT OF CASE	135
	DISCUSSIONS WITH BUCKINGHAMSHIRE COUNCIL	136
	CONCLUDING COMMENTS	138
12	REVIEW BY MILTON KEYNES COUNCIL	139
	MILTON KEYNES COUNCIL'S STATEMENT OF CASE	140
	MODELLING	142
	2016 TRANSPORT ASSESSMENT – MOUCHEL (2016 TA)	144
	MAY 2020 WSP TRANSPORT ASSESSMENT (UPDATED TA)	145
	2020 TRAVEL PLAN (UPDATED FTP)	145
	MKC HOLDING OBJECTION TO BC APPLICATION	146
	MEETING WITH MKC	146
	STATEMENT OF COMMON GROUND BETWEEN MKC AND NLPC/WBC	147
	CONCLUDING COMMENTS	147
13	REASON FOR REFUSAL OF PLANNING PERMISSION BY MILTON KEYNES	148
	PLAN:MK POLICY CT1	148
	PLAN:MK POLICY CT2	149



	CONCLUDING COMMENTS	149
14	REPRESENTATIONS BY THIRD PARTIES	151
	NEWTON LONGVILLE PARISH COUNCIL AND WEST BLETCHLEY COUNCIL	151
	WHADDON PARISH COUNCIL	152
	CONCLUDING COMMENTS	153
15	OVERALL SUMMARY AND CONCLUSIONS	154

TABLES

Table 4.1 – Estimated Housing Completions and Required Service Frequency	42
Table 4.2 – Required Hours of Operation	42
Table 5.1 – MK Mode Share Targets	64
Table 8.1 - Buckingham Road Access	101
Table 8.2 - Whaddon Road Access	103
Table 9.1 – Junction 5 - Tattenhoe Roundabout	105
Table 9.2 – Junction 6 - Bottledump Roundabout	107
Table 9.3 – 2033 Do Nothing Traffic Flows	109
Table 9.4 – 2033 Do Nothing Traffic Flows Including Shenley Park Allocation	109
Table 9.5 – 2033 Do Something 1 Traffic Flows	110
Table 9.6 – 2033 Do Something 2 Traffic Flows	110
Table 9.7 – 2033 Do Something 3 Traffic Flows	110
Table 9.8 – 2033 Do Something 1 Percentage Impact	111
Table 9.9 – 2033 Do Something 2 Percentage Impact	111
Table 9.10 – 2033 Do Something 3 Percentage Impact	112
Table 9.11 - COBALT Collisions - Casualty Prediction Over 60 years	114
Table 10.1 – Junction 5 Tattenhoe Roundabout Mitigation Results	120
Table 10.2 – Junction 5 – Vehicle Queuing on Internal Links at Start of Green Time	122
Table 10.3 – Junction 6 – Bottledump Roundabout Mitigation Capacity Assessment	123
Table 10.4 – Modelling Results and Proposed Junction Mitigation Summary	124

Table 10.5 – Mitigation Summary	131
Table 10.6 - Overall Junction Delay - 2033 DS1 Mitigated compared to 2033 DN	133
Table 11.1 – BC Junction Mitigation Summary Using Alternative Methodology	137

FIGURES

Figure 3.1 - Amenities Plan	30
Figure 4.1 - Proposed Whaddon Road Access	45
Figure 4.2 - Distances Between Junctions	46
Figure 4.3 - Proposed A421 Standing Way Access	48
Figure 4.4 - Proposed A421 Standing Way Access Showing Pedestrian Route	49
Figure 4.5 - Proposed Buckingham Road Access	50
Figure 4.6 - Proposed Buckingham Road Access - Visibility	52
Figure 8.1 - Buckingham Road Access	100
Figure 8.2 - Whaddon Road Access	102
Figure 9.1 - COBALT Benefits	114



APPENDICES (Bound Separately)

MJP1	Appeal Development
MJP2	Transport Evidence Directory
MJP3	Chronology of Discussions
MJP4	Transport Assessment Scoping Documents
MJP5	Proposed Development Access Drawings
MJP6	Access Drawings Showing Public Highway
MJP7	MK Urban Bus Routes Map April 2021
MJP8	Technical Note 4 – Traffic Data Analysis
MJP9	Walking and Cycling Connections
MJP10	A421 Access Interaction with Old Buckingham Road
MJP11	Drawing D016B Proposed Buckingham Road Access
MJP12	Drawing 9442-TO-SK-006 P02 Buckingham Road Visibility Splay
MJP13	Policy Compliance Table
MJP14	Microsimulation Modelling Note
MJP15	DfT Growth Forecasts Note
MJP16	Highways England Formal Response 01-03-2016 and 27-11-2020
MJP17	Draft Highways Works Delivery Scheme
MJP18	Highways Mitigation Cost Estimate Summary
MJP19	Drawing 9442-WSP-XX-XX-M2-C-00005 P02 Highways Mitigation Masterplan
MJP20	Letter to BC 7 th April 2021 re Swept Path Analysis and Geometric Dimensions
MJP21	Letter to BC 7 th April 2021 re Junction 16
MJP22	Letter to BC 7 th April 2021 re Junction 17



- MJP23 Letter to BC 7th April 2021 re Junction 1
- MJP24 Correspondence with MKC 21st October 2021
- MJP25 Correspondence with MKC 3rd November 2020 and 18th November 2020
- MJP26 Meeting Note WSP/Hydrock 23rd April 2021
- MJP27 Letter to MKC Dated 7th April 2021 re Further Information
- MJP28 Correspondence with Icenl 31st March 2021



QUALIFICATIONS

Martin James Paddle will say:

- i) I am a Director with WSP where I direct Transport and Development Planning services for a broad range of property sector clients.
- ii) I am registered with the European Federation of National Engineering Associations and hold the title of European Engineer. I am a Chartered Civil Engineer, a Member of the Institution of Civil Engineers and a Fellow of the Chartered Institution of Highways and Transportation.
- iii) I am also a Chartered Water and Environmental Manager and a Member of the Chartered Institution of Water and Environmental Management and hold the degree of Bachelor of Science in Civil Engineering.
- iv) I have been engaged in the practice of civil, municipal, highway and traffic engineering for over forty years in both the public and private sectors. I joined Mouchel (part of WSP since October 2016) in March 1993, having previously worked as an Associate for Transport and Infrastructure consultants The Noble Lewis Partnership (formerly F.E. Noble Associates) and prior to that with the Greater London Council.
- v) I have worked on numerous development and regeneration projects throughout the UK providing transport, highway and infrastructure advice in support of planning applications for a range of land uses and have given expert evidence at numerous Public Inquiries and Tribunals.
- vi) I am familiar with the Appeal Development and the surrounding area having visited it on several occasions following WSP's appointment by the South West Milton Keynes Consortium in January 2015. This evidence has been prepared in accordance with the guidance of my professional Institutions and the opinions expressed are my true professional opinions.



1 INTRODUCTION AND SCOPE OF EVIDENCE

- 1.1 My evidence addresses the transport and highway issues resulting from the refusal of planning permission by Milton Keynes Council (MKC) for two points of access within the Council's jurisdiction to serve a proposed development site within Buckinghamshire Council's (BC) administrative area at South West Milton Keynes (hereinafter referred to as the Proposed Development). The access points together with the existing roundabout junctions at Bottledump and Tattenhoe along A421 are identified as three distinct areas contained within the red line application boundary (hereinafter referred to as the Appeal Development) (**MJP1**).
- 1.2 Where appropriate, I draw on relevant sections of the Updated Transport Assessment (Updated TA) of May 2020,¹ the Updated Framework Travel Plan (Updated FTP) of May 2020², the Transport Response Notes (TRN1³, TRN2⁴ and TRN3⁵) of September 2020, December 2020 and January 2021 and Road Safety Audits with their associated Designer's Responses⁶ of January 2021 that address points raised by BC following the appeal submission. To assist the Inquiry, I prepared a Transport Evidence Directory⁷ (**MJP2**) which explains the relationship between the various documents submitted in evidence and identifies where text/figures/tables have been superseded.
- 1.3 I have also had regard to the Main Proofs submitted in Sept 2020 albeit, I recognise that these are to be superseded and therefore reserve my position to make any further comments on the updated evidence as appropriate.
- 1.4 I also refer to other core documents that I consider would assist this Inquiry. The planning history associated with this case leading up to the eventual determination of the planning application by MKC is explained in evidence presented on behalf of the Appellant by Mr Mark Hyde.
- 1.5 The Appellant's Statement of Case (SoC)⁸ documents the history of MKC's review of the planning application and the events leading towards the eventual determination of the planning application currently before this Inquiry. On 7th November 2019, the Planning Committee at MKC refused planning permission for the following reason:

¹ Updated Transport Assessment, May 2020, WSP (CD10/H/A)

² Updated Framework Travel Plan, May 2020, WSP (CD10/H/B)

³ Transport Response Note 1, September 2021, WSP (CD16/A)

⁴ Transport Response Note 2, December 2020, WSP (CD16/B)

⁵ Transport Response Note 3, January 2021, WSP (CD16/C)

⁶ Road Safety Audits and Designer's Responses (CD16/D)

⁷ Transport Signposting Document, March 2021, WSP (CD16/E)

⁸ Appellant's Statement of Case, May 2020



‘That in the opinion of the Local Planning Authority there is insufficient evidence to mitigate the harm of this development in terms of increased traffic flow and impact on the highway and Grid Road network, with specific reference to Standing Way and Buckingham Road, thus this will be in contravention of Policies CT1 and CT2 (A1) of Plan:MK.’

- 1.6 My evidence demonstrates that this reason for refusal by MKC cannot be sustained. I explain that subject to the implementation of comprehensive measures to mitigate the potential transport impacts of the Proposed (fully occupied) Development in 2033, the Appeal Development would not give rise to any unacceptable traffic or safety impacts that would warrant the refusal of permission. My evidence includes data collected prior to the outbreak of the COVID 19 pandemic in 2020. The data have been used to test a worst case impact on the local highway network in 2033 and do not reflect the inevitable behavioural change that will influence the future growth in trip making across Milton Keynes through the Plan period and beyond.
- 1.7 My evidence is structured as follows and is supported by appendices bound separately prefixed ‘MJP’.
- Introduction and Scope of Evidence;
 - Background to Discussions with Highway Authorities
 - Appeal Development and Existing Conditions;
 - Proposed Development and Transport Strategy;
 - Planning Policy, Guidance and Strategies;
 - Approach to Modelling;
 - Assessment Methodology;
 - Access Junctions;
 - Impact Off-Site Prior to Mitigation;
 - Mitigation and Residual Impact;
 - Review by Buckinghamshire Council;
 - Review Milton Keynes Council;
 - Reason for Refusal of Planning Permission by Milton Keynes;



- Representations by Third Parties; and
- Overall Summary and Conclusions.



2 BACKGROUND TO DISCUSSIONS WITH HIGHWAY AUTHORITIES

INTRODUCTION

- 2.1 Planning permission for the Proposed Development was originally sought in 2015 from both Aylesbury Vale District Council⁹ (AVDC) (15/00314/AOP) and Milton Keynes Council (MKC) (15/00619/FUL). Discussions with both authorities continued following the submission of the applications and in June 2017 AVDC resolved to grant planning permission subject to the signing of a s106 Agreement. Negotiations have progressed well between all parties to finalise the Agreement and, although the document has not yet been completed, it is at an advanced stage.
- 2.2 MKC subsequently refused planning permission for the duplicate planning application in November 2019 in relation to the impact on the wider highway network as follows:

'...there is insufficient evidence to mitigate the harm of this development in terms of increased traffic flow and impact on the highway and Grid Road network, with specific reference to Standing Way and Buckingham Road, thus this will be in contravention of Policies CT1 and CT2 (A1) of Plan:MK.'

- 2.3 This decision was contrary to the advice of MKC Planning and Highway Officers, who repeatedly recommended the grant of permission. The Officer's Report prepared for the 7th November 2019 Planning Committee specifically concluded:

'...subject to adequately worded conditions...the proposed development therefore accords with Policies CT1, CT2 and CT3 of Plan:MK.'

PREVIOUS DISCUSSIONS

- 2.4 Since my company's original appointment in January 2015, my team and I have been involved with numerous meetings with Officers at MKC, Buckinghamshire County Council (BCC), who manage the local road network, and Highways England (HE) who manage the Strategic Road Network (SRN) on behalf of the Secretary of State for Transport.
- 2.5 In addition, all three authorities sought advice and support from their respective consultants comprising: Stirling Maynard Transportation (SMT) for MKC; Jacobs for BC, and Aecom for HE. In

⁹ AVDC and Buckinghamshire County Council (BCC) ceased to exist on 1st April 2020, when Buckinghamshire Council (BC) became the new unitary authority with control over the whole of the Buckinghamshire area, including Aylesbury Vale.



progressing matters, my team engaged extensively with these consultants during the period 2015 – Summer 2017. Those discussions preceded the Regulation 22 submission in August 2016 and continued through to AVDC's positive resolution in June 2017 and MKC's refusal of the Appeal Development in November 2019. Since my initial involvement in January 2015, my team and I have gone to great lengths to address all the transport related points raised by MKC, BC and HE.

2.6 I include at **MJP3** a more detailed chronology of transport events and the outputs that preceded MKC's determination of the planning application in November 2019, with key dates set out below:

- January 2015: The original planning application was accompanied by a Transport Assessment (TA) and Framework Travel Plan (FTP) dated January 2015.
- March 2015 – August 2016: Further technical notes and assessments provided through discussion with both MKC and BC and their consultants, leading to agreement on technical highway matters;
- August 2016: Submission of an updated TA¹⁰ (2016 TA) as part of a Regulation 22 submission;
- August 2016 – June 2017: Further discussions were held with Officers at BCC and MKC and their respective consultants to agree a revised mitigation package, to identify s106 obligations and the extent of proposed highway improvements that would also be secured via s278 of the Highways Act 1980;
- June 2017: AVDC resolved to grant permission subject to conditions and securing the s106 agreement. The highway Officer's response confirmed that the Proposed Development would not have a severe impact on the local road network; and
- November 2019: MKC considered the application for the Appeal Development and refused planning permission against their Officer's recommendation.

2.7 Following the refusal of planning permission by MKC, a further Updated TA¹¹ and Updated FTP¹² (hereinafter referred to as the Updated TA and Updated FTP) were prepared which accord with a previously agreed Transport Assessment Scoping Note (TASN)¹³ (**MJP4**) and these were submitted

¹⁰ Transport Assessment, August 2016, Mouchel (CD2/E)

¹¹ Updated Transport Assessment, May 2020, WSP (CD10/H/A)

¹² Updated Framework Travel Plan, May 2020, WSP (CD10/H/B)

¹³ Transport Assessment Scoping Note, January 2020, WSP (MJP4)



as part of the Appeal document bundle. The WSP technical team produced the Updated TA under my direction, to update matters given the passage of time between submission of the 2016 TA and the submission of the Appeal in Spring 2020 and given that the MKTM (upon which the 2016 TA was based) had been superseded¹⁴. The methodology contained within the 2016 TA was robust and fit for purpose at the time of submission and determination of the planning applications to MKC and AVDC. Highway Development Management Officers from both authorities were satisfied at that time, that the TA was robust and that the Proposed Development would not give rise to any severe residual cumulative impacts that would justify the refusal of planning permission.

- 2.8 The planning application previously subject to a resolution to grant from AVDC was subject to a further update in 2020 which is described in the evidence of Mr Hyde and comprises minor changes to the proposed masterplan and the development framework plans. For avoidance of doubt, the quantum of development has not changed from the original planning application of 2015 and Regulation 22 submission in 2016; the only minor change that could have a bearing on traffic generation is the inclusion of 60 extra care units within the total of 1,855 residential units, although this would serve to reduce the number of trips generated by the Proposed Development. The Proposed Development is described in more detail in Section 4 of my evidence.
- 2.9 Further to the submission of the Appeal in May 2020 and application revision package in June 2020, further discussions were held with BC, MKC and their respective consultants¹⁵ to consider and review the content of the Updated TA and Updated FTP. Further analysis was completed and presented in evidence in September 2020 and comprises TRN1 and various Technical Notes that respond to comments raised by BC. This further analysis included sensitivity tests and an alternative methodology to incorporate higher employment trip generation; a modified distribution of trips; and junction calibration as requested by BC.
- 2.10 No detailed formal comments had been proffered by MKC at that time, with exception of the points raised in their original evidence which I summarise below:
- Traffic data was not collected in a representative period;
 - Walking and cycling distances from the Site were misrepresented;
 - Model calibration did not follow guidance;
 - The models are inaccurate and are under-predicting queueing and delay; and

¹⁴ The MKTM was superseded by the MKMMM in 2017

¹⁵ Hydrock were also appointed alongside SMT to act on behalf MKC



- There is no assessment of the effect of the redistribution of traffic across the wider highway network.

- 2.11 I do not accept these criticisms, and MKC now agree that the traffic data used in the Updated TA are representative.¹⁶ The second point has been updated in TRN1 to reflect walking and cycling isochrones from the centre of the Proposed Development as requested; the third point MKC has not raised any further query. I address the final two points later in my evidence in Sections 6, 9 and 10.
- 2.12 Discussions continued with BC through the Autumn 2020 to refine the methodology used to calibrate the junction models to ensure that they replicated the conditions as observed as closely as possible. In December 2020, TRN2 was submitted to address the further comments raised by BC on the analysis of junctions within their jurisdiction and to ensure that my team and I could respond positively to requests made from the other parties involved in the Appeal in order to narrow the differences between us.
- 2.13 In January 2021, TRN3 was submitted at the request of BC, to ensure consistency of the approach adopted within TRN2 (i.e. including a higher employment trip rate, amended distribution and alternative calibration methodology). TRN3 applied the methodology and approach adopted in TRN2 to the junctions within MK. This will enable BC to return to Committee in the knowledge that their highways Officers have assessed the MKC junctions based on the agreed updated methodology.
- 2.14 The changes between the Updated TA, TRN1, TRN2 and TRN3 relate to the modelling of junctions in the base and mitigation scenarios to ensure that the mitigation proposed is acceptable to BC and MKC. The amendments to the proposed mitigation following the submission of the Updated TA comprise kerb widening and enhancement to the capacity at specific junctions. All parties at the Appeal have had the opportunity to comment on the proposed mitigation through consultation on the Appeal and on the live planning application within BC.

CONCLUDING COMMENTS

- 2.15 Comprehensive discussions have been held during the period March 2015 – July 2017 with Officers at MKC, BCC, HE and their respective consultants to determine and agree appropriate methods to collect data and assess the transport/highway impact of the Appeal Development and the Proposed Development on both the local road network and the SRN.

¹⁶ Draft Statement of Common Ground (Transport & Highways) between the Appellant and MKC, April 2021, Paragraph 20



- 2.16 A *nil detriment* approach was previously agreed using a combination of ‘static’ junction models and relevant data extracted from the Milton Keynes Traffic Model (MKTm) to assess and determine the appropriate impacts on local roads. A subsequent review in 2019 of strategic modelling forecast reports in support of Plan: MK¹⁷ and the draft VALP¹⁸ acknowledges that to accommodate planned growth to 2031 and 2033 respectively, the corridor of A421 (which includes Standing Way), would operate either at or near to capacity in the absence of further improvements to local infrastructure.
- 2.17 In view of MKC’s refusal of permission in November 2019, the assessment of the transport implications of the Appeal Development and the Proposed Development has been updated to include 2020 data collected prior to the outbreak of the COVID 19 pandemic. The Updated TA incorporates a methodology that was agreed with Officers at BCC/BC, MKC and their respective consultants (**MJP4**). TRN2 and TRN3 incorporate a revised methodology for the junction assessments as requested by BC, with associated updated mitigation proposals. The overall quantum of development remains unchanged from the original 2015 planning application and Regulation 22 submission in August 2016.

¹⁷ Milton Keynes Multi Modal Model Update, Highway Model Traffic Forecasting Report, November 2017, Aecom (CD12/A)

¹⁸ North East Bucks Local Plan Tests – Technical Report, TN02/2, 30 May 2019, Jacobs, Section 6.3 (CD11/D)

3 APPEAL DEVELOPMENT AND EXISTING CONDITIONS

APPEAL DEVELOPMENT

- 3.1 The Appeal Development relates to three distinct areas as previously described (**MJP1**). Two of those areas comprise land where access is required within MKC's jurisdiction to serve the Proposed Development. The access arrangements to serve the Proposed Development are shown on **MJP5** and described in more detail in in Section 4 of my evidence. The Appeal Development is predominantly within the existing public highway (**MJP6**), with the exception of land at point 'A', which is currently within the control of Milton Keynes Parks Trust¹⁹ and I understand is available for use for landscaping and highways schemes.
- 3.2 The area of land that would be served by the Appeal Development (i.e. the land that constitutes the Proposed Development), lies north-west of Newton Longville, immediately west of Far Bletchley and south west of the centre of Milton Keynes. The area, which covers approximately 144 hectares, is bounded to the north by A421 Standing Way, to the east by the existing built up area of Far Bletchley, to the south by the disused railway line and to the west by Whaddon Road.
- 3.3 The entirety of the Proposed Development is located within the area of Aylesbury Vale in Buckinghamshire. However, two of the three access points; one on A421 Standing Way and the second on B4034 Buckingham Road lie within MKC and form part of the Appeal Development. A plan showing the location of the Proposed Development in relation to the surrounding area is provided in the Updated TA.²⁰
- 3.4 The three areas which delineate the Appeal Development land within the 'red line' planning application boundary comprise (**MJP1**):
- i) A length of public highway and land adjacent to A421 Standing Way for the purpose of constructing a 'left in' only access;
 - ii) A small area of highway land which is required for the purpose of constructing the Proposed Development access roundabout that connects with Buckingham Road and Tattenhoe roundabout; and
 - iii) Bottledump Roundabout further west along A421.

¹⁹ Milton Keynes Parks Trust – an independent organisation to MKC

²⁰ Updated Transport Assessment, May 2020, WSP, Figure 3.1 and Appendix B (CD10/H/A)



- 3.5 There is currently no formal direct means of vehicular access into the Proposed Development. Weasel Lane crosses the Proposed Development area in a north easterly direction from Whaddon Road to B4034 Buckingham Road. Weasel Lane is a restricted byway; a highway over which the public has a 'right of way' on foot, bicycle, horseback, and with non-mechanically propelled vehicles. Weasel Lane is accessible from both Whaddon Road and Buckingham Road by means of 'simple' priority junctions at both ends.

EXISTING LOCAL AND STRATEGIC ROAD NETWORK

- 3.6 The extent of the local and strategic highway network is shown in the Updated TA.²¹ The area is well connected on a local, sub-regional and regional scale. A421 Standing Way runs in a north easterly direction towards the A5, providing connections to the Bletchley, Emerson Valley and Furzton areas. A roundabout at the junction of A421 Standing Way and V6 Grafton Street (Bleak Hall Roundabout) provides access to Redmoor Roundabout which interchanges with A5. To the east of A5, A421 Standing Way provides access through the Beanhill, Netherfield, Monkston, Kents Hill and Brinklow areas to Junction 13 on M1 and northeast into Bedford.
- 3.7 To the west, A421 provides links to Buckingham and A43. A421 extends west from Bottledump Roundabout in the north-west corner of the Proposed Development and has a number of junctions along its length providing links to minor roads that serve the surrounding villages. A421 continues west and meets A413 at a roundabout to the east of Buckingham, some 12.5km west of the Proposed Development, before continuing west bypassing Tingewick to the south and joining A43 approximately 4km south of the centre of Brackley.
- 3.8 Whaddon Road runs in a south easterly direction along the western edge of the Proposed Development, over the disused railway, and into the village of Newton Longville. Within the village, Whaddon Road gives way to Bletchley Road/Drayton Road at a four-arm priority junction before continuing as Stoke Road. Stoke Road connects via a priority junction with Drayton Road which provides access to A4146 Stoke Hammond bypass to the south, of which A4146 provides a southern bypass to Leighton Buzzard before joining A505. A505 joins A5 Watling Street at a roundabout junction to the north west of Houghton Regis with A5 continuing eastwards to the recently opened Junction 11A on M1.

EXISTING WALKING NETWORK

- 3.9 A comprehensive network of existing pedestrian footways and Public Rights of Way (PRoW) lies predominantly to the north and east of the Appeal Development and Proposed Development.

²¹ Updated Transport Assessment, May 2020, WSP, Figure 3.2, 3.3 and Appendix D (CD10/H/A)



Walking isochrones using the existing network of footpaths developed from the centre of the Proposed Development as indicated by Figure 4.1 of TRN1 demonstrate that the areas of Snelshall West, Tattenhoe Park, Kingsmead, West Bletchley and Far Bletchley are all within reasonable walking distance of 2km (i.e. 25 minute walk time). Table 4.1 included within TRN1 identifies the local amenities that would be accessible with appropriate walk times and distances.

- 3.10 Whaddon Road to the west forms part of the Milton Keynes Boundary Walk, despite the fact that it does not include any formal pedestrian infrastructure, whereas both A421 Standing Way and B4034 Buckingham Road do provide pedestrian and cycle facilities. A421 Standing Way features a shared cycle/footway to the north of the carriageway segregated by a wide grass verge. That forms part of Milton Keynes' 'Redway' network; a network of pedestrian and cycle routes across the City.
- 3.11 A subway is provided adjacent to Steinbeck Crescent which provides access to the southern side of the carriageway where a 'lay-by' is provided. The subway also provides a connection to the disused carriageway of the Old Buckingham Road that runs parallel along A421 Standing Way to the south and comprising the northern boundary of the Proposed Development.
- 3.12 The Redway on A421 Standing Way runs between the Bottledump Roundabout and the urban centre of Milton Keynes. Grade separated provision at the Tattenhoe Roundabout provides a safe connection to a further Redway route that runs along B4034 Buckingham Road to Caernarvon Crescent where Chestnuts Primary School is located.
- 3.13 The Redway on A421 Standing Way continues into Milton Keynes along the southern side of the carriageway with subway connections to Tattenhoe Park and other residential areas to the north. Buckingham Road also features a shared cycle/ footway on the northern side of the carriageway segregated from the carriageway by a grass verge.

EXISTING PUBLIC RIGHTS OF WAY

- 3.14 PRoWs extend through and adjacent to the Appeal Development and the Proposed Development and comprise²²:
- Bridleway WHA/16 extends south from A421 Standing Way (approximately 150m west of Bottledump Roundabout) to Whaddon Road (Mursley) and beyond Whaddon Road to the west as LHO/19;

²² Updated Transport Assessment, May 2020, WSP, Figure 3.5 and Appendix F (CD10/H/A)



- Weasel lane, a restricted byway runs through the Proposed Development on a south west to north east axis between Whaddon Road and Buckingham Road where it terminates. In the west it continues across Whaddon Road and connects with Salden Lane;
- Footpath NLO/19 extends from Weasel Lane (250m west of Buckingham Road) south to Whaddon Road, Newton Longville, opposite Westbrook End. The footpath passes under the currently disused route of the East West rail line via an existing underpass;
- There are two recreational footpath routes in the vicinity of the Proposed Development:
 - The Midshires Way is a long-distance footpath and bridleway that runs from Bledlow in Buckinghamshire, to Stockport in Greater Manchester. Near the Proposed Development, it runs along Bridleway WHA/16 from Whaddon Road (Mursley) under the subway at Bottledump Roundabout, and north along the western boundary of Tattenhoe Park; and
 - The Milton Keynes Boundary Walk is a circular route around Milton Keynes. It runs through Newton Longville, north along footpath NLO/19 to Weasel Lane, along Weasel Lane, north along Whaddon Road to Bottledump Roundabout and north along the western boundary of Tattenhoe Park. The route is a 'walk' and is not designated as a PROW.

EXISTING CYCLING NETWORK

- 3.15 There is a comprehensive network of routes that surround the Appeal Development and the Proposed Development. National Cycle Route (NCR) 51 runs south-west through the Proposed Development, along Weasel Lane from Buckingham Road, crossing Whaddon Road before re-joining the road network on a small farm track, east of Lower Salden Farm. Weasel Lane is a restricted byway, with the following PROW classifications:
- NLO/25 at the north eastern end (between Buckingham Road and footpath NLO/19 – around 250metres) with a metalled surface around 4m in width and with verges both sides;
 - NLO/20 between footpath NLO/19 and the parish boundary – around 1150m in length generally metalled and with a similar width of around 4m and verges to both sides; and
 - MUR/15 between the parish boundary and the track to Lower Salden Farm – around 550m, with width and surface generally as for NLO/20.
- 3.16 The route is sign-posted throughout as NCR51, providing connections to Bicester and Oxford to the south-west, and Bedford and Huntingdon to the north-east.



- 3.17 The Milton Keynes cycle network (i.e. the Redway network) commences west of Bottledump roundabout before continuing eastbound, north of A421 Standing Way, reaching Tattenhoe Roundabout where it passes under the V1 Snelshall Street and A421 Standing Way arms of the roundabout via subways. At this point, the Redway splits in three. A route can either be followed north-east alongside A421 Standing Way towards the City Centre and Central Milton Keynes Railway Station, or to the south east alongside Buckingham Road, and to the north alongside V1 Snelshall Street.
- 3.18 The Redway network can be accessed from the Proposed Development via:
- Whaddon Road, immediately south of Bottledump Roundabout;
 - The subway under A421 Standing Way, east of Steinbeck Crescent; and
 - Buckingham Road, south east of Tattenhoe Roundabout.
- 3.19 Isochrones showing the areas accessible within an 8km cycling distance of the centre of the Proposed Development are indicated by Figure 4.2 of TRN1²³. Within a 5km cycling distance the areas of Bletchley including Bletchley Railway Station, Water Eaton, Tattenhoe, Oxley Park, Emerson Valley, Furzton and Shenley Lodge are accessible. **Table 3.1** of my evidence (and Table 4.1 included within TRN1) identifies the local amenities that would be accessible with appropriate cycle times and distances.

EXISTING PUBLIC TRANSPORT

- 3.20 Public transport services and associated infrastructure are reviewed in the Updated TA²⁴, however there have been amendments to the bus services in April 2021 which I describe in my evidence in this Section. Access to public transport is measured with reference to the number of services accessible within a reasonable walking distance. For bus based public transport a reasonable walking distance between a home/place of employment and a bus stop is generally regarded to be around 300-500m, depending on the frequency of services from the stop, the topography and the security of desire routes.²⁵
- 3.21 The nearest bus stops that are served by a regular bus service are on Steinbeck Crescent in Snelshall West to the north of the Proposed Development, approximately 230m from the boundary south of A421 Standing Way and one kilometre from the centre of the Site. The bus stop is currently served by

²³ TRN1, September 2020, WSP, Figures 4-1 and 4-2, Appendix D (CD16/A)

²⁴ Updated Transport Assessment, May 2020, WSP, Section 3.6-3.7 (CD10/H/A)

²⁵ Buses in Urban Developments, 2018, CIHT Table 4 page 18 (CD13/D)



Route 3 operated by Arriva. Between Monday and Saturday, a 20-minute service operates between Snelshall West and Magna Park via Central Milton Keynes, with an hourly service on Sundays.

- 3.22 A number of local bus services have ceased to operate recently, with MKC instead operating a Demand Responsive Transport service (MK Connect) from April 2021 to provide a more flexible, bespoke service to local residents. Service 4 continues to operate between Bletchley and Wolverton, Service 50 continues between CMK and Little Horwood, via Newton Longville, and Service 8 remains operational between Westcroft, CMK and Walnut Tree (**MJP7**).

RAIL SERVICES

- 3.23 Rail services are identified in the Updated TA.²⁶ Bletchley Railway Station is located approximately 3.4km to the east of the Proposed Development and would be accessible by bicycle or by Bus Route 4. Bletchley Railway Station has currently 628 parking spaces with 29 for use by the mobility impaired. There is also sheltered parking for 58 bicycles at the station.
- 3.24 The station, operated by London Northwestern Railway, is located on the West Coast Main Line, providing connections to Milton Keynes Central and Birmingham New Street to the north, and Watford and Euston to the south. The station also provides links to local stations, including Leighton Buzzard. Southern Trains also operate an hourly service which terminates at East Croydon.
- 3.25 Milton Keynes Central is located approximately 6.4km from the Proposed Development via the Redway network on bicycle, or via V1 Snelshall Street, H6 Childs Way and Elder Gate by car. The station provides sheltered storage for 900 bicycles. Car parking is available at the station although this is more costly than the provision at Bletchley and therefore may be a less attractive option for residents wishing to access rail services. The train operators serving Milton Keynes Central are London Northwestern, Southern Trains and Avanti West Coast.

ACCESSIBILITY TO LOCAL FACILITIES

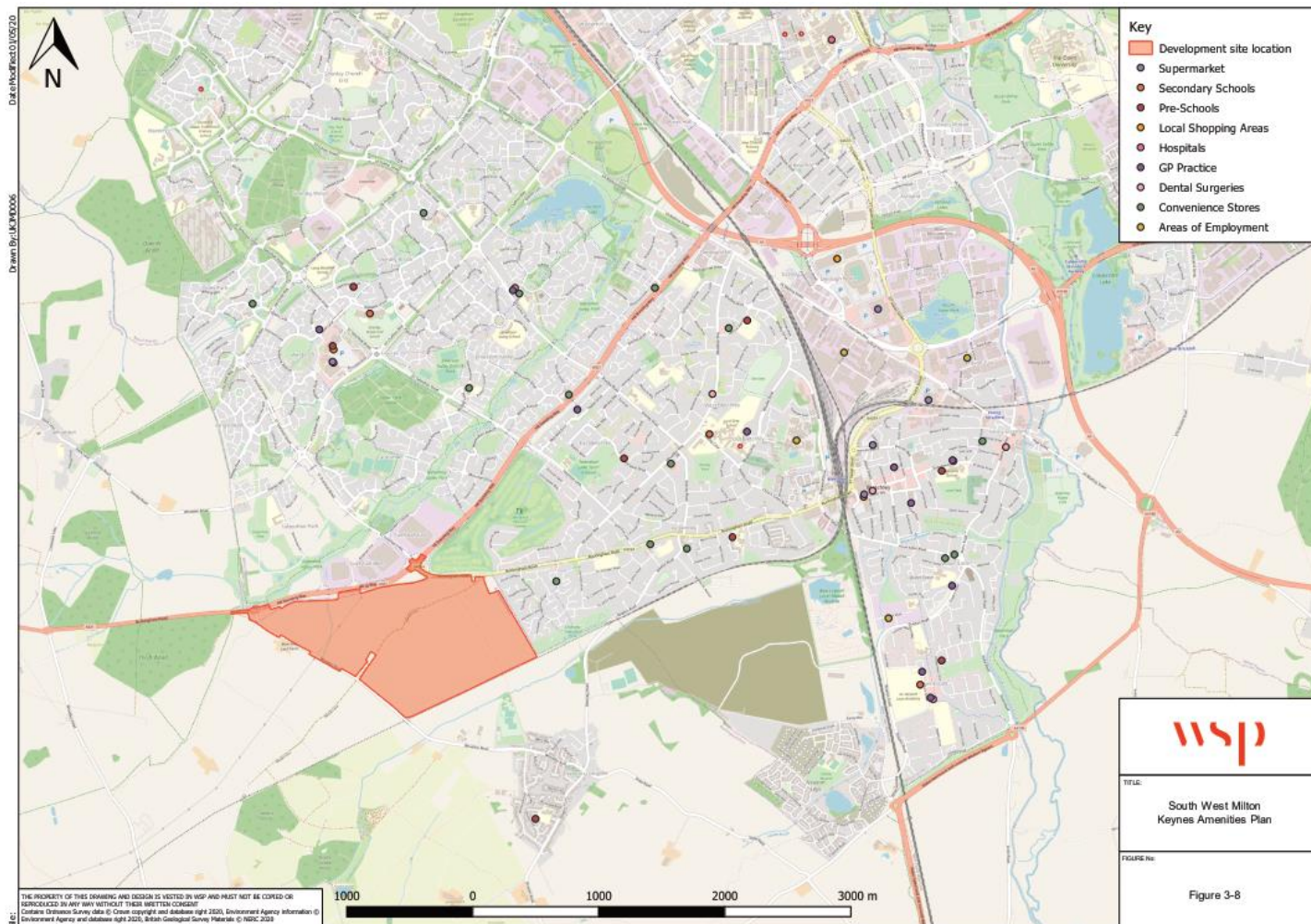
- 3.26 Access to local amenities is considered by examining the number of services and facilities available within a reasonable walking and cycling distance of the Proposed Development. The distances that are typically considered acceptable by these modes of travel are as follows:
- Walking - up to 2km (equivalent to a 25-minute walk); and
 - Cycling - up to 5km (equivalent to a 20-minute cycle).
- 3.27 The range of amenities and facilities available are indicated below in **Figure 3.1**. Distances measured from the centre of the Proposed Development to those facilities not expected to be

²⁶ Updated Transport Assessment, May 2020, WSP, Section 3.7 (CD10/H/A)



available within the Proposed Development are shown in **Table 3.1** and included as Table 4.1 in TRN1.

Figure 3.1 - Amenities Plan²⁷



²⁷ Updated Transport Assessment, May 2020, WSP, Figure 3.8 and Appendix I (CD10/H/A)

Table 3.1: Amenities within Walking and Cycling Distance

Amenity Type	Amenity	Distance from Centre of Site (KM)	Walking Time (minutes)	Cycling Time (minutes)
Pre School	Little Tinkers	2.8	35	11
	Phoenix Pre School	2.6	33	10
	Melrose Pre School	3.9	49	15
	Ducklings Pre School Westcroft	4	50	15
	Newton Longville Pre School	4.3	54	16
	Chipmonks Pre School	4.4	55	17
	Knowles Nursery School	4.8	60	18
	Wind in the Willows Nursery	6	75	23
Areas of Employment	Bletchley Park Science Centre	4.3	54	16
	Water Eaton Industrial Estate	4.6	58	17
	Denbigh Business Park	5.5	69	21
	Caldecotte Lake Business Park	7.3	91	27
Hospitals	Milton Keynes University Hospital	6.3	79	24
Dental Surgeries	Bletchley Dental Practice	3.2	40	12
	All Smiles Dentist	3.6	45	14
	Queensway Dental Practice	4.2	53	16
	Milton Keynes Dental Clinic	5	63	19
	Oxford House Dental Practice	5.3	66	20
	Water Eaton Health Centre	5.8	73	22
Supermarket	Morrisons	3.9	49	15

Amenity Type	Amenity	Distance from Centre of Site (KM)	Walking Time (minutes)	Cycling Time (minutes)
	Sainsburys	4.2	53	16
	Lidl	4.3	54	16
	Asda	5.4	68	20
	Tesco	5.6	70	21
GP Practice	Whaddon House Surgery	2.9	36	11
	Westcroft Health Centre	3.8	48	14
	Furzton Medical Centre	4.3	54	16
	Parkside Medical Centre	3.8	48	14
	Bedford Street Surgery	4.5	56	17
	Westfield Road Surgery	4.6	58	17
	Water Eaton Health Centre	5.8	73	22

*Walking time based on an average walking speed of 80m per minute (3mph²⁸)

**Cycle time based on an average cycling speed of 267m per minute (10mph²⁹)

3.28 I explain later in Section 4 of my evidence that the Proposed Development would include a convenience store; retail space for a café, pub or takeaway; community facilities including play areas and sports facilities; a primary school, secondary school and a health facility, meaning that access to local facilities will be via shorter distances than those shown above. Further detail on the composition of the Proposed Development is provided in Section 4 of the Updated TA.³⁰

²⁸ Planning for Walking, 2015, CIHT, Page 6 (CD13/C)

²⁹ LTN01/20 Cycle Infrastructure Design, 2020, Department for Transport (DfT), Para 5.1.2 Page 40 (CD13/E)

³⁰ Updated Transport Assessment, May 2020, WSP, Section 4 (CD10/H/A)



PERSONAL INJURY COLLISIONS

- 3.29 A review of the most recent Personal Injury Collision (PIC) data^{31,32} available for the study area indicate that there are no specific causal patterns that relate to junction/highway alignment that are likely to be exacerbated either by the Appeal Development or the Proposed Development.
- 3.30 The analysis of PIC data presented in the Updated TA and TRN2 identifies that whilst a number of collisions have occurred across the study area, there is no specific causal pattern (e.g. poor junction configuration and highway alignment) on the existing road network immediately surrounding the Proposed Development.

TRAFFIC SURVEYS

- 3.31 A comprehensive data collection exercise was undertaken in February 2020 as agreed with Officers from MKC, BCC and their respective consultants³³, to provide an up to date baseline for consideration within the Updated TA.³⁴ The study area was agreed with BCC and MKC as part of the Updated TA scoping process³⁵ and includes the roads most likely to be affected by the Appeal Development and the Proposed Development.
- 3.32 Further analysis of the traffic surveys is included in **MJP8**, and both BC and MKC agree that the traffic survey data were collected in February 2020 prior to the COVID 19 pandemic and are representative and suitable for use within the assessment of the Proposed Development, as set out in the respective Statements of Common Ground.^{36,37}

CONCLUDING COMMENTS

- 3.33 The Appeal Development comprises two areas within MKC's jurisdiction where access is required to serve the Proposed Development. The two points of access include the provision of an 'at grade' roundabout located on Buckingham Road and a 'left in' only access from A421 Standing Way.
- 3.34 The Proposed Development has good access to local footways / footpaths, the PRoW network and local cycle routes. The pedestrian network provides connections to local places of interest and public transport facilities and is well located to make use of existing highway connections.

³¹ Updated Transport Assessment, May 2020, WSP, Section 3.9 (CD10/H/A)

³² Transport Response Note 1, September 2020, WSP, Section 3.2 (CD16/B)

³³ Transport Assessment Scoping Note, January 2020, WSP, Appendix A (MJP4)

³⁴ Updated Transport Assessment, May 2020, WSP, Figure 3.27 and Appendix B (CD10/H/AD)

³⁵ Transport Assessment Scoping Note, January 2020, WSP (MJP4)

³⁶ Draft Statement of Common Ground (Transport & Highways) between the Appellant and MKC, April 2021, Paragraph 20

³⁷ Draft Statement of Common Ground (Transport & Highways) between the Appellant and BC, April 2021, Paragraph 19



- 3.35 Many of the existing facilities and amenities surrounding the Appeal Development and the Proposed Development are beyond a reasonable walking and cycling distance and therefore the provision of 'on site' facilities is an integral part of the Proposed Development as I explain later in Section 4 of my evidence.
- 3.36 A review of the most recent PIC data available for the study area indicates that there are no specific causal patterns that relate to junction/highway alignment that are likely to be exacerbated by either the Appeal Development or the Proposed Development.
- 3.37 The Appeal Development and the Proposed Development offer an excellent opportunity to enhance the existing infrastructure and seek to influence behaviour at source to encourage the use of more sustainable travel options that would potentially offer a far wider community benefit and maximise the opportunity for internalising trips. In this way, the Proposed Development would contribute positively towards achieving both national and local planning policies to deliver sustainable development objectives as I explain later in Section 5 of my evidence.

4 PROPOSED DEVELOPMENT AND TRANSPORT STRATEGY

- 4.1 The Proposed Development incorporates a mixed-use sustainable urban extension on 144.77Ha of land to the south west of Milton Keynes. The Appellants seek outline planning permission (all matters reserved except for access) for the following:

‘Outline planning application with all matters reserved except for access for a mixed-use sustainable urban extension on land to the south west of Milton Keynes to provide up to 1,885 mixed tenure dwellings; an employment area (B1); a neighbourhood centre including retail (A1/A2/A3/A4/A5), community (D1/D2) and residential (C3) uses; a primary and a secondary school; a grid road reserve; multi-functional green space; a sustainable drainage system; and associated access, drainage and public transport infrastructure’

- 4.2 The quantum of development assessed within the Updated TA is consistent with the 2016 TA (i.e. Regulation 22 submission) and comprise the following:

- 1,855 mixed tenure residential dwellings, including 60 extra care units;
- 2.07-hectare employment area (B1 land use);
- 0.67-hectare neighbourhood centre accommodating retail (A1/A2/A3/A4/A5) and community land uses (D1/D2);
- A Primary School with 630 pupil places; and
- A Secondary School with 600 pupil places.

- 4.3 The residential component of the Proposed Development includes up to 1,855 new dwellings, 60 of which would be extra care units with the precise mix of the remaining 1,795 units to be fixed through subsequent reserved matters planning applications pursuant to any outline planning permission. There will be a range of residential densities from 20-25 dwellings per hectare on the southern edge of the development where it meets the open countryside to up to 50 dwellings per hectare abutting the Neighbourhood Centre.

- 4.4 The Proposed Development also makes provision for a range of employment uses. Employment uses will be provided within an employment area set around a mixed-use Neighbourhood Centre located close to the north-eastern ‘gateway’ adjacent to A421 Standing Way. The employment area is likely to accommodate small ‘starter’ office units that would provide appropriate space for small local businesses but will not preclude larger single buildings / businesses.



- 4.5 The proposed mix of uses, to include both primary and secondary school provision, will encourage internalisation of trips and therefore satisfies key local and national policy requirements to reduce the impact of development on the wider highway network through reducing the need to travel and to encourage greater use of sustainable modes of travel, in particular walking and cycling.

DEVELOPMENT FRAMEWORK PLAN

- 4.6 The Development Framework Plan³⁸ has been prepared to accompany the revised planning submission to BC. The Development Framework Plan has been subject to certain amendments over time, however the ‘principles of access’ remain unchanged and the internal layout remains broadly consistent with earlier concepts. The Development Framework Plan incorporates the following changes:
- Revisions to selective development areas to accommodate updates to the surface water drainage strategy and utilities on Site;
 - A more definitive plot and alignment of the existing pipeline; and
 - Inclusion of the 60 bed extra care facility.
- 4.7 The Proposed Development and details of the Development Framework Plan are described in detail in the updated Design and Access Statement (DAS)³⁹ prepared to accompany the updated planning submission. The overall layout is planned to accommodate the sustainable travel needs of future residents and employees to influence behaviours and maximise the opportunity to internalise trips which I explain later.
- 4.8 The extent of the proposed highway improvements is discussed and explained in more detail in Section 10 of my evidence but broadly comprise:
- Weasel Lane and National Cycle Route 51 to be retained and enhanced as an important route through the new development, new homes set back from Weasel Lane and existing landscape features orientated to provide overlooking of public routes, and provision of appropriately designed, at-grade, road crossings;
 - An extensive linear park running alongside Whaddon Road, incorporating new landscape planting, trees, footpaths and cycleway links to Redway standard to enhance the northwest section of the MK Boundary Walk;

³⁸ Development Framework Plan rev K CSA/4857/100, Feb 2020, CSA (CD10/O/A)

³⁹ Design and Access Statement, May 2020, CSA (CD10/D)



- Highway improvements to Bottledump Roundabout, including a new combined equestrian/pedestrian/cycle crossing across Whaddon Road just to the south of the existing roundabout;
- Access improvements along Whaddon Road, A421 Standing Way and B4034 Buckingham Road to facilitate all travel modes, including combined 'at grade' crossing facilities for pedestrians and cyclists with connections to the wider existing network;
- Highway improvements across the wider local network (to the extent that these are considered necessary); and
- Improvements to the PROW network to create permeability across the Proposed Development and strengthen connections with the existing network.

- 4.9 The design and layout of the Proposed Development in close proximity to the existing Milton Keynes Redway network will enhance the connectivity of the local area and seek to influence the behaviours of future residents and employees in line with the Government's vision for walking and cycling,⁴⁰ thereby encouraging more active travel with walking and cycling as a sustainable method of travel. Pedestrian and cycling facilities within the Proposed Development would be high quality, convenient and provide direct routes to both internal and external destinations. The provision of primary and secondary schools and community facilities as part of the Proposed Development will maximise the opportunities to reduce external trip making.
- 4.10 The provision of a reserve for a future Grid Road is an important element to satisfy aspirational local planning policies.⁴¹ Whilst the Proposed Development requires only provision of a single carriageway road for access, the Development Framework Plan safeguards the corridor and would enable a dual carriageway to be implemented by MKC/BC should this be considered necessary in the future.
- 4.11 The overall movement and transport strategy remain unchanged from that proposed within the 2016 TA. The underlying principle is to provide the future community on the Proposed Development with a comprehensive sustainable travel network that would influence behaviour and reduce the need to travel, thereby minimising the impact on the external transport network. A key priority is given to the

⁴⁰ Gear Change A bold Vision for Cycling and Walking, 2020, DfT (CD13/S)

⁴¹ AVDLP Policy RA35; Plan:MK Policy CT8; Draft VALP Policy D-NLV001



promotion of active travel to accommodate pedestrian and cycle movements and enhance the accessibility to high quality public transport facilities.

- 4.12 At the heart of the overall strategy is the implementation, monitoring and management of Travel Plans (TPs) for the residential, commercial/employment and school uses. TPs under the umbrella of the Updated FTP⁴² will be the key tool for developing a sustainable Travel Demand Management Strategy for all land uses.

PEDESTRIANS & CYCLISTS

- 4.13 Walking and cycling routes would be provided to link with the enhanced PRoW network (**MJP9**). Access to the Proposed Development would be achieved as follows, with all but the recreational footpaths being available for use by cyclists:
- A connection with the existing Redway on the northern side of A421 Standing Way as well as other recreational routes, and via the existing pedestrian / cycle route running along the line of the old Buckingham Road route south of the current A421 Standing Way:
 - across A421 close to Bottledump Roundabout via the existing subway;
 - across A421 to Snelshall West via the existing subway; and
 - via Tattenhoe Roundabout;
 - A connection to the existing Redway network via a new pedestrian/cyclist/equestrian route along Whaddon Road, including a new 'Pegasus' combined crossing to the south of Bottledump Roundabout and the access to Pearce Recycling;⁴³
 - A connection to Buckingham Road, approximately 600m to the south of Tattenhoe Roundabout, via NCR 51 on Weasel Lane, and via a new access to the Proposed Development between this point and Tattenhoe Roundabout; and
 - Connections at four locations to the south and west of the Proposed Development, via existing bridleways / footpaths NLO/19, MUR/15, WHA/15 and WHA/16.
- 4.14 Walking and cycling plans are provided in TRN1⁴⁴, with distances taken from the centre of the Proposed Development as previously indicated, using Weasel Lane to access Buckingham Road

⁴² Updated Framework Travel Plan, May 2020, WSP (CD10/H/B)

⁴³ Updated Transport Assessment, May 2020, WSP, Drawing D015D Appendix L (CD10/H/A)

⁴⁴ Transport Response Note 1, September 2020, WSP, Figure 4-1, Figure 4-2 and Appendix D (CD16/A)



and beyond. Future residents and employees would have access to a wide range of active and sustainable routes that would maximise connectivity and the opportunity to internalise trips.

STREET HIERARCHY

- 4.15 The key strategic route within the Proposed Development is the allocation of land for a future Grid Road, in line with Policy CT8 of Plan:MK; saved policy RA.35 of the Aylesbury Vale Local Plan⁴⁵ and Policy NLV001 of the draft VALP. This is aligned from the proposed B4034 Buckingham Road access south to the disused railway line forming a part of East-West Rail. A new primary street will be provided within the reserved corridor such that a dual carriageway could be accommodated and extended as part of the Bletchley Southern Bypass in the future.
- 4.16 A network of primary streets will form the principal circulation route for all vehicular traffic through the Proposed Development. This route will connect with the existing highway network at the three proposed points of access. Primary streets will be designed to achieve three aims:
- to accommodate vehicular capacity without compromising character;
 - to provide a network of legible, direct streets design in accordance with the principles set out in Manual for Streets (MfS)⁴⁶ and Manual for Streets 2 (MfS2)⁴⁷; and
 - to complement and enhance the local network of public footpaths, cycle ways and bridleways.
- 4.17 Providing a ‘connector’ function, linking the primary streets through the development areas, will be secondary streets from which will lead to a network of tertiary streets. Tertiary streets will provide a very low speed environment with shared space and ‘home zone’ principles applied to their design in accordance with MfS and MfS2. All streets within the Proposed Development will be limited to speeds of either 30mph or less and would provide a safe and attractive environment for all road users.

BUS SERVICES

- 4.18 The principal objective of the public transport strategy is to provide a new high quality, fast, frequent and reliable bus service between the Proposed Development and Central Milton Keynes (CMK) via the rail station. As well as serving the social and accessibility needs of those future residents and employees without access to a car, it is also expected that, with the help of effective marketing and initiatives included within the Updated FTP, people who would otherwise use a private car will be

⁴⁵ Aylesbury Vale District Local Plan 2004, AVDC, Policy RA 35 (CD6)

⁴⁶ Manual for Streets, 2007, DfT (CD13/A)

⁴⁷ Manual for Streets 2, 2010, DfT (CD13/B)



encouraged to use the proposed bus service for many of their work, school and leisure based journeys.

- 4.19 Previous discussions in 2016/2017 with MKC and the operator Arriva indicated that there was potential to extend either service 8/8A/8X (currently operating between Oxley Park, Westcroft, CMK, Kingston and Walnut Tree) further south into the Proposed Development, and there is no reason to believe that this has changed. An alternative option would also potentially include extending service 3 (currently operating between Snelshall West, Tattenhoe Park, Westcroft, Central Milton Keynes, Coachway, Kingston, Magna Park and Eagle Farm). At this stage, the potential viability for extending either the 8 or 3 service would be subject to a further review prior to commencing the tendering process for the new service.
- 4.20 It is anticipated that the preferred option would be to start a completely new high frequency service between the Proposed Development, CMK, the rail station and key social infrastructure. The target would be to provide a journey time between the Proposed Development and CMK of circa 20 minutes, although this would be subject to further discussion and agreement with MKC, BC and the preferred operator.
- 4.21 The phasing and anticipated 'build-out' of the Proposed Development are shown in the Updated TA.⁴⁸ The first occupation of dwellings is likely to occur in 2022/2023, although this is dependent on the rate of build and sales. The intention is to ensure that there would be a critical mass of occupied dwellings prior to the commencement of the service to encourage patronage and enable the service to become operationally viable during the early development phases.
- 4.22 A new bus service between the Proposed Development and CMK would commence no later than the occupation of the 100th dwelling, although the exact timing will be dependent upon the overall phased 'build out' period. As dwellings become occupied, the route into the Proposed Development would be extended further and the service frequency increased.
- 4.23 The initial phase of the Proposed Development would include the construction of the primary school. It is therefore proposed to ensure that the new/extended bus service should be available prior to the school opening and becoming fully operational.
- 4.24 It is proposed that the service would be funded initially by way of a financial contribution incorporated within a service level agreement that would be secured as a s106 planning obligation. The level of the initial subsidy required would reduce as patronage and revenue increase once further homes and areas of employment are occupied in subsequent development phases.

⁴⁸ Updated Transport Assessment, May 2020, WSP, Table 4.1 (CD10/H/A)



Proposed Bus Route

- 4.25 Within the Proposed Development, the bus service would run on the principal development access roads designed to allow a dedicated route with priority at key junctions. Bus stops would be located at appropriate intervals to minimise walk distances and to ensure that where practicable, residential dwellings are no greater than 400 metres from a stop. Each stop would include raised boarding platforms (i.e. 220mm high) if required, together with safe and secure weather proofed shelters equipped with Real Time Passenger Information (RTPI) displays.
- 4.26 Between the Proposed Development and CMK, the bus service would operate using existing Grid Roads, primary roads and their associated bus stops. The overall specification of the agreed route is to be defined and agreed between MKC, BC and the preferred operator and, as a minimum, would link the Proposed Development with key social infrastructure, CMK and Milton Keynes railway station. Providing a connection to Bletchley Rail Station for services on East-West Rail will be discussed when finalising the specification of the route. In this regard, it is intended that the level of service and route specification would meet with the delivery timescales identified by MKC in their LTP4⁴⁹

Proposed Bus Timetable

- 4.27 The estimated house completions by year and the required frequency are shown in **Table 4.1**. The required hours of operation of the Service is shown in **Table 4.2**. The vehicle specification is described in greater detail within the Updated TA.⁵⁰

⁴⁹ Mobility Strategy for Milton Keynes 2018 -2036 (LTP4): Mobility for All; Section 3 – Delivery Plan: Improving Our Public Transport (CD12/C)

⁵⁰ Updated Transport Assessment, May 2020, WSP, Section 4.3, pages 75-76 (CD10/H/A)

Table 4.1 – Estimated Housing Completions and Required Service Frequency

Year	House Completions		Bus Frequency	
	In Year	Running Total	Daytime	Eve/Sun
2022/23	100	100	60	60
2023/24	200	300	30	60
2024/25	250	550	30	60
2025/26	250	800	30	60
2026/27	250	1050	30	60
2027/28	250	1300	20	30
2028/29	250	1550	20	30
2029/30	250	1800	20	30
2030/31	55	1855	20	30

Table 4.2 – Required Hours of Operation

Criteria	Monday to Friday	Saturday	Sunday
Full daytime frequency to start with first journey arriving in CMK no later than:	0605	0705	0905
Full daytime frequency to end with last journey departing CMK no earlier than:	2005	2005	1905
Evening service to end with last journey departing CMK no earlier than:	2305	2305	2305

TRAVEL DEMAND MANAGEMENT

4.28 Travel Demand Management is an important element of the Proposed Development. Sustainable development principles are met and a number of key objectives which ensure consistency with relevant policy provisions are satisfied. The objectives of the design are to:

- minimise the need to travel by providing a mix of land uses that are within acceptable walking and cycling distances of each other;
- maximise the opportunity for travel by non-car modes of transport, particularly by the design of the urban form itself, by maximising priority to pedestrians and other non-car users;
- minimise the impact of traffic associated with the development; and
- maximise integration with adjacent development areas.



- 4.29 It is recognised that communication to future residents and employees is a key factor in influencing behaviours in order to implement a shift towards active and more sustainable modes of travel. As such, a series of Travel Plans would be implemented within the criteria imposed by the Updated FTP for all the proposed main land uses (i.e. residential, employment, education).
- 4.30 As well as assisting in communicating the availability and benefits of non-car modes, the Travel Plans will contain the details of a number of measures and initiatives designed to encourage, promote and maintain mode shift from use of private vehicles, in particular single-occupancy car use, to more sustainable means such as walking, cycling, use of public transport, car sharing and taxis.
- 4.31 The Updated FTP is provided as a separate document. Following receipt of permission for the first reserved matters, a Travel Plan Co-ordinator (TPCO) would be appointed who will be the main point of contact for all travel planning matters.

VEHICLE ACCESS POINTS

- 4.32 Three points of access would serve the Proposed Development to create flexibility across the masterplan and accommodate the future movement demands and comprise:
- Whaddon Road (within BC's jurisdiction) – by means of a priority 'T'-junction with a 'ghost island' right turn lane;
 - An extension to Buckingham Road into the Proposed Development (within both MKC and BC's jurisdiction) – by means of a four-arm 'at grade' roundabout junction; and
 - A421 Standing Way (within MKC's jurisdiction) – by means of 'left in only' junction.
- 4.33 The principle of gaining vehicle access to the Proposed Development from these three roads remains unchanged from the original planning application as submitted in January 2015 and the subsequent Regulation 22 submission in August 2016. The detail and form of each access has been modified to reflect various comments raised by BCC, MKC and Road Safety Auditors.⁵¹ For avoidance of doubt, the form and detail of the proposed access arrangements and hence the Appeal Development, have not changed since the Regulation 22 submissions to AVDC and MKC in August 2016 and the subsequent determination of the planning applications by AVDC in July 2017 and MKC in November 2019.
- 4.34 The access onto Whaddon Road joins the public highway under the control of BC, whilst the access point off A421 Standing Way joins the highway network controlled by MKC. The Buckingham Road

⁵¹ Updated Transport Assessment, May 2020, WSP, Appendix N (CD10/H/A)

access joins the existing public highway controlled by MKC, but the majority of the new highway layout is located within BC's jurisdiction.

Whaddon Road - Ghosted Right Turn Access

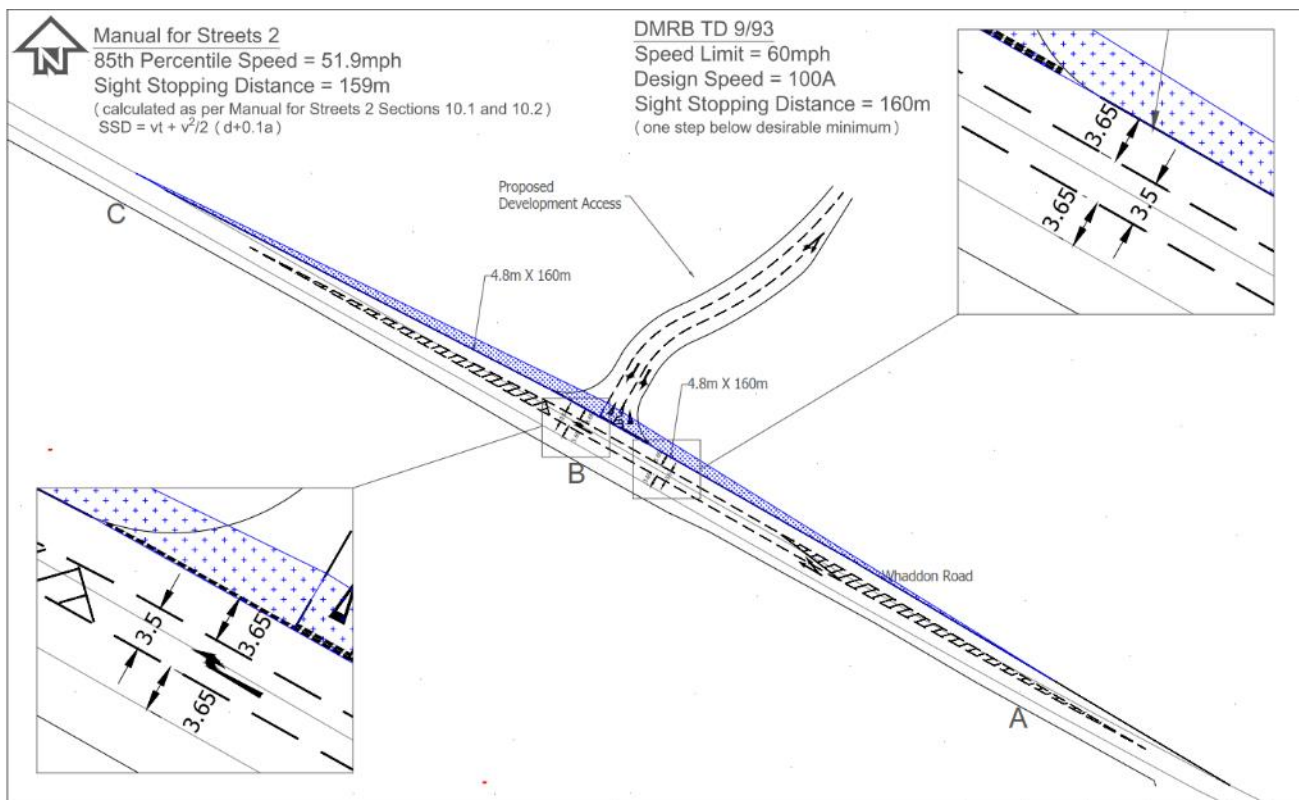
- 4.35 The proposed access at Whaddon Road is a 'Ghosted Right Turn' priority junction, with a single lane minor arm approach with a long flare to two lanes, as shown in **Figure 4.1** and on drawing D014D⁵² (**MJP5**). The access arrangement was enlarged from the original proposals submitted in 2015 as part of the Regulation 22 submission in August 2016 to accommodate a longer flare length along the development access road as it approaches the junction with Whaddon Road to accommodate peak hour demand for vehicles leaving the Proposed Development.
- 4.36 Following the Stage 1 Road Safety Audit (RSA),⁵³ the length of the 'ghost island' along Whaddon Road was extended to ensure sufficient deceleration length is provided for right turning traffic.
- 4.37 During the previous planning application determination period (i.e. prior to July 2017), and subsequent to agreement of the layout with BCC and MKC, revisions were undertaken to provide amendments to the visibility splays. These revisions were shown on Drawing D014E.⁵⁴
- 4.38 The Whaddon Road access junction lies entirely within the jurisdiction of BC and is therefore within the Proposed Development; it does not form a part of the Appeal Development.

⁵² Updated Transport Assessment, May 2020, WSP, Appendix M (CD10/H/A) (MJP5)

⁵³ Updated Transport Assessment, May 2020, WSP, Appendix N (CD10/H/A)

⁵⁴ Updated Transport Assessment, May 2020, WSP, Figure 4.1 and Appendix M (CD10/H/A) (MJP5)

Figure 4.1 - Proposed Whaddon Road Access



A421 Standing Way - Left In Only Access

- 4.39 The proposed access from A421 Standing Way is in the form of a 'left-in only' junction with a single entry lane. A 'left in, left out' option was originally considered and included within the original 2015 planning application⁵⁵. Following subsequent discussions with Officers at MKC and BCC and observations from WSP's Safety Auditor, it was agreed that access onto A421 Standing Way in this location would potentially give rise to an increase in weaving movements between passing traffic along A421 Standing Way, merging traffic from the Proposed Development and the approach to Bottledump Roundabout.
- 4.40 Hence, access only (i.e. no egress) would be provided to the Proposed Development via A421 Standing Way, as confirmed in the 2016 TA and included within the Regulation 22 submission of August 2016.

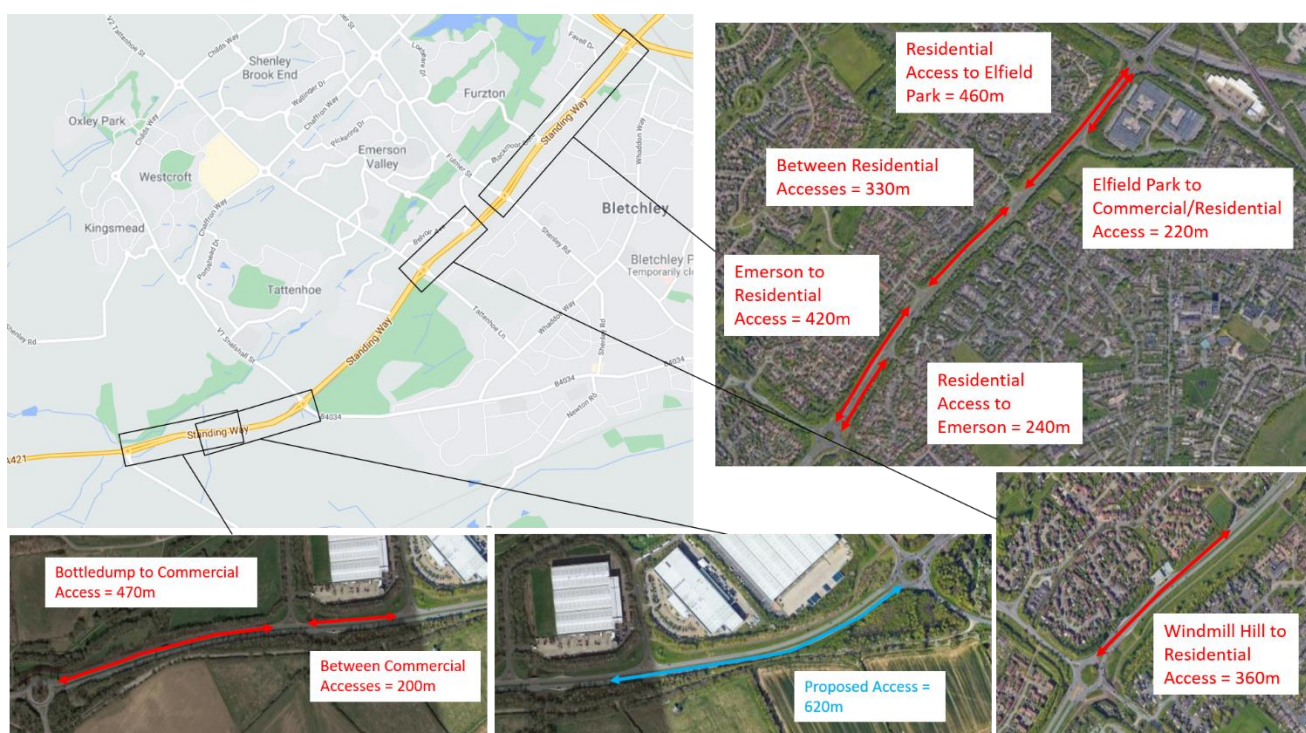
⁵⁵ Transport Assessment & Appendices (Appendix 10.1 of the Environmental Statement), Pell Frischmann, January 2015, Appendix E (CD1/I)



Weaving Movements

4.41 Comments have been raised previously by consultant Mr McKechnie of Hydrock acting on behalf of MKC in regard to potential weaving traffic that could occur between Tattenhoe Roundabout and the proposed access off A421. Having reviewed this matter further, I have no concern about weaving given that the distance between the two junctions is circa 620m as shown on **Figure 4.2**. Weaving calculations would normally be completed between a grade-separated junction and an ‘at-grade’ junction at this distance; however, neither Tattenhoe Roundabout nor the proposed access are grade-separated; therefore, in my opinion, weaving calculations and CD122⁵⁶ would not be relevant.

Figure 4.2 - Distances Between Junctions



4.42 Furthermore, the Milton Keynes grid road network is designed and currently operates with many accesses with tighter geometry and separation distances far shorter than 620m; a few examples of which are also shown on **Figure 4-2**. Directly opposite the Appeal Development there are currently two junctions that provide access and egress to commercial properties in Snelshall West. The distance between Bottledump Roundabout and the first access is circa 470m with separation between the first egress and second access of not even 200m. Similarly, to the east along A421, there is a priority junction similar to that proposed which gives access to a residential area. The separation between the Windmill Hill Roundabout on A421 and that access is just 360m. Between

⁵⁶ CD 122 Geometric Design of Grade Separated Junctions, January 2020, Highways England (CD13/K)



the Emerson Roundabout and Elfield Park Roundabouts there are a number of accesses serving both residential and commercial areas, all of which have distances between junctions of less than that of the Proposed Access, with one just 220m from the preceding roundabout.

- 4.43 Only one of the access points mentioned above includes a deceleration lane. In this regard, the access to the Proposed Development is designed with a deceleration lane to meet the requirements of CD 123⁵⁷ of the Design Manual for Roads and Bridges (DMRB).

Junction Design

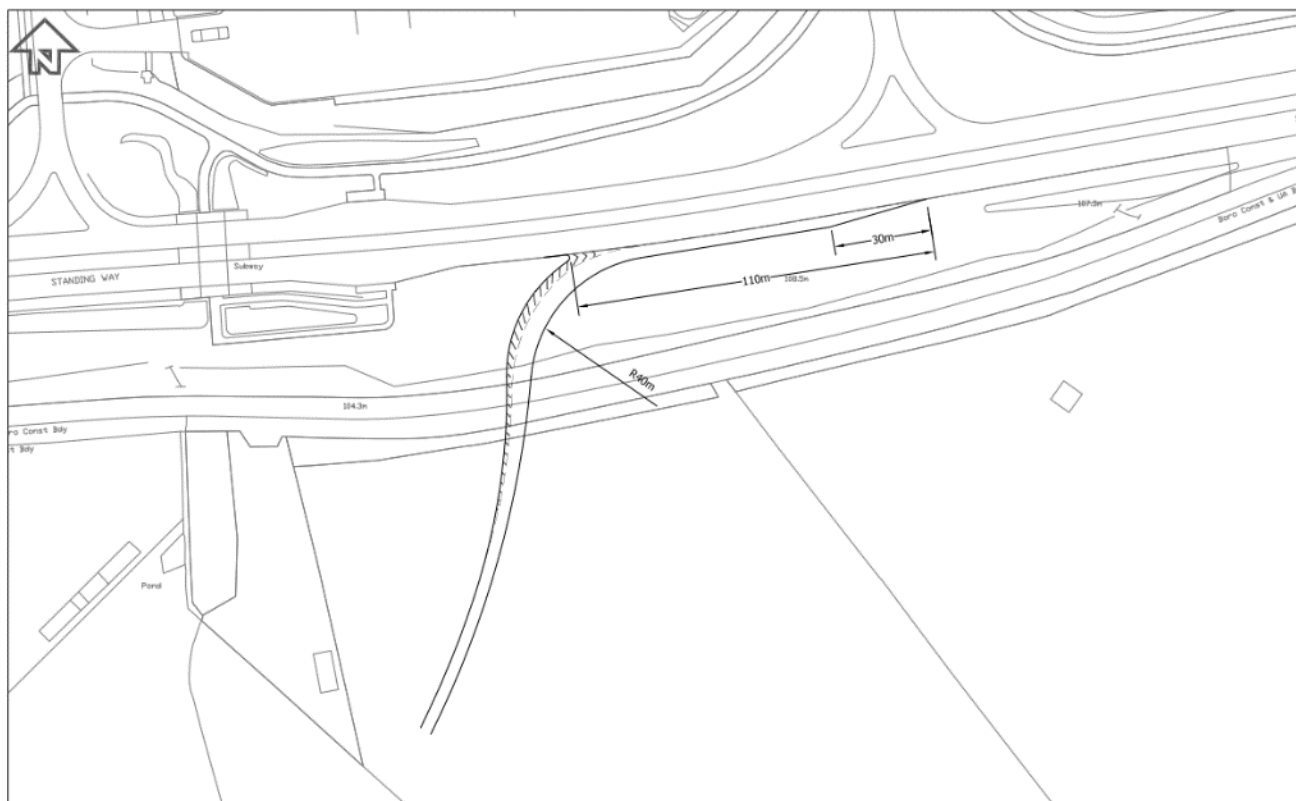
- 4.44 The design of the junction to TD 42/95⁵⁸, the predecessor to CD123, was agreed with BCC and MKC in 2015 as it is an 'at-grade' priority junction similar to those on the opposite side of A421 Standing Way and further east, which provide access to commercial and/or residential areas. The proposed access is neither a slip road nor a grade separated junction; therefore, in my opinion, the application of CD122 would be inappropriate as previously explained.
- 4.45 Following the Stage 1 Road Safety Audit, Vehicle Restraint Systems (i.e. crash barriers) would be included within the design of the access road to minimise the risk of any loss of control collisions around the bend. The design of the proposed access from A421 as previously agreed in 2016 is shown below in **Figure 4.3** and on Drawing D013A⁵⁹ (**MJP5**). For avoidance of doubt, the location and design of the access along A421 Standing Way within MKC's jurisdiction as proposed in the Updated TA remains unaltered.

⁵⁷ CD 123 Geometric Design of At-Grade Priority and Signal-Controlled Junctions, August 2019, Highways England (CD13/F)

⁵⁸ TD 42/95 Geometric Design of Major-Minor Priority Junctions, January 1995, Highways Agency (superseded)

⁵⁹ Updated Transport Assessment, May 2020, WSP, Figure 4.2 and Appendix O (CD10/H/A) (MJP5)

Figure 4.3 - Proposed A421 Standing Way Access



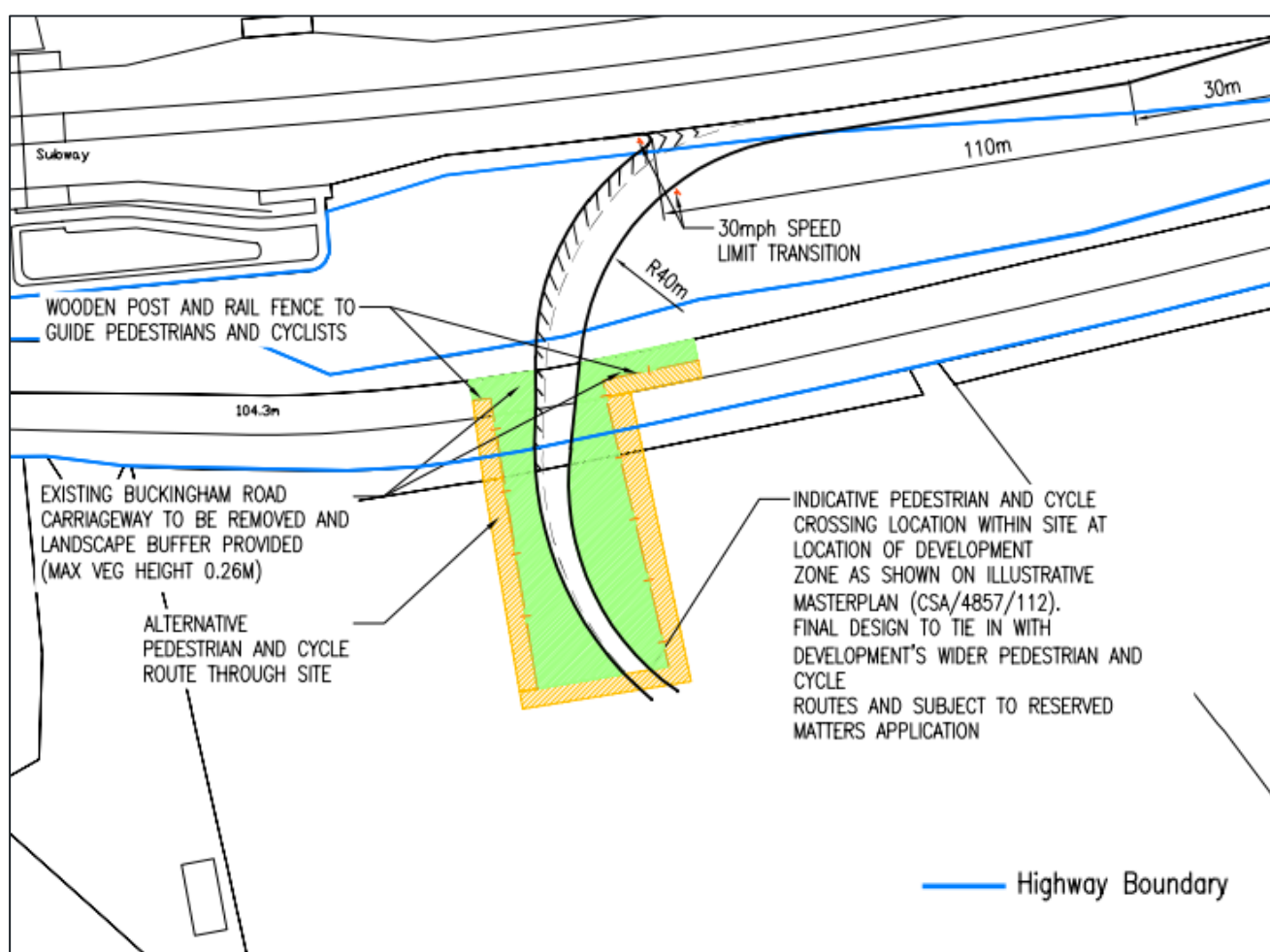
- 4.46 The approved design does not compromise the location of the existing underpass which connects pedestrian and cycle routes with the Redway on the northern side of A421 Standing Way. At the point where the proposed access route crosses Old Buckingham Road (i.e. this is currently existing public highway with extinguished rights for motor vehicles), it would be appropriate to ‘stop up’ the existing highway (**MJP6**) to all road users and divert pedestrians and cyclists further into the Proposed Development, as shown on **Figure 4.4 (MJP10)**.
- 4.47 Cycling Infrastructure Design Local Transport Note 1/20 was published in July 2020 and provides guidance and good practice for the design of cycle infrastructure in support of the DfT Cycling and Walking Investment Strategy. One of the five core design principles for cycle infrastructure within LTN 1/20 is that routes *should* be direct, however another core principle is that routes *must* be safe⁶⁰. Whilst I acknowledge that the proposed alignment would divert from the existing straight route to the proposed crossing point, this is designed to ensure there is sufficient distance from the junction with A421 and provide the required Sight Stopping Distance (SSD) for drivers approaching the crossing from A421, thereby providing safe passage for pedestrians and cyclists to cross the access road and to connect with routes within the Proposed Development. This minor deviation from

⁶⁰ Cycling Infrastructure Design Local Transport Note 1/20, July 2020, DfT, Figure 1.1 (CD13/E)

the guidance within LTN 1/20 to provide direct routes is considered essential to ensure the safety of pedestrians and cyclists and is therefore in accordance with the guidance, especially given that the summary principles⁶¹ state that a short stretch of less good provision is better than no provision where the remainder of the route is good.

- 4.48 The use of wooden post and rail fencing (or similar) and a low-level landscape buffer would prevent pedestrians and cyclists from crossing in a straight line (i.e. ignoring the crossing point provided further to the south). **Figure 4.4** also indicates the alignment of the access road south of the highway boundary to accord with the updated illustrative masterplan.

Figure 4.4 - Proposed A421 Standing Way Access Showing Pedestrian Route

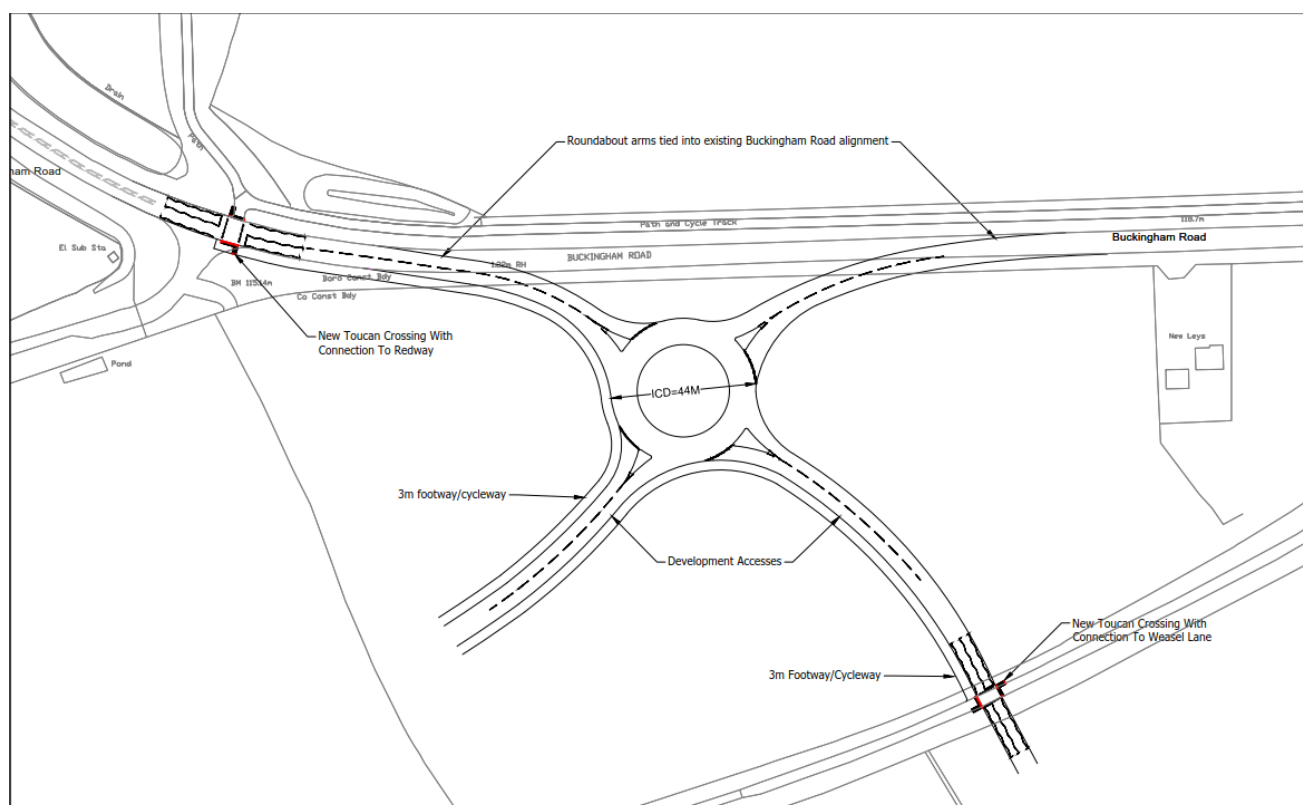


⁶¹ Cycling Infrastructure Design, Local Transport Note 1/20, July 2020, DfT, Page 123 point 22 (CD13/E)

Buckingham Road – At Grade Roundabout Access

- 4.49 The proposed access arrangement would take the form of an ‘at grade’ roundabout, encompassing two new roads from within the Proposed Development, as shown on **Figure 4.5** and Drawing D017C.⁶² The existing Redway on the northern side of Buckingham Road would remain, and a shared footway for pedestrians/cyclists⁶³ will be provided on the southern arms of the junction into the Proposed Development. Subsequent to the Regulation 22 submission in August 2016 and during the planning application determination period (i.e. prior to July 2017), revisions were undertaken to the access arrangement at the request of BCC, to provide minor lane marking improvements; these revisions are shown on Drawing D017D.⁶⁴ A wider view of the proposed junction is provided on Drawing D016B in Appendix **MJP11**.

Figure 4.5 - Proposed Buckingham Road Access



- 4.50 The roundabout solution ensures amendments to the alignment of Buckingham Road are minimised. The provision of a combined toucan crossing facility for pedestrians and cyclists is included on the north-western arm between the new roundabout and Tattenhoe roundabout to provide a connection

⁶² Updated Transport Assessment, May 2020, WSP, Figure 4.3 and Appendix P (CD10/H/A) (MJP5)

⁶³ With an effective width of 3m

⁶⁴ Updated Transport Assessment, May 2020, WSP, Figure 4.3 and Appendix P (CD10/H/A) (MJP5)



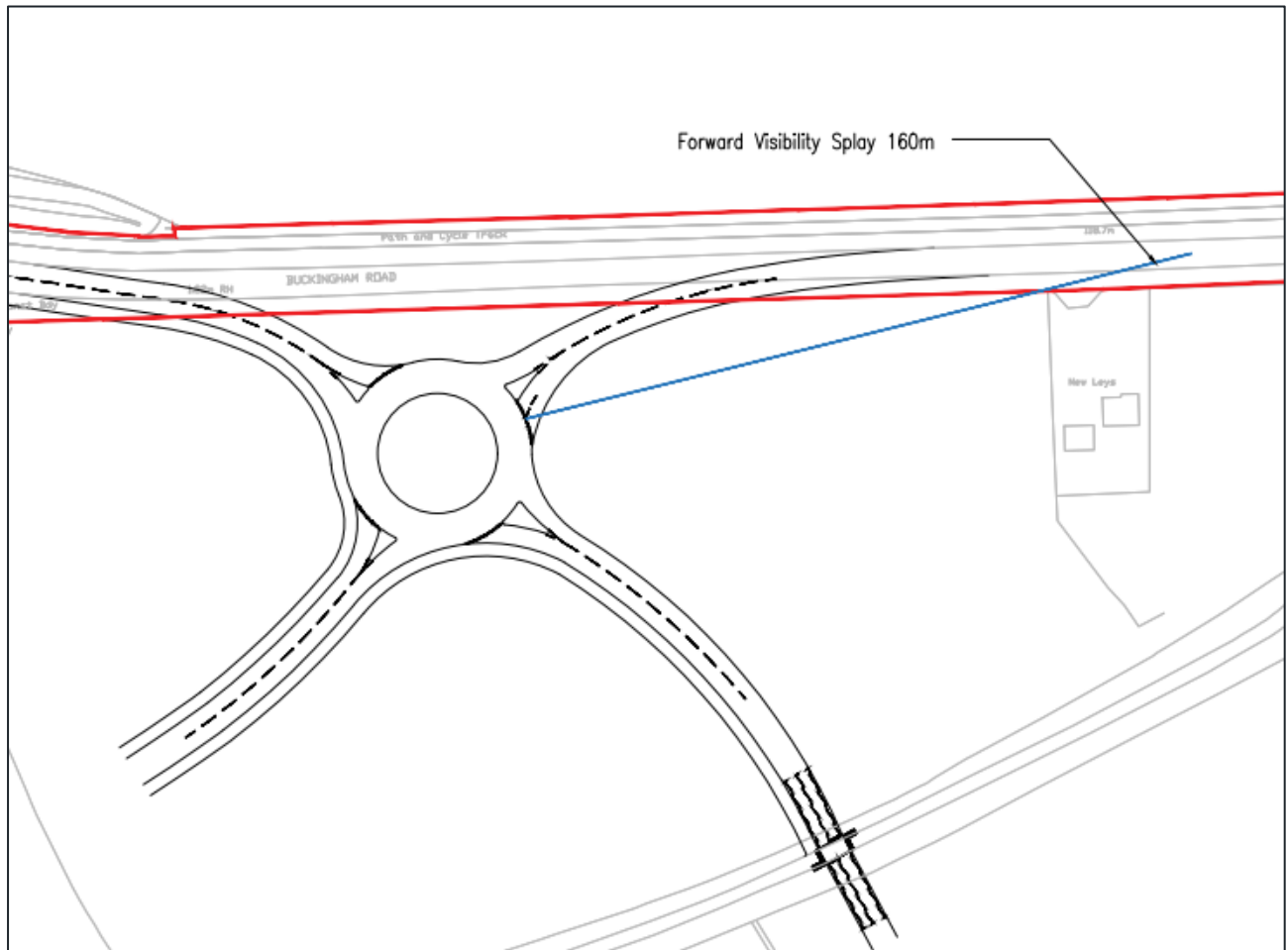
between Old Buckingham Road and the Redway network at a location to be determined at detailed design. A further toucan crossing would be provided on B4034 Buckingham Road where it meets Weasel Lane to convey pedestrians and cyclists to the shared footway/cycleway on the northern side of B4034 Buckingham Road. The design of the routes for pedestrians and cyclists will be in accordance with LTN1/20⁶⁵ and will be refined at detailed design. These controlled crossings would facilitate the safe movement of pedestrians and cyclists across the wider network and enhance connectivity.

- 4.51 Should the Grid Road reserve 'corridor' be called upon at some point in the future by MKC and BC, an amended junction arrangement could be provided (i.e. the proposed design does not prejudice the opportunity for construction of a link) to accommodate additional lanes on the south-eastern and north-western arms of the roundabout. BC has confirmed hitherto, that there is no current policy requirement for the Proposed Development to provide a junction arrangement with the geometric parameters to specifically accommodate a new Grid Road.
- 4.52 Forward visibility to the roundabout from B4034 Buckingham Road is sufficient to meet the standard required for the 85thile wet weather speed of the road (49.4mph/79.6kph) based on data from the February 2020 traffic surveys. The visibility splay of 160m⁶⁶ would be contained entirely within the public highway and land within control of the Appellant as shown in **Figure 4.6 (MJP12)**. Given the proposed change in the characteristics of Buckingham Road, the existing speed limit boundary could also be relocated west of the proposed access roundabout if requested by MKC.

⁶⁵ Cycling Infrastructure Design, Local Transport Note 1/20, July 2020, DfT (CD13/E)

⁶⁶ CD 109 revision 1, Highway Link Design, March 2020, Highways England, Table 2.10 (CD13/J)

Figure 4.6 - Proposed Buckingham Road Access - Visibility



ROAD SAFETY AUDITS

- 4.53 Stage 1 Road Safety Audits (S1 RSAs) were completed on all of the access points and include the proposed equestrian crossing to the south of Bottledump Roundabout. The S1 RSAs as submitted to BCC and MKC in December 2015, with Designer’s Responses to each point raised, are provided in the Updated TA.⁶⁷ Following amendments to the designs to meet BCC and MKC requirements, a revised S1 RSA was completed in June/July 2016. That RSA and associated Designer’s Response are also included in the Updated TA.⁶⁸
- 4.54 The main comments within the June/July 2016 S1 RSA (auditing the current access proposals) relate to ensuring appropriate visibility splays are provided to the access on Whaddon Road given the existing undulating nature of the road; the provision of vehicle restraint systems (safety barriers)

⁶⁷ Updated Transport Assessment, May 2020, WSP, Appendix N (CD10/H/A)

⁶⁸ Updated Transport Assessment, May 2020, WSP, Appendix N (CD10/H/A)



around the bend at the access off A421 Standing Way; and to ensure that the provision for pedestrians and cyclists at the Buckingham Road junction is safe and suitable for all users.

- 4.55 Additional Road Safety Audits were completed in January 2021⁶⁹ which cover the proposed off-site mitigation schemes, but also include the access junction on Buckingham Road (in relation to interaction with Tattenhoe Roundabout) and the proposed Pegasus crossing on Whaddon Road (with Bottledump Roundabout). No new issues of significance were raised in those audits.

CONCLUDING COMMENTS

- 4.56 The quantum of the Proposed Development remains unchanged since the original planning application and comprises: 1,855 residential units including 60 extra care units, education facilities, commercial space and a neighbourhood centre.
- 4.57 The Development Framework Plan⁷⁰ incorporates a comprehensive network of cycle and pedestrian routes to enhance connectivity and encourage active travel for future residents and employees. The movement corridors across the Proposed Development would cater for an efficient, high frequency bus service to connect with CMK and other key social infrastructure.
- 4.58 The overall movement and transport strategy remain unchanged from that proposed within the 2016 TA. The underlying principle is to provide the future community on the Proposed Development with a comprehensive sustainable travel network to influence behaviour and reduce the need to travel and hence reduce the impact on the external transport network.
- 4.59 Communication with future residents and employees is a key factor in influencing behaviour to implement a shift towards active and more sustainable modes of travel. In this regard, a series of more detailed Travel Plans would be implemented within the criteria imposed by the updated FTP for all of the proposed main land uses. The application of a development wide FTP with appropriate obligations and targets imposed for each land use, would create a future community that has far greater choice in determining an appropriate travel mode and is therefore less reliant on the private car.
- 4.60 The proposed access points, which include the Appeal Development, connect with the existing local road network via: Whaddon Road (i.e. via a ghosted right turn junction); A421 Standing Way (i.e. via a left in only junction); and Buckingham Road (i.e. via an 'at grade' roundabout). The previously agreed principle of gaining vehicle access to the Proposed Development from these three roads is

⁶⁹ Road Safety Audits and Designers Responses, January 2021, WSP (CD16/D)

⁷⁰ Development Framework Plan rev K CSA/4857/100, Feb 2020, CSA (CD10/O/A)



unchanged from the original planning application as submitted in January 2015 and the subsequent Regulation 22 submission in August 2016.



5 PLANNING POLICIES, GUIDANCE AND STRATEGIES

- 5.1 Mr Mark Hyde will address relevant planning policies that apply to the Appeal Development and the Proposed Development. In this Section of my evidence, I address relevant transport policy and guidance. National policy deals with wider strategic aims and objectives. It does not provide specific detail but gives general guiding principles for the implementation of new developments.
- 5.2 Regional policy considers planning and development within Buckinghamshire, whilst local policy defines the detailed requirements for new developments within Aylesbury Vale and Milton Keynes. This section of my evidence provides a review of the policies that are adopted and those that are emerging along with other guidance and documents that are relevant to the Appeal Development and Proposed Development.

COMPLIANCE WITH POLICY

- 5.3 For clarity, I have provided a table in Appendix **MJP13** cross-referencing the policies relevant to the Appeal Development and Proposed Development, and my assessment of compliance with them. My more general response to the fundamental aspects of the policies are provided at the end of each policy section within my evidence.

ADOPTED AYLESBURY VALE DISTRICT LOCAL PLAN 2001-2011 (2004)

- 5.4 The Aylesbury Vale District Local Plan (AVDLP) was adopted in January 2004 and covered the period to 2011. The AVDLP proposed land for development and provided a framework of policies within which other proposals will be considered. After 27 September 2007, legislation meant that policies in the AVDLP ceased to have effect unless 'saved' by a Direction from the Secretary of State. Following an application from AVDC, the Secretary of State issued a direction on 24 September to save specified policies.
- 5.5 Section 4 of the AVDLP included general transport policies that applied across the District. However, the majority of those policies were not saved due to similar guidance being found within the national policy prevalent at the time.
- 5.6 The only saved transport policies relevant to the Proposed Development within the AVDLP is Policy RA 35 which safeguards a corridor of land to allow the opportunity for a new link to be created through the Proposed Development between A4146 Fenny Stratford Bypass and A421 Standing Way.



ADOPTED PLAN:MK 2016 -2031 (MILTON KEYNES LOCAL PLAN) (2019)

5.7 Plan:MK 2016 - 2031 was adopted in March 2019 and sets out the Council's approach and policies for the Borough for the period up to 2031.

5.8 The vision for the borough is:

'By 2031 Milton Keynes will be known internationally as a great city within a thriving rural hinterland. Its thriving knowledge-based economy, its first class lifelong education and training, its diverse population with their excellent, lively and varied culture, its sport and leisure opportunities, and its range of different, high quality places to live, together with the green, open and spacious layout and a transport system that makes its facilities easily accessible to all, will have enhanced its reputation as a pleasurable and exciting place to live, work, play and visit.'

5.9 Objective 12 of the strategic objectives relates to transport as follows:

'To manage increased travel demands through: Smart, shared, sustainable mobility. Promoting improvements to public transport and supporting the development of the East – West rail link between Oxford and Cambridge, including the Aylesbury Spur. Encouraging an increased number of people to walk and cycle by developing an expanded and improved redway network. Extending the grid road pattern into any major new development areas. Utilising demand management measures to reduce the growth of road congestion, whilst upgrading key traffic routes such as the A421, A422 and the A509.'

5.10 Policy CT1 Sustainable Transport Network sets out requirements for how the Council will promote sustainable development:

- *'i. Promote a safe, efficient and convenient transport system*
- *ii. Promote transport choice, through improvements to public transport services and supporting infrastructure, and providing coherent and direct cycling and walking networks to provide a genuine alternative to the car*
- *iii. Promote improved access to key locations and services by all modes of transport and ensure good integration between transport modes*
- *iv. Manage congestion and provide for consistent journey times*
- *v. Promote and improve safety, security and healthy lifestyles*



- *vi. Continue to engage with relevant stakeholders along the East-West Rail line and Expressway to identify operational benefits, which provide additional support for a more sustainable transport strategy and/or economic growth of the city*
- *vii. Engage with the National Infrastructure Commission to set in place connections from Central Milton Keynes to surrounding communities, including a fifth track constructed between Bletchley and Milton Keynes Central*
- *viii. Promote the usage of shared transport schemes in the borough.'*

5.11 Policy CT2 Movement and Access requires development proposals to:

'minimise the need to travel, promote opportunities for sustainable transport modes, improve accessibility to services and support the transition to a low carbon future.'

5.12 In relation to planning applications Policy CT2 states that development proposals will be permitted that:

- *'(A)1. Integrate into our existing sustainable transport networks and do not have an inappropriate impact on the operation, safety or accessibility of the local or strategic highway networks;*
- *2. Mitigate impacts on the local or strategic highway networks, arising from the development itself or the cumulative effects of development, through the provision of, or contributions towards necessary and relevant transport improvements including those secured by legal agreement;*
- *[...]*
- *6. Do not result in inappropriate traffic generation or compromise highway safety;*
- *(B). Development proposals that generate significant amounts of movement or impact on level crossings must be supported by a Transport Statement or Transport Assessment and will normally be required to provide a Travel Plan, with mitigation implemented as required.'*

5.13 Policy CT3 Walking and Cycling states:

'The Council will support developments which enable people to access employment, essential services and community facilities by walking and cycling.'

5.14 Policy CT5 Public Transport states:

'Development proposals must be designed to meet the needs of public transport operators and users. In particular:

- *i. Road layouts must include direct, convenient and safe public transport routes and be free of obstructive parking;*
- *ii. Public Transport priority measures must be implemented, where appropriate;*
- *iii. Where appropriate and necessary, all houses and most other developments must be no more than 400m from a bus stop;*
- *iv. Bus stops must have good pedestrian access, be open to public supervision and be sheltered where appropriate; and*
- *v. Specific consideration must be given to the provision of public transport services in planning new development.'*

5.15 Policy CT6 Low Emission Vehicles requires new facilities for low emission vehicles to be integrated into major new developments. All new developments will be required to provide electric vehicle charging infrastructure in accordance with the Council's parking standards.

5.16 Policy CT8 Grid Road Network requires the following in respect of the Grid Road Network:

'Opportunities for extending the grid road system design and redway super network route into any major new development areas will be required to ensure that the grid continues to function effectively and sufficient land/corridors are safeguarded for future highway/transit links around the district to accommodate and manage increased travel demands changing and future travel demands.

The Council will also seek to extend grid roads and redway super network route to link with new cross-boundary developments. New grid roads should also include green infrastructure buffers to improve air quality, reduce noise and vibration and enhance the landscape and result in a net gain in biodiversity. New grid roads will be designed with the following characteristics:

- *i. Grid roads will run in generous multi-functional green infrastructure reservations (which are designed to allow for future upgrading to dual carriageways if and when required);*
- *ii. Grid roads will also accommodate main services, and landscaping of appropriate road surfaces to protect adjacent development from the noise and visual intrusion of traffic and give a green character to the road. Where possible, grid roads will incorporate a bund providing additional protection;*
- *iii. Grid roads will also be designed for use by public transport and for alternative forms of transport if required [e.g. electric cars/driverless cars], with bus laybys at*

intersections with pedestrian bridges and underpasses and controlled crossings where appropriate;

- *iv. Grid Road Reserves will be identified in order to safeguard further potential extension of the grid and enable future development to access the grid;*
- *v. Grid road reservations should be 80m in width where residential is on each side and 60m where other land uses occur;*
- *vi. Junction spacings will be set out as in MK Planning Manual. Redways should be setback 3m from the carriageway;*
- *vii. In order to improve pedestrian safety, in line with the Planning Manual, development incursions would be considered permissible within the grid road reserves at “points of connection”, for example where redways pass underneath the grid road and at bus stops. This might include local centres and housing which should be designed to provide surveillance over the underpass or bus stop. This development should not however constrain the overall 60m width such that it prejudices future transport systems from being implemented. The overall green character and multi-functional green infrastructure of the grid road reserves should also still be maintained. The effect should be a green corridor punctuated at “points of connection” by development. This development could also have the important benefit of assisting with wayfinding around the grid road system, especially for visitors;*
- *viii. There are cross-border locations where MK Council considers that the extension of the grid road network, as part of new or future development allocations, will provide benefits to both local communities in MK and those in the adjacent district, as well as provide much needed connections to the strategic road network. Milton Keynes Council will seek the safeguarding of grid road connections and extensions or reserves through joint working and consultation responses to neighbouring authorities’ local plan policy, or its response to planning applications in adjacent districts”; and*
- *ix. As MK’s Mobility Plan develops, it is possible that some areas will be designated for higher densities, with a different relationship to grid roads and public transport corridors. An appropriate specification for that relationship will be produced at that time. The specification will only apply to those designated areas.’*



- 5.17 Policy CT10 Parking establishes that all developments should meet the requirements of the Council's vehicle parking standards.
- 5.18 Policy SD15 provides guidance on the place-making principles for sustainable urban extensions in adjacent local authorities bordering Milton Keynes. The principles include:
- *'6. Technical work should be undertaken to fully assess the traffic impacts of the development on the road network within the city and nearby town and district centres and adjoining rural areas, and to identify necessary improvements to public transport and to the road network, including parking.*
 - *7. A route for the future construction of a strategic link road(s) and/or rail link should be protected where necessary.'*

Commentary

- 5.19 Policy SD15 requires the completion of appropriate technical assessments to determine the impact on the road network and to identify appropriate mitigation. The Updated TA and TRNs provide the detailed technical assessments. Furthermore, the transport modelling evidence base that supports Plan:MK includes the Proposed Development within the 2031 Reference Case⁷¹. In this regard, MKC and the Local Plan Inspector have also assessed the cumulative impact of the Proposed Development on the wider area at a strategic level and concluded that it was acceptable by recommending Plan:MK for adoption.
- 5.20 The Proposed Development would provide sustainable transport links and improved permeability and connectivity, through integration with the surrounding built environment, enhanced travel choices and improved access to key destinations including local railway stations.
- 5.21 The Updated TA⁷² and TRNs^{73,74} review the impact of the Proposed Development on the local highway network and identify appropriate, proportionate and cost effective mitigation^{75,76,77} to ensure that the residual cumulative impact is acceptable and that it does not compromise highway safety.
- 5.22 A grid road reserve corridor up to 80m in width is provided within the Proposed Development (as shown on the Development Framework Parameters Plan⁷⁸) to allow for the implementation of the

⁷¹ Milton Keynes Multi Modal Model Update, Highway Model Traffic Forecasting report, November 2017, Aecom (CD12/A)

⁷² Updated Transport Assessment, May 2020, WSP, Section 7 (CD10/H/A)

⁷³ Transport Response Note 2, December 2020, WSP, Section 4 (CD16/B)

⁷⁴ Transport Response Note 3, January 2021, WSP, Section 4 (CD16/C)

⁷⁵ Updated Transport Assessment, May 2020, WSP, Section 8 (CD10/H/A)

⁷⁶ Transport Response Note 2, December 2020, WSP, Section 5 (CD16/B)

⁷⁷ Transport Response Note 3, January 2021, WSP, Section 5 (CD16/C)

⁷⁸ Development Framework Plan rev K CSA/4857/100, Feb 2020, CSA (CD10/O/A)

Bletchley Southern Bypass at a point in the future if MKC (and BC) determine that it would be beneficial and funding is available.

- 5.23 I am therefore of the opinion that the Appeal Development and the Proposed Development comply with the policies set out in Plan:MK, as demonstrated within the 2016 TA, the Updated TA and subsequent TRNs. In this regard, the Case Officer's Report to the MKC Planning Committee in November 2019 specifically stated that, subject to suitably worded conditions and details assessed at the reserved matters and s278 stages, the development accords with Policies CT1, CT2 and CT3 of Plan:MK.⁷⁹

BUCKINGHAMSHIRE LOCAL TRANSPORT PLAN 4 (LTP4) (2016)

- 5.24 The Buckinghamshire Local Transport Plan 4 (BLTP4) is designed to help realise the transport element of BC's Strategic Plan and identifies four objectives:

- *'Objective 1: Connected Buckinghamshire - Provide a well-connected, efficient and reliable transport network which links to key national and international destinations helping Buckinghamshire's residents and economy to flourish while capitalising on external investment opportunities;*
- *Objective 2: Growing Buckinghamshire - To secure good road, public transport, cycle and walking infrastructure and service provision, working in partnership with local businesses, the community and district councils through a range of initiatives and taking advantage of new and emerging technologies to meet the (current and future) needs of our residents as Buckinghamshire grows;*
- *Objective 3: Healthy, Safe and Sustainable Buckinghamshire - Allow residents to improve their quality of life and health, by promoting sustainable travel choices and access to opportunities that improve health. Ensure transport systems are accessible by all, safe and allow people to make the most of Buckinghamshire whilst protecting its special environments;*
- *Objective 4: Empowered Buckinghamshire - Allow everybody to access the educational, work and social opportunities they need to grow. Increase opportunities for residents to support themselves and their communities by enabling local transport solutions.'*

⁷⁹ MKC Committee Report November 2019, paragraph 7.11 CD12/J/A



5.25 A total of 19 policies are identified within the document, each focused on mitigating a specific transport issue; four of these policies have been designed to actively promote the use of sustainable transport modes, as follows:

- Policy 12: Encouraging walking for shorter journeys:

‘Walking should be the best option for more of our short journeys. We will look to develop the walking network and encourage walking, to help ensure it becomes one of the most convenient ways to make short journeys.’

- Policy 13: Encouraging cycling:

‘We will look to develop the cycling network through a combination of new infrastructure, maintenance and guidance. This will help cycling to become one of the most convenient and well used forms of transport for short journeys.’

- Policy 14: Car clubs, car sharing and taxis:

‘We will work with partners to explore opportunities for car clubs, car sharing and taxi initiatives. This will provide an alternative to car ownership for some: encouraging people to consider other modes of transport; and helping people to access the opportunities Buckinghamshire has to offer.’

- Policy 16: Total Transport: the bus network Buckinghamshire needs:

‘We will work with partners to ensure public transport services best meet the county’s needs – now and in the future.’

5.26 There is a key focus on the development of transport throughout Buckinghamshire, particularly the promotion of sustainable modes of transport as an alternative to single use private vehicles. Policy 16 of BLTP4 is particularly relevant to the Proposed Development and seeks to:

- Ensure developments are located near to good public transport or provide the right public transport (i.e. public transport services should be located where they address the impact of new developments and are able to flourish and meet Buckingham’s needs). In this regard, the provision of a new/extended bus service would enhance the connectivity with CMK and key social infrastructure as previously indicated;
- Help improve public transport information: the Proposed Development-wide FTP will ensure that information is provided across social media platforms and through the introduction of Real Time Passenger Information (RTPI) systems;
- Introduce ‘smart’ ticketing and fares: the new/extended bus service would incorporate technology to enable the introduction of ‘smart’ ticketing;



- Provide bus priority measures: Within the Proposed Development, measures will be provided on the identified bus route(s) to ensure that services are given priority at key junctions;
- Improve public transport infrastructure: Safe and secure weatherproof shelters that would facilitate the provision of Real Time Passenger Information (RTPI);
- Make public transport fully accessible; considering the needs of mobility impaired people and those with other specific needs. In this regard, tactile paving and high bus boarding platforms would be provided to enable greater accessibility.

Commentary

5.27 The development proposals comply with the objectives and policies outlined within BLTP4. Specifically, the Proposed Development complies with objectives 1, 2 and 3 by providing a range of sustainable transport options that aim to connect the development to the surrounding areas and with Policies 12 and 13 by providing a widespread network of footpaths and cycle paths that would connect with existing infrastructure. Through the introduction of a new/extended high frequency bus service, the Proposed Development would comply with Policy 16 and make a significant contribution towards delivering BC's objectives.

MOBILITY STRATEGY FOR MILTON KEYNES 2018-2036 (LTP4) MOBILITY FOR ALL (2018)

- 5.28 The Milton Keynes LTP4 (MK LTP4) was adopted in March 2018 and sets out the Council's policies and programme for delivering local, sub-regional and national policy objectives between 2018 and 2036. The MK LTP4 assumes growth in the population from 268,000 people to over 300,000 by the mid-2030s and to over 400,000 by around 2050, with an additional 31,000 homes.
- 5.29 This future mobility strategy for MK acts as the reference point for how the town wishes to maintain, improve and develop its transport system up to 2036⁸⁰, providing the foundations upon which the Plan:MK policies are built. As such, the MK LTP4 is significant to the growth of Milton Keynes and explains to how the transport network needs to respond to accommodate that growth.
- 5.30 It establishes both short term and long term (up to 2050) visions and demonstrates how it will connect to new infrastructure such as East West Rail as outlined in the National Infrastructure Commission's final report 'Partnering for Prosperity: a new deal for the Cambridge-Milton Keynes-Oxford Arc' and the council's 'First Last Mile' strategy.
- 5.31 The ambition for MK LTP4 is to:

⁸⁰ MK Mobility Strategy 2018-2036 Section 1.1, page 2 (CD12/C)

- *‘Stabilise average journey times and ensure they remain competitive while promoting the development of smart shared sustainable mobility for all;*
- *Provide a fully integrated and accessible public transport system - “Mobility as a Service” (MaaS)*
- *Develop and promote a ‘First Last Mile’ culture for future technologies such as autonomous and connected vehicles and sustainable connectivity*
- *Ensure transport infrastructure is configured to enable the city’s future development and growth in travel demand to be accommodated based on the council’s ‘First Last Mile’ Strategy’*

5.32 Milton Keynes has established mode share targets for 2030 and 2050 as shown in **Table 5.1**.

Table 5.1 – MK Mode Share Targets

Journey	Journey to work by car/other mode (%)		
	2011 (Actual)	2030 (Target)	2050 (Target)
Milton Keynes	65/35	60/40	50/50
Intra-borough	80/20	70/30	55/45
Inter-borough	85/15	80/20	60/40

5.33 MKC’s Mobility Strategy sets out key transport objectives and outcomes⁸¹ to accommodate the anticipated level of growth through to 2036 and beyond leading towards 2050. In this regard, the Proposed Development would include a range of measures to comply with these objectives and predicted outcomes, inter alia:

- Support growth and provide mobility for all: the Proposed Development would facilitate a transport network that would cater for all road users to improve journey time reliability underpinned by a comprehensive Framework Travel Plan (FTP) that would apply to all the proposed uses. The provision of land to accommodate the extension of the grid road network southwards would also facilitate connectivity to the wider highway network;
- Provide an effective Network: to prioritise travel by public transport, cyclists and pedestrians: The Proposed Development would maximise the opportunity to enable ‘fast track’ bus services and provide an integrated network of routes for cyclists and pedestrians, linked to existing Public

⁸¹ Mobility Strategy for Milton Keynes 2018-2036 (LTP4), March 2018, MKC, Section 2, page 3 (CD12/C)



Rights of Way (PRoW) and the Redway system to the north. A new/extended bus service between the Proposed Development and Central Milton Keynes (CMK) would provide a high-quality sustainable travel option;

- Maximise Travel Choice: to provide integrated seamless ticketing enabling reliable and frequent transport to reduce the need for car ownership. Given the proximity of the Proposed Development to CMK and increasing Mobility as a Service (MaaS), it presents an opportunity to reduce the need for car ownership;
- Protect Transport Users and the Environment: to improve wellbeing, reduce emissions and ensure the safety of all travellers: The Proposed Development would include cycleways/footways that will enable Non-Motorised Users (NMUs) to travel safely throughout the Proposed Development and connect with the wider network of PRoWs, Redways and local bus nodes.

5.34 MKC's Mobility Strategy also explains the contribution of public transport towards achieving the delivery initiatives⁸² and how MKC would seek to improve public transport services and associated infrastructure, comprising, inter alia:

- Park and Ride sites along corridors where there is a high trip demand;
- Premium bus network to provide high frequency services where there is high demand from early in the morning until late evening;
- Expanding the local bus network and introduce bus priority along key access routes to encourage mode shift;
- Shuttle bus services from identified Park and Ride sites on selected corridors;
- Ensure that social infrastructure (i.e. schools, hospitals) are fully accessible by public transport; and
- Optimise public transport/mass transit access in development areas, to include priority routes, signage and high-quality facilities.

Transport Infrastructure Delivery Plan, October 2019

5.35 The Transport Infrastructure Delivery Plan (TIDP) forms part of the MK LTP4 and was published in October 2019. The TIDP sets out the short to medium term transport infrastructure required to

⁸² Mobility Strategy for Milton Keynes 2018-2036 (LTP4), March 2018, MKC, Section 3, page 6 (CD12/C)



support planned growth in Milton Keynes with an outline Action Plan and policy enablers, aligned to the Mobility Strategy and MK Futures 2050 workstreams.

- 5.36 The TIDP acknowledges⁸³ the unique nature of the Milton Keynes grid roads, and the potential that exists for redistribution of trips across the network:

“The unique single and dual carriageway grid road system with national speed limits provides good network performance due to the its high capacity and routing option resilience.” [sic.]

- 5.37 MKC are committed to and are implementing a series of ‘Redway Super Routes’, one of which is along B4034 Buckingham Road,⁸⁴ to improve the direct nature of the redway network to make the routes more attractive to commuters.

- 5.38 MKC acknowledge that future technology trends, including MaaS, electric vehicles, connected and autonomous vehicles etc. could have a transformational impact on the demand for car travel and road infrastructure, although acknowledging the uncertainty of predicting future trends:⁸⁵

“Due to the uncertainties in the availability, applicability and uptake of these new technologies it is very difficult to predict what the transport network and car travel demand will look like by 2031 and beyond to 2050.”

- 5.39 The TIDP considers and prioritises 103 schemes across all transport themes, categorised into spatial areas, with funding identified across all levels from central Government, the Local Enterprise Partnership and developer contributions and obligations.

- 5.40 The following schemes under ‘Urban Milton Keynes Infrastructure’⁸⁶ are noteworthy in relation to the Proposed Development:

- 3. New Urban Redway Super Routes
 - *“Expansion of the Redway Super Routes programme to provide additional links along key routes and desire lines”;*
 - short term; high priority;
- 19-23. Travel Planning

⁸³ Transport Infrastructure Delivery Plan, 2019, MKC paragraph 3.3.6

⁸⁴ Transport Infrastructure Delivery Plan, 2019, MKC Figure 6-2

⁸⁵ Transport Infrastructure Delivery Plan, 2019, MKC Paragraphs 3.6.1-3.6.2

⁸⁶ Transport Infrastructure Delivery Plan, 2019, MKC Section 6.3



- *“Smarter Choices Travel Planning Team to work with schools, residential developers and employers to encourage travel behaviour change through the delivery of strategies (Travel Plans) and initiatives to decrease car dependency and increase sustainable travel” ;*
 - short term, high priority;
- 89. Smart Sensors
 - *“Installation of SMART Sensors covering roads, redway and parking spaces to enable the collection of real time information. This data can then be linked to transport models, monitoring transport scheme impacts network resilience, air quality, traffic conditions, asset maintenance, emergency planning and providing open data to transport network users via a SMART Milton Keynes Travel portal including car parking space availability, bus locations and dynamic vehicle routing”;*
 - short term; high priority;
- 84. UTC Expansion
 - *“Expansion of the Urban Traffic Management Control System. This will include signalised bus priority measures at key pinch point junctions, signalisation oat junctions and traffic and cycle counters. This option aims to gather data and maximise junction efficiency with the ability to monitor success”;*
 - short term; high priority;
- 83. Speed Reduction
 - *“Speed reduction on the urban grid road network to support its safe operation. This would entail a 10mph reduction on both dual carriageways and single carriageways currently subject to national laities, resulting in speed limits of 50mph or 60mph”;*
 - short term; desirable;
- 53. Salden Chase Rail Station (further study required)
 - *“Provision of a new railway station at Salden Chase (on the East-West Rail route) in order to support the delivery of new development in south-west Milton Keynes”;*
 - long term; low priority;
- 67. Pinch Point Junction Improvements (further study required)
 - *“Physical improvements at junctions identified as pinch points on the road network in and around Milton Keynes, where public transport improvements are a priority. Enhancements*



could include the introduction of traffic signals, junction widening and improving crossing provision, subject to traffic modelling to demonstrate overall network benefits”;

- medium term, desirable;
- 76. Bletchley Southern Bypass (further study required)
 - *“Delivery of the Bletchley Southern Bypass linking the A421 and A4146 to provide congestion relief to the A421 and Buckingham Road and support the delivery of strategic growth in the southwest. The indicative route for the Bletchley Southern Bypass would connect the A4142 Stoke Hammond Bypass to the A421, west of Bletchley”;* and
 - medium term; low priority.

Commentary

- 5.41 The Proposed Development complies with the policies and aspirations of MK LTP4 through the provision of connections to the redway network, expansion of the public transport network with a new bus service through the Proposed Development and provision of junction capacity improvements that will assist with congestion at identified pinch-points, including the Bleak Hall Roundabout and Elfield Park Roundabout.
- 5.42 The TIDP includes schemes that are spatially directly relevant to the Proposed Development, with a Redway Super Route proposed along B4034 Buckingham Road and the expansion of the UTC network along A421 and B4024 Buckingham Road.⁸⁷ The longer term aspirations for a new rail station at Salden Chase on the East-West Rail line and for the Bletchley Southern Bypass (with a grid road reserve through the Proposed Development)), are ideally located to allow greater route and travel mode choice for the Proposed Development, which will assist in reducing the existing congestion on the local highway network.

MILTON KEYNES COUNCIL STRATEGY FOR FIRST LAST MILE TRAVEL (2017)

- 5.43 The MK Strategy for First Last Mile Travel forms part of MK LTP4. It aims to establish the approach to providing fast, affordable and efficient connectivity for the city of Milton Keynes and the wider area and to provide connections to both the East-West Railway and Oxford-Cambridge Expressway⁸⁸ as they are implemented in future years.
- 5.44 The objectives of the first/last mile strategy are to:

⁸⁷ Transport Infrastructure Delivery Plan, 2019, MKC Figure 6-3

⁸⁸ Scheme now cancelled by DfT

- Ensure the maximum advantage is taken from the new nationally significant east west infrastructure, putting in place transport solutions which remove the risk of congestion, promote sustainable transformational growth and ensure the region's economic capability, in line with NIC objectives;
- Working with the cities and town of Cambridge, Oxford and Northampton to ensure development of transport systems which will be the example for others worldwide;
- Ensure that first/last mile infrastructure schemes provide a basis for the future potential directions of growth for the city out to 2050, in line with the NIC's objectives.

5.45 The Strategy recognises that significant growth in Milton Keynes is likely to result in increased congestion, and this is evidenced by the Council's strategic transport model, even though increasing congestion is likely to impact productivity which could in turn make the City less attractive in the absence of significant investment in transport infrastructure:

*'However with rapid growth comes an increased pressure on the transport network. The MK multi modal traffic model has been updated during 2017 and it evidences an increasingly congested road network towards 2031 especially during morning and evening peak travel times. There is a risk that without much greater investment in the public transport system greater growth in the economy beyond then to 2050 could be stifled by further increases in road traffic.'*⁸⁹

5.46 The Strategy states⁹⁰ that:

'the Vision for 2050 sets the scene for the transformation of the city into a highly skilled, highly proactive workforce with one of the best transport systems in the world, to be an exemplar transit city providing benefits for business and an exemplar for future mobility solutions across the world. It envisages a future city for which its ambitions for growth are realised through greater strategic planning with key partners and neighbours, based on high density development along transit corridors with people able to access a transport system that meets their needs based on rapid mass transit and shared use of vehicles such as autonomous pods, electric car share and demand responsive services.'

5.47 The Strategy establishes a series of mode share targets⁹¹ which aim to deliver the high growth ambitions of the City.

⁸⁹ Strategy for First Last Mile Travel, 2017, MKC, Page 8 (CD12/E)

⁹⁰ Strategy for First Last Mile Travel, 2017, MKC, Page 10 (CD12/E)

⁹¹ Strategy for First Last Mile Travel, MKC, Table 2-1 (CD12/E)



5.48 The Strategy is split into three phases as follows:

- Phase 1 (2017-2024) – Managing demand and building capacity to accommodate a future mass transit system, investment in interchanges at key transport nodes and improving cycling connections;
- Phase 2 (2025-2031) – Continued demand management and delivery of the mass transit system; and
- Phase 3 (2032-2050) – Synchronising movement within the East West Rail, Oxford to Cambridge Expressway⁹² and HS2 corridors.

Commentary

5.49 The public transport and access strategies for the Proposed Development as set out within the Updated TA⁹³ comply with the strategies contained within MKC's First Last Mile Strategy by providing an enhanced and extended bus service as well as improving cycling connections from the Proposed Development to the existing network.

5.50 The Updated FTP aims to influence behavioural change through the promotion of more sustainable and active modes of travel, to adjust the time of travel away from the traditional peak hours, and ultimately reduce the need to travel by maximising opportunities to internalise trips. The FTP is supported by a range of measures, incentives and demand management to ensure connectivity exists where needed without creating additional congestion and capacity constraints. The FTP sets out measures related to the residential land use and also provides a framework for education and employment travel plans to be created by the occupiers of the development once completed.

NATIONAL PLANNING POLICY FRAMEWORK (NPPF)⁹⁴

5.51 The Government's NPPF emphasises the importance of rebalancing the transport system in favour of sustainable transport modes, whilst encouraging local authorities to plan proactively for the transport infrastructure necessary to support the growth of major generators of travel demand.

Section 2 – Achieving Sustainable Development

5.52 Paragraph 7 of the NPPF states:

'The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be

⁹² Scheme now cancelled by DfT

⁹³ Updated Transport Assessment, May 2020, WSP, Section 4 (CD10/H/A)

⁹⁴ National Planning Policy Framework, 2019, MHCLG

summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.'

5.53 Paragraph 8 sets out the three overarching, interdependent objectives of sustainable development - economic, social and environmental - which should to be pursued together to secure net gains across each objective:

- 'a) an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;*
- b) a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and*
- c) an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.'*

5.54 At the heart of the NPPF is the presumption in favour of sustainable development, set out in Paragraph 11 of the NPPF. This is seen by the industry as 'the golden thread' running through both plan making and decision taking.

Section 9 – Promoting Sustainable Transport

5.55 Section 9 of the NPPF entitled 'Promoting Sustainable Transport' outlines the transport considerations for plan making and development proposals.

5.56 Paragraph 102 provides that:

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

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

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

5.57 Paragraph 103 states that:

'Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes.'

5.58 Paragraph 104 relates to local authorities ensuring that their planning policies support a mix of uses to minimise journeys, involve local highway authorities, identify improvements to transport infrastructure, and provide walking and cycling networks/facilities. The paragraph is not aimed at individual development proposals, although the principles set out are key to sustainable growth in a congested network.

5.59 Paragraph 108 identifies a number of key considerations when assessing sites to be allocated for development in plans or specific development applications. There are:

- *'Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development applications and its locations;*
- *Safe and sustainable access to the Proposed Development can be achieved for all users; and*
- *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.*

5.60 Paragraph 109 explains that development should only be prevented or refused on highway grounds if:

'there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

5.61 Paragraph 110 explains that applications for development should:

- *'Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible - to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- *Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- *Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- *Allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- *Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.'*

5.62 As outlined in Paragraph 111:

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

Commentary

5.63 The Proposed Development is in an accessible location within a range of good public transport services, either existing or to be provided by the Proposed Development, with sustainable active travel connections to Milton Keynes and Bletchley. The Proposed Development provides a permeable and connected network of footpaths and cycleways, and a range of amenities within the proposed Neighbourhood Centre and across the wider development, including both a primary school and a secondary school as shown on the Development Framework Parameters Plan.⁹⁵

⁹⁵ Development Framework Plan rev K CSA/4857/100, Feb 2020, CSA (CD10/O/A)



- 5.64 An Updated FTP accompanies the planning application. The Updated FTP identifies trip characteristics and measures to achieve a realistic modal shift away from the use of the private car with the promotion of active travel and sustainable transport options for future residents and employees.
- 5.65 As detailed within my evidence, in transport terms, the Proposed Development is in accordance with the NPPF. The Proposed Development is in an accessible location to maximise the use of existing public transport services and will encourage sustainable travel wherever possible through the implementation of the FTP. The assessment within the TRNs shows that the residual cumulative impacts of the Proposed Development would be acceptable and would not have an unacceptable impact on highway safety. Therefore, in the context of paragraph 109 of NPPF, the development should not be prevented or refused.

DRAFT VALE OF AYLESBURY LOCAL PLAN (VALP) 2013-2033

- 5.66 The Draft VALP is currently undergoing Examination by the Inspectorate. A statutory six-week consultation on the Main Modifications following the Inspector's recommendations was completed between November and December 2019. Additional hearing sessions are scheduled to take place in April 2021. It is anticipated that the Draft VALP will be adopted later in 2021 or early 2022.
- 5.67 The Draft VALP will help to accommodate national housing growth demand and bring more investment, employment and opportunity, thus helping the district to thrive. It meets the need for 28,600 new homes in the District by 2033, half of which are either already built or have planning permission.
- 5.68 The Proposed Development is identified as an allocation site within the Draft VALP (Policy D-NLV001) for the delivery of:
- up to 1855 new homes;
 - an employment area;
 - neighbourhood centre;
 - secondary school;
 - primary school; and
 - grid road reserve.
- 5.69 Three points of access into the Proposed Development are required by the policy in accordance with the planning application and AVDC's resolution to grant planning permission. The following highway improvements are identified as part of the draft policy:



- Highway Improvements by Condition(s)
 - Buckingham Road Access;
 - Whaddon Road Access;
- Highway Improvements by s106 agreement(s):
 - A421 Standing Way left in only junction and further detailed design;
 - Signalisation of the priority junctions of the A421/ Warren Road and A421/Shucklow Hill/Little Horwood Road;
 - In order to mitigate the potential impact in Whaddon a financial contribution is required towards road safety improvements on Coddimoor Lane and Stock Lane;
 - Newton Longville Traffic Calming Proposals. Currently this is an indicative scheme which may include enhanced gateway features on all roads leading into the village and raised junction tables and signing/lining;
- Internal Road Network:
 - A new network of primary streets will form the principal circulation route for all vehicular traffic including a bus route. The route will connect with the existing highway network at the three access points. Plans should show that the primary street is to be at least 7.3m wide, with a footway/cycleway of 3m wide and will need to consider drop off provision, widened footways, crossing points, road signage and lining in relation to the proposed school site;
- Grid Road:
 - Whilst the Proposed Development only requires a single carriageway road for access, a dual carriageway could be provided in the future. The land for the grid road is to be secured in the S106 Agreement for the future extension of V1 Snelshall Street so that BC/MKC can develop and implement a scheme in the future;
- Public Transport Provision:
 - The enhancement of the existing bus service or provision of a new service to operate between the Proposed Development and CMK via the existing rail station will be required and included within the Framework Travel Plan;
- Public rights of way:
 - A number of improvements to the surfacing of the local footpaths will be required within the Proposed Development and be completed as part of the development and a financial



contribution is to be secured as part of the S106 Agreement for those routes outside of the Proposed Development. The improvements within the Proposed Development include:

- upgrade of footpath and resurface between Weasel Lane and the railway underpass; route to be dedicated as a public bridleway; and
- resurface Weasel Lane between B4034 Buckingham Road and Whaddon Road.

5.70 Chapter 7 of the Draft VALP sets out the transport related strategies for the region, outlining the importance of a sustainable transport vision. It states that creating development that is accessible by different modes of transport, particularly active modes, is essential to promoting sustainable development as it reduces car dependency.

5.71 'Policy T4 Delivering Transport in New Development' states:

'Transport and new development will also only be permitted if the necessary mitigation is provided against any unacceptable transport impacts which arise directly from that development. This will be achieved, as appropriate, through:

- *The submission of a transport statement or assessment and the implementation of measures arising from it*
- *Ensuring that the scale of traffic generated by the proposal is appropriate for the function and standard of the roads serving the area*
- *The implementation of necessary works to the highway*
- *Contributions towards local public transport services and support for community transport initiatives*
- *The provision of new, and the improvement of existing, pedestrian and cycle routes*
- *The provision of a travel plan to promote sustainable travel patterns for work and education related trips.'*

5.72 'Policy T6 Footpaths and Cycle Routes' sets out how strategic routes through proposed development sites should be treated.

Commentary

5.73 The Proposed Development includes transport and highway improvements set out in policy NLV001 to ensure that the scale of traffic generated is appropriate for the function and standard of the roads serving the area, and that unacceptable impacts on the transport network do not arise, in accordance with draft Policy T4.



5.74 The transport evidence that supports the Draft VALP indicates that there would be some increase in on congestion on the A421 but that the impacts could be addressed in the planning application process.⁹⁶ Recognising the benefits of development adjacent to Milton Keynes, including for example, focussing significant development in locations which limit the need to travel and offer a genuine choice of transport modes to assist in reducing congestion and reducing emissions,⁹⁷ the Examination in Public (EiP) Inspector examining the Draft VALP reported that AVDC (now BC), should increase the allocation for housing in close proximity to Milton Keynes, in addition to the draft allocation for the Proposed Development. As a result, AVDC included a Main Modification to the Draft VALP to allocate further development along the corridor of A421 at Shenley Park, given the Inspector's findings that the general location was appropriate to allocate further development. I understand that further hearings are planned for April 2021 to discuss the additional allocation at Shenley Park.

PLANNING PRACTICE GUIDANCE (PPG) (2014)

5.75 On 6th March 2014 the Department for Communities and Local Government launched its planning practice guidance web-based resource. The Planning Practice Guidance (PPG)⁹⁸ has updated and replaced a wide range of Government planning policy and Circular guidance. It addresses transportation and highway matters under the headings of 'Travel plans, Transport Assessments and Statements in decision-taking' and 'Design'.

Travel Plans, Transport Assessments and Statements in Decision-Taking

5.76 The PPG (Reference ID: 42-004-20140306) explains that Transport Assessments (TAs) and Travel Plans (TPs) are ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development and that they are required for developments which generate significant amounts of traffic movements. A TA may propose mitigation measures which may be required to avoid unacceptable or severe residual impacts. TPs are identified as playing an effective role in taking forward approved mitigation measures which relate to on-going occupation and operation of the development.

5.77 Paragraph 005 (Reference ID: 42-005-20140306) set out that TPs and TAs should be an iterative process as each may influence the other, with the primary purpose of a TP to identify the opportunities for promoting and delivering sustainable travel initiatives to reduce the demand for travel by less

⁹⁶ Countywide Strategic Transport Model Supporting Statement, Oct 2020, BC, Paragraph 12.1.32 (CD11/H)

⁹⁷ NPPF, 2019, MHCLG, Paragraph 103 (CD/8)

⁹⁸ Planning Practice Guidance, March 2014, MHCLG (CD9)



sustainable modes. TAs, which focus on evaluating the impacts of development proposals, may propose mitigation measures where necessary to avoid unacceptable or 'severe' impacts.

- 5.78 The PPG states (Reference ID: 42-006-20140306) that TAs can positively contribute to:
- encouraging sustainable travel;
 - lessening traffic generation and its detrimental impacts;
 - reducing carbon emissions and climate impacts;
 - creating accessible, connected, inclusive communities;
 - improving health outcomes and quality of life;
 - improving road safety; and
 - reducing the need for new development to increase existing road capacity or provide new roads.
- 5.79 For a TP, the guidance advises that it should identify the specific required outcomes, targets and measures, and set out clear proportionate future monitoring and management arrangements. A TP should also consider what additional measures may be required to offset unacceptable impacts if the targets are not met. It is necessary for a TP to set out explicit outcomes rather than just identify processes to be followed. A TP should also address all journeys resulting from a development by anyone who may need to visit or stay, and it should seek to fit in with wider strategies for transport in the area (Reference ID: 42-011-20140306).
- 5.80 The scope for a TA is set out in Paragraph 15 (Reference ID: 42-015-20140306), and requires a range of assessments to be completed to determine the baseline position, the impacts of the development and appropriate mitigation, based on normal traffic flow conditions, although it may be necessary to consider regular peak traffic usage periods.

Commentary

- 5.81 An important part of the overall strategy for the Proposed Development is the implementation, maintenance and monitoring of the Updated FTP that would encompass individual more detailed Travel Plans for the principal land uses of the Proposed Development. The Updated FTP is focused towards influencing future travel behaviour and encouraging sustainable active travel away from the use of the private car.
- 5.82 The PPG also requires the appropriate consideration of the cumulative impacts of any adopted Local Plan allocations or committed developments where there is a reasonable degree of certainty of proceeding within the next three years. Through discussions with BCC and MKC, the appropriate



level of committed/allocated development has been included within the assessments through the use of TEMPro⁹⁹ growth factors and inclusion of specific committed developments.

BUCKINGHAMSHIRE COUNTYWIDE PARKING GUIDANCE (2015)

- 5.83 The Buckinghamshire Countywide Parking Guidance document sets out BCC's approach to parking throughout the County. The vehicle and cycle parking standards of relevance to the Proposed Development are summarised in the Updated TA.¹⁰⁰

Commentary

- 5.84 The Proposed Development is to be determined by BC in outline with all matters reserved with the exception of access. The level of parking to be provided in the Proposed Development will be determined through Reserved Matters and will be considered against the prevailing parking standards at that time.

BUCKINGHAMSHIRE COUNTY COUNCIL HIGHWAYS DEVELOPMENT MANAGEMENT GUIDANCE: MANAGING THE TRANSPORT AND TRAVEL IMPACT OF NEW DEVELOPMENTS (2018)

- 5.85 The BCC Highways Development Management Guidance document establishes a set of guiding principles for the delivery of development within Buckinghamshire. It helps to establish the objectives that are set out within the County's Local Transport Plan and provides:

- The information the Council requires for different types and size of development proposals;
- Principles for designing new developments that meet transport and highway requirements;
- How BCC considers development proposals' transport impacts; and
- How cumulative impacts are considered where multiple developments affect an area.

Commentary

- 5.86 This guidance document has been used to assess the suitability and sustainability of the Proposed Development and to ensure that the impacts of development are adequately assessed.

⁹⁹ Trip End Model Presentation Programme, developed by the Department of Transport (DfT)

¹⁰⁰ Updated Transport Assessment, May 2020, WSP, Table 2.3 and Table 2.4 (CD10/H/A)



BUCKINGHAMSHIRE'S SUSTAINABLE TRAVEL PLANS: GUIDELINES FOR DEVELOPERS (2020)

- 5.87 The BC Sustainable Travel Plans: Guidelines for Developers document guides developers through the process and policies surrounding Sustainable Travel Planning.
- 5.88 The guidance sets out the potential benefits of a TP and provides a template for developers who may be required to submit TPs as part of the planning process in Buckinghamshire.
- 5.89 The guidance is intended to assist a developer in the production of consistent and high-quality TPs that will achieve and sustain long term modal shift away from car use. The FTP has been prepared in accordance with this guidance.

MILTON KEYNES STRATEGY FOR 2050

- 5.90 MKC published the Milton Keynes Strategy for 2050¹⁰¹ (MK2050) in January 2021. MK2050 identifies potential strategies for housing, employment, transport and quality principles for new communities. MK2050 also acknowledges the opportunities associated with the Oxford to Cambridge Arc. MK2050 identifies potential strategic options for the growth of Milton Keynes and identifies direction of growth options into the neighbouring areas of Buckinghamshire, Northamptonshire and Central Bedfordshire. The decision to identify directions of growth into neighbouring areas was based on the delivery of sustainable patterns of growth unrestricted by administrative boundaries; although it is acknowledged in MK2050 that decisions about growth in neighbouring areas will be for those authorities.
- 5.91 MK2050 acknowledges that traffic congestion in the city is becoming worse, and that some key grid road junctions will exceed their capacity. MK2050 acknowledges that as a result of the COVID-19 pandemic, the timeline for junctions reaching capacity will be extended and will be later than the previous forecast of 2031.¹⁰² MK2050 also recognises that constructing new road capacity does not provide a long-term solution to congestion, as it is proven to create more traffic. Reallocating road space to other modes (such as cycling or mass rapid transit (MRT)) would produce a more efficient solution.¹⁰³
- 5.92 Furthermore, MK2050 identifies a potential new rail station and rail/MRT interchange on East West Rail to the south west of the Proposed Development, combined with a potential 'Park and Ride' site to the north west, accessed off A421 Buckingham Road close to Bottledump Roundabout.

¹⁰¹ Milton Keynes Strategy for 2050, November 2020 (CD12/D/A)

¹⁰² Milton Keynes Strategy for 2050, November 2020, Page 42 (CD12/D/A)

¹⁰³ Milton Keynes Strategy for 2050, November 2020, Page 42 (CD12/D/A)



- 5.93 MK2050 identifies and assesses a number of strategic directions of growth. The Proposed Development is shown as an allocation in a neighbouring draft Local Plan, with further development to the west of the Proposed Development highlighted for long-term development, although outside the scope of MK2050.¹⁰⁴

MILTON KEYNES LOCAL INVESTMENT PLAN (MARCH 2015)

- 5.94 The Local Investment Plan (LIP) sets out the vision and aspirations for the Milton Keynes area as it continues to grow with the aim of delivering a further 28,000 new homes and over 40,000 new jobs by 2026. The plan outlines the investment requirements and funding mechanisms to support the delivery of growth.
- 5.95 The LIP identifies that the commitment to future growth and the policies and strategies in place for Milton Keynes creates both ‘challenges’ and ‘opportunities’ in terms of the infrastructure and investment required.
- 5.96 The ‘*Capacity of Transport Grid and Transport Links*’ is identified as an opportunity as the LIP recognises that Milton Keynes has good transport links and was planned to deliver high speed access across the whole town. A specific opportunity that is noted is the reinstatement of the disused railway line through Bletchley and on to Bedford and Cambridge as part of East West Rail.

CONCLUDING COMMENTS

- 5.97 Mr Mark Hyde provides a comprehensive review of relevant planning policies on behalf of the Appellant in his Main Proof. Relevant transport policies at national, regional and local level require new residential development to be well located to a range of facilities and services by a variety of modes of transport including walking, cycling and public transport to minimise the number and length of car journeys. Safe and suitable access to the Proposed Development will facilitate inclusive mobility and be achievable by all modes. In this regard, I consider that both the Appeal Development and the Proposed Development comply with the policy objectives of Plan:MK and the NPPF as set out above in my evidence and summarised in Appendix **MJP13**.
- 5.98 Along with a package of proposed mitigation, to ensure that the residual cumulative impacts on safety and highway capacity are acceptable and not severe and comply with relevant local transport and national planning policies, both the Appeal Development and Proposed Development would therefore deliver:

¹⁰⁴ Milton Keynes Strategy for 2050, November 2020, Figure 8, page 66 (CD12/D/A)



- i) enhanced connectivity and permeability for pedestrians and cyclists;
- ii) access to efficient and frequent public transport services; and
- iii) a range of social and educational amenities contained within the Proposed Development to reduce the need to travel by private car and minimise the need for external trips.

6 APPROACH TO MODELLING

STRATEGIC MODELS

Previous Assessments

- 6.1 The original 2015 TA used the MKTM strategic model approach, whilst the 2016 TA used a combined 'hybrid' approach, using the strategic model for most junctions within Milton Keynes and a manual spreadsheet-based model in Buckinghamshire.

Updated TA and TRNs

- 6.2 It was agreed with both BC and MKC as part of the approved TASN¹⁰⁵ that a manual spreadsheet-based assessment approach should be used instead of a strategic transport model to ensure a consistent methodology and as the best, most robust approach to assessing the impacts of the Proposed Development.
- 6.3 For avoidance of doubt, it was agreed during the scoping process that it would be inappropriate to use a strategic model because neither the Buckinghamshire Countywide Model nor the MKMMM covered the entire study area for the Updated TA in sufficient detail (**MJP4**). The updates completed to create a 2016 base for the MKMMM did not include any traffic counts located close to the boundary with Buckinghamshire, hence validation of the model would be reduced. BC were therefore not convinced that the model would accurately replicate the realistic situation on their road network, consistent with their views articulated in 2015 in regard to the MKTM.
- 6.4 Therefore, a manual spreadsheet-based approach to assessment was requested by and agreed with both MKC and BC to provide a consistent assessment across the study area. The results presented in the Updated TA,¹⁰⁶ TRN2¹⁰⁷ and TRN3¹⁰⁸ therefore use the manual spreadsheet approach to comply with the requirements of BC and MKC.
- 6.5 The use of a manual spreadsheet-based approach to distribute and assign traffic is unable to account for the benefits of any dynamic reassignment that would arise in a congested urban network. The approach assumes that traffic volumes would continue to increase at a junction indefinitely and ignores the fact that motorists will only accept a certain level of queueing and delay before either re-assigning to a parallel route (i.e. to balance traffic flows across the network), re-

¹⁰⁵ Transport Assessment Scoping Note, January 2020, WSP, Page 10 (MJP4)

¹⁰⁶ Updated Transport Assessment, May 2020, WSP, Sections 7 and 8 (CD10/H/A)

¹⁰⁷ Transport Response Note 2, December 2020, WSP, Sections 4 and 5 (CD16/B)

¹⁰⁸ Transport Response Note 3, January 2021, WSP, Sections 4 and 5 (CD16/C)



timing (i.e. to outside of peak hours), re-modelling (i.e. to sustainable transport options) their journey, or even avoiding the need to make the journey at all. When used on a congested urban network, a manual-spreadsheet based approach therefore presents a robust worst case assessment of the development impacts at key junctions, in that the scope of the impacts it identifies in the forecast year (i.e. 2033) are unlikely to occur to the same extent.

- 6.6 The main benefit of a strategic transport model is therefore the ability to dynamically distribute and assign vehicle flows which can allow for traffic re-routing, re-timing or re-modelling as a result of congestion/ future changes in highway and transport infrastructure. Whilst it is acknowledged by MKC and their consultant Hydrock that redistribution could occur where there is potential congestion on the local road network, as detailed in the SoCG with MKC,¹⁰⁹ in the absence of developing further operational scenarios using either the MKMMM or possibly a microsimulation model, it is not possible to assess how and whether any redistribution would occur. In this regard, I explain below in paragraph 6.22 and Appendix **MJP14** why a microsimulation model would not be appropriate to assess the impact of the Proposed Development.

Local Plan Modelling

- 6.7 Both Plan:MK and the Draft VALP are underpinned by strategic transport models which account for the reassignment of traffic over a wider modelled area and consider the benefits of major transport interventions that would be implemented over the course of the next 10-13 years including: inter alia, East-West Rail (EWR), widening of A421 west of M1 and various other improvements¹¹⁰ as previously explained.
- 6.8 The MKMMM 'Reference Case'¹¹¹ is a scenario that incorporates planned growth in the Milton Keynes district and includes some 20,000 dwellings and 28,000 jobs in the region, together with highway and rail infrastructure that is expected to be in place by 2031. The Reference Case also includes the Proposed Development for circa 1,855 dwellings and 895 jobs. It identifies increasing

¹⁰⁹ Draft Statement of Common Ground (Transport & Highways) between the Appellant and MKC, April 2021, Paragraph 37

¹¹⁰ Milton Keynes Multi Modal Model Update, Highway Model Traffic Forecasting report, November 2017, Aecom, Table 8 (CD12/A)

¹¹¹ Milton Keynes Multi Modal Model, Impacts of Plan:MK, November 2017, Aecom (CD12/B)



congestion on the local road network during the morning and evening peak travel periods through to 2031¹¹² at specific junctions along A421 corridor of 421 approaching Milton Keynes from the west.

6.9 The forecasting report for the MKMMM,¹¹³ indicates that with the Reference Case:

‘...due to some significant increases in delay at key junctions there is some reassignment in the AM and PM time periods, most notably in the AM peak.’

6.10 The report continues at paragraph 8.7.2:¹¹⁴

“Due to the re-assignment in the AM peak there are some junctions where the average V/C falls below 85%, however, it is important to note that certain junction are still over capacity.’

6.11 In addition, the transport evidence that supports the Draft VALP^{115,116,117} indicates that there would be a general increase in congestion on surrounding routes including the corridor of A421. Nevertheless, both MKC and BCC acknowledge that the corridor is an appropriate location for further development.^{118,119} This is predicated on the need for behavioural change that would be required to encourage the use of more sustainable modes of travel, which is reflected in MKC’s commitment to future significant investment in the local transport system.¹²⁰ The MKC Topic Paper of March 2018 interprets the MKMMM for Plan:MK as follows:¹²¹

“The traffic model forecasts are a useful tool to plan transport improvements and guide land use planning, however it does not provide a full enough appreciation of potential future transport conditions. Interpretation of the model outputs need moderating by an understanding of how travel demand could change in future as a result of the mobility strategy but also wider trends in mobility and behaviours.

Even with this appreciation of uncertainties over future highway demand, and accepting that the network will be under more pressure in future years there are

¹¹² Milton Keynes Multi Modal Model Update, Highway Model Traffic Forecasting Report, November 2017, Aecom, Figures 29-33 (CD12/A)

¹¹³ Milton Keynes Multi Modal Model Update, Highway Model Traffic Forecasting report, November 2017, Aecom, Section 8.7, page 62 (CD12/A)

¹¹⁴ Milton Keynes Multi Modal Model Update, Highway Model Traffic Forecasting report, November 2017, Aecom, Section 8.7, page 62 (CD12/A)

¹¹⁵ Countywide Local Plan Modelling Phase 3 Technical Note, August 2017, Jacobs, Table 6B (CD11/C)

¹¹⁶ North East Bucks Local Plan Tests – Technical Report, TN02/2, 30 May 2019, Jacobs, Section 6.3 (CD11/D)

¹¹⁷ Countywide Local Plan Modelling Support Phase 4 Report, May 2020, Jacobs (CD11/F)

¹¹⁸ Milton Keynes Strategy for 2050: Growth Options Assessment, January 2020, MKC (CD12/D)

¹¹⁹ Vale of Aylesbury Local Plan as Proposed to be Modified October 2019, AVDC, Policy NLV001 (CD7)

¹²⁰ Mobility Strategy for Milton Keynes 2018-2036 (LTP4), March 2018, MKC (CD12/C)

¹²¹ Proposed Submission Plan:MK Topic Paper: Transport, March 2018, MKC, Paragraphs 25-27(CD12/L)

reasons to be comfortable with this given the capacity of the network to soak this up, and its benefit to future efforts to achieve modal shift and operate an effective park and ride system.

By outlining the transport context and application of the Mobility Strategy this paper has sought to provide reassurance that the growth planned to 2031 can be accommodated in transport terms.”

- 6.12 The results from the impact analysis contained within TRN2 and TRN3 reach similar conclusions to those contained within the Local Plan evidence that supports both Plan:MK and the Draft VALP in relation to the congested nature of the corridor of A421 in 2031 and 2033 respectively. However, the Plan:MK evidence confirms that where the Updated TA and TRNs indicate mitigation is required, in fact the redistributive effects included within the strategic model show that the majority of the junctions perform satisfactorily within capacity.¹²²
- 6.13 Following the request from the Local Plan Inspector, with the benefit of the modelling assessment to support the Draft VALP, AVDC included a Main Modification to the VALP to allocate further development on the edge of Milton Keynes and along the corridor of A421, through an additional draft allocation at Shenley Park, given the Inspector’s suggestion that the location was appropriate for further development, as set out in Section 5 of my evidence.

Unconstrained Growth

- 6.14 It is important to appreciate that the evidence base that supports Plan:MK and the Draft VALP acknowledges the potential congestion issues that would arise on the local road network predicated on the forecast growth through to 2031 and 2033 respectively.
- 6.15 In the absence of a sustained shift in travel choices, MKC accept that in future years, the local road network would become ‘grid locked’ holding back economic ambitions and damaging quality of life.¹²³ Both MKC and BC accept that in order to accommodate the forecast growth in housing and employment, there would need to be a significant shift in behavioural attitude towards the use of more sustainable modes of travel, a redistribution of traffic to other time periods, or flexible home

¹²² Milton Keynes Multi Modal Model Update, Highway Model Traffic Forecasting Report, November 2017, Aecom, Figures 29 and 31 (CD12/A)

¹²³ Milton Keynes Strategy for 2050, November 2020, Page 42 (CD12/D/A)



working (i.e. to influence commuting) and they intend that this will develop over time as set out in their respective LTPs.

- 6.16 Wider growth on the local highway network is predicated on the assumption that the level of traffic demand would continue in accordance with current TEMPro trip end forecasts and the demand on the local highway network itself remains unconstrained. Given the recent COVID 19 pandemic, there is a clear indication that the future growth in traffic as predicted by the Department of Transport (DfT) in TEMPro forecasts may never be realised.¹²⁴ If the current trip end forecasts are reached, then MKC would need to make significant investment in strategic infrastructure as they acknowledge in their LTP4,¹²⁵ as I explained earlier in my evidence.

SPREADSHEET AND STATIC MODELS

- 6.17 I indicated earlier in my evidence that the agreed approach to modelling the impact on the wider highway network is based on a series of 'static' junction models that precludes the evaluation of traffic reassignment on the wider congested network in the future year 2033. The use of 'static' junction models also excludes the benefit of any strategic transport schemes e.g. East West Rail or A421 widening.
- 6.18 I would add, that the approach to the highway capacity assessments present a robust 'worst case' predicated on several factors that would influence trip making, including inter alia: pre-pandemic TEMPro traffic forecasts which represent circa 15% additional traffic during peak hours between 2020 and 2033 and a higher employment forecast than is expected to occur.
- 6.19 Furthermore, the trip generation has been completed based on a TRICS¹²⁶ 'predict and provide' approach looking at similar development sites across the past five years. TRICS now advocate a 'decide and provide'¹²⁷ approach which relies on several factors including the trip generation trend across a much greater time period (i.e. trip rates reducing over time), national road traffic forecasts (i.e. reducing growth over time), and vision-based masterplanning (i.e. designing to embed sustainable and active modes), all of which point to reduced trip rates compared with those assumed in the Updated TA¹²⁸ and TRNs.

¹²⁴ Appraisal and Modelling Strategy: A route map for updating TAG during uncertain times, July 2020, DfT (CD13/P)

¹²⁵ Mobility Strategy for Milton Keynes 2018-2036 (LTP4), March 2018, MKC (CD12/C)

¹²⁶ TRICS (Trip Rate Information Computer System) is the UK's national system of trip generation analysis, containing over 7150 directional transport surveys at over 110 types of development

¹²⁷ Guidance Note on the Practical Implementation of the Decide & Provide Approach, February 2021, TRICS (CD13/T)

¹²⁸ Updated Transport Assessment, May 2020, WSP, Section 5 (CD10/H/A)



- 6.20 The approach taken, as agreed with MKC, BC and their respective consultants during scoping, therefore identifies the impacts at key junctions in TRN2 and TRN3 predicated on a robust worst case assessment to determine appropriate and proportionate mitigation.

MICROSIMULATION MODEL

- 6.21 A large scale microsimulation model would not be appropriate given the need to validate the model in accordance with the Transport Analysis Guidance (TAG) as explained earlier in this section of my evidence; a full explanation is set out in Appendix **MJP14**. Essentially, the size of the potential microsimulation model would mean that there would be a very complex calibration and validation process which would rely on having a robust set of data. The sheer size of the required dataset would mean that there was a greater risk of survey failure leading to unreliable data, particularly in regard to ANPR surveys.

MKC'S CURRENT POSITION

- 6.22 Since submission of the Updated TA, and notwithstanding the previous agreement as to the adopted methodology included in the Updated TA, MKC have sought to criticise the agreed methodology and to assert that the agreed methodology is not in fact suitable for assessing the impact of the Proposed Development or the Appeal Development given the lack of consideration of redistribution across the local highway network. MKC have not provided any explanation or justification for that fundamental change in their position.
- 6.23 Furthermore, MKC have failed to consider the strategic modelling that was previously completed to support Plan:MK which includes the Proposed Development within the 2031 Reference Case. MKC have therefore failed to acknowledge that an assessment of the wider highway network has already been completed, by Aecom on behalf of the Council, which takes account of the redistribution effect and shows that the majority of the network to the west of Central Milton Keynes would operate within capacity, with the exception of Bleak Hall Roundabout and Elfield Park Roundabout that are operating near to or over capacity in the 2016 base scenario.
- 6.24 As such, it is unreasonable of MKC to now suggest that a further assessment should be completed of a wider study area, following the completion of the surveys and junction modelling assessments that were discussed at length and agreed during scoping (**MJP4**). MKC's criticism of the agreed methodology is therefore considered to be unjustified.

CONCLUDING COMMENTS

- 6.25 Overall, I consider that a 'worst-case' manual spreadsheet-based approach as agreed at the scoping stage with MKC and BC and as adopted within the Updated TA and TRNs, would show



greater impacts at the junctions assessed within the study area than would be expected from a strategic transport model. As such, in my opinion, the results in TRN2 and TRN3 present a robust assessment of the impacts on the local highway network.

7 ASSESSMENT METHODOLOGY

TRIP GENERATION

- 7.1 The approach taken to derive the trip generation has been discussed and agreed during the scoping process with BC, MKC and their respective consultants and included within the TASN¹²⁹ to identify person trip rates for each land use and apply appropriate mode shares and internalisation discount factors. For the residential land use, journey purpose has also been applied to disaggregate the trips and apply assumptions about internalisation. The methodology for the trip generation split by land use is summarised below and is addressed in detail in the Updated TA,¹³⁰ TRN1,¹³¹ TRN2¹³² and TRN3¹³³. The trip generation used within the TRNs includes a higher trip generation for the employment use on the Site and has been adopted at the request of BC, however the methodology for the trip generation is unchanged from that agreed at the scoping stage (**MJP4**).
- 7.2 The Proposed Development total trip generation is a combination of all the proposed land uses which include external residential, employment and secondary education trips.
- 7.3 At the request of MKC's consultant SMT,¹³⁴ rail based trips have been removed from the trip generation and applied across the potential modes that would be used to access rail based public transport. As such, the rail trips have been re-assigned to bus, car driver, car passenger and cycle. The total trip generation for the Do Something (DS) 1 scenario split into the various modes of travel is shown below in **Table 7.1**.

¹²⁹ Transport Assessment Scoping Note, January 2020, WSP (MJP4)

¹³⁰ Updated Transport Assessment, May 2020, WSP, Section 5 (CD10/H/A)

¹³¹ Transport Response Note 1, September 2020, WSP, Section 5 (CD16/A)

¹³² Transport Response Note 2, December 2020, WSP, Section 3 (CD16/B)

¹³³ Transport Response Note 3, January 2021, WSP, Section 3 (CD16/C)

¹³⁴ Email from SMT to WSP, 13th March 2020 (MJP4)



Table 7.1 - Total Development Trip Generation (Excluding Travel Planning – DS1) – Rail Reassigned

Mode	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Rail	0	0	0	0	0	0
Bus	161	53	215	66	41	106
Taxi	6	9	15	10	8	18
Motorcycle	6	9	15	10	8	18
Car Driver reduced to account for servicing trips	530	729	1257	806	576	1382
Car Passenger	134	63	198	77	55	132
Cycle	19	18	37	22	16	38
Pedestrian	135	45	180	53	47	100
Servicing	19	15	34	9	9	18
Total – Person Trips	1010	940	1950	1053	759	1812
Vehicular Total – (sum of Taxi, Motorcycle and Car Driver and servicing)	563	763	1325	838	602	1440

7.4 The trip generation has been developed using person trip rates. This process has been adopted to enable a separate assessment of travel planning in a separate scenario (Do Something 2). To account for implementing travel planning measures, a 12% point reduction¹³⁵ in car driver trips is applied to the residential and employment land uses; the total development trip generation taking account of the travel planning measures is shown below in **Table 7.2**.

¹³⁵ Transport Assessment Scoping Note, January 2020, WSP (MJP4)



Table 7.2 - Total Development Trip Generation (Including Travel Planning – DS2) – Rail Reassigned

Mode	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Rail	0	0	0	0	0	0
Bus	197	108	306	133	87	220
Taxi	6	9	15	10	8	18
Motorcycle	6	9	15	10	8	18
Car Driver reduced to account for servicing trips	458	620	1077	673	484	1157
Car Passenger	134	63	198	77	55	132
Cycle	37	45	82	56	39	95
Pedestrian	153	71	224	84	70	154
Servicing	19	15	34	9	9	18
Total – Person Trips	1010	940	1950	1053	759	1812
Vehicular Total – (sum of Taxi, Motorcycle and Car Driver and servicing)	491	655	1144	705	510	1215

7.5 **Table 7.3** below shows the vehicular trip generation that has been applied in the highway network assessments contained within TRN2¹³⁶ and TRN3,¹³⁷ and is agreed with BC and MKC as set out in the respective Statements of Common Ground (SoCG).^{138,139}

¹³⁶ Transport Response Note 2, December 2020, WSP, Sections 4 and 5 (CD16/B)

¹³⁷ Transport Response Note 3, January 2021, WSP, Sections 4 and 5 (CD16/C)

¹³⁸ Draft Statement of Common Ground (Transport & Highways) between the Appellant and BC, April 2021, Paragraph 19

¹³⁹ Draft Statement of Common Ground (Transport & Highways) between the Appellant and MKC, April 2021, Paragraph 20

Table 7.3 - Vehicular Trip Generation

Vehicular Trip Generation	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Excluding Travel Planning	563	763	1325	838	602	1440
Including Travel Planning	491	655	1144	705	510	1215

TRIP DISTRIBUTION & ASSIGNMENT

7.6 The trip generation used in TRN2 and TRN3, as explained earlier in my evidence, has been produced for each of the land uses on the Site, namely:

- Residential;
- Employment; and
- Secondary school.

7.7 With the exception of servicing movements, the neighbourhood centre and primary school are considered integral elements to support the needs of the Proposed Development and therefore would not generate any external trips. To distribute and assign the vehicular trips on the highway network two distributions were derived:

- residential trip distribution; and
- employment trip distribution.

7.8 The residential trip generation (for all journey purposes) was distributed using the residential trip distribution and all other land uses, including servicing trips were distributed using the employment trip distribution. The methodology for deriving the trip distribution was agreed with BC and MKC through scoping discussions and was updated in TRN1 to account for comments made by BC.

7.9 The study area for the assessment of the impacts of the Proposed Development was agreed with BC and MKC during scoping discussions.¹⁴⁰ It is not unusual for a network assessment to identify where trips may have a destination beyond the boundary of study area (i.e. that leave the assessment network). In this regard, I do not consider that the quantum of trips that leave the study area is of concern as the wider impact has already been considered within evidence base that

¹⁴⁰ Transport Assessment Scoping Note, January 2020, WSP, (MJP4)



supports Plan:MK, which includes the Proposed Development, as set out earlier in Section 6 of my evidence.

COMMITTED DEVELOPMENT

- 7.10 I agreed with BCC and MKC that the only committed developments requiring consideration within the core scenarios of the Updated TA are Tattenhoe Park and Kingsmead South. These developments are both currently under construction and there is a reasonable degree of certainty that they would be completed and occupied.
- 7.11 In regard to the allocation of Shenley Park within the Draft VALP, BCC requested that the development should not be included within the Updated TA as a committed development but should instead be assessed separately as a sensitivity test.¹⁴¹

BACKGROUND TRAFFIC GROWTH

- 7.12 In addition to committed development, and as agreed with BCC and MKC, the traffic models developed to test the Proposed Development also include a TEMPro growth factor. TEMPro is an industry standard tool used to estimate traffic growth based on economic forecasts that precede the outbreak of the COVID-19 pandemic. Any smaller developments not explicitly included as committed developments within the highway network assessment are accounted for with the use of a growth factor as explained in the Updated TA.¹⁴²
- 7.13 The TEMPRO growth factor was adjusted using the alternative assumptions tool based on the MKC housing trajectory¹⁴³ to determine the number of dwellings still to be completed at Tattenhoe Park and Kingsmead South that needed to be accounted for. This is a robust method of determining the partial completion of a development site for inclusion in a committed development scenario.

Implications of COVID-19

- 7.14 The COVID-19 pandemic has changed how and why people travel and will have implications for traffic growth in the future. Behavioural change is expected to be long lasting, with research emerging regarding the way people will travel in the future, as documented in the recent paper '*At a crossroads – Travel adaptations during COVID-19 restrictions and where next?*'¹⁴⁴ by CREDS and DecarboN8 of March 2021.

¹⁴¹ Transport Assessment Scoping Note, January 2020, WSP, Page 10 (MJP4)

¹⁴² Updated Transport Assessment, May 2020, WSP, Section 6.7 (CD10/H/A)

¹⁴³ Updated Transport Assessment, May 2020, WSP, Appendix U (CD10/H/A)

¹⁴⁴ At a Crossroads – Travel adaptations during COVID-19 restrictions and where next?, March 2021, CREDS/DecarboN8, page 28 (CD13/R)



- 7.15 In regard to this recent research, it is evident that in my opinion the return to pre-pandemic levels of car use is extremely unlikely. The shift to active travel modes and the flexibility created through digital communication via platforms such as 'Teams', 'Zoom' and Google, has revolutionised the way people work and accelerated the opportunity to achieve a sustainable behavioural change that will result in significant economic and environmental benefits.
- 7.16 It is clearly unrealistic to assume that the growth levels assumed pre COVID-19 pandemic would be achieved in 2033 as predicted by Government (TEMPro). The shift in working patterns and demand for greater flexibility in the way that people live their lives is now critical to achieve a sustainable work/life balance.
- 7.17 The COVID-19 pandemic has forced people to work from home instead of having to complete long and unnecessary commutes. The impact of sustaining this working culture is already being seen with major multi-national companies such as BP, JP Morgan and Nestle¹⁴⁵ having already indicated to their employees the need for greater flexibility. In many cases, this also presents an opportunity for employers to reduce floorspace to accommodate a lower employee density which also has the added benefit of reducing overhead costs and increasing productivity.
- 7.18 The research report notes that there could be 14% fewer trips if people worked at home for two days per week. In this regard, a 14%¹⁴⁶ reduction in morning and evening peak hour car trips is broadly comparable to a school half-term week¹⁴⁷ and would represent a reduction of c.350-450 trips along the corridor of A421 in 2033. This would have the added effect of reducing trips across the wider grid road network and limiting the risk of future congestion.
- 7.19 Public transport use has reduced significantly during the COVID-19 pandemic and I consider that patronage levels will take a while to recover. Notwithstanding, the introduction of new bus technology and the use of cleaner, less polluting fuels and Government subsidies, will over time, see a further transition back to public transport. Greater investment by Government in key infrastructure to promote active travel is also key to creating a sustained shift away from the use of the private car particularly for short trips.

¹⁴⁵ At a Crossroads – Travel adaptations during COVID-19 restrictions and where next?, March 2021, CREDS/DecarboN8, page 28 (CD13/R)

At a Crossroads – Travel adaptations during COVID-19 restrictions and where next?, March 2021, CREDS/DecarboN8, page 29 (CD13/R)

¹⁴⁶ At a Crossroads – Travel adaptations during COVID-19 restrictions and where next?, March 2021, CREDS/DecarboN8, page 7 (CD13/R)

¹⁴⁷



- 7.20 It is evident from this research that the current TEMPro traffic forecasts for growth are extremely unlikely to be realised given the impact of the COVID-19 pandemic on future travel behaviour. Therefore, I am firmly of the opinion that my own assumptions for traffic growth based on TEMPro forecasts are robust and present a worst case.

DfT Route Map

- 7.21 The DfT have provided a route map¹⁴⁸ for incorporating the revised forecasts for economic growth as a result of the COVID-19 pandemic into the next formal release of TAG. The Office of Budgetary Responsibility's (OBR) March 2020 population and economic projections show a reduction in growth of GDP per capita of 23.7% between 2019 and 2069 and a reduction in population growth of 8.4% over the same time period, relative to previous estimates. These projected growth reductions are likely to have a significant impact on travel demands and the appraisal of future transport schemes.
- 7.22 The next TAG release is expected to also include updates to TAG Unit M4, advocating the use of scenario testing to consider the impacts of coronavirus and other uncertainties on travel demands. The DfT require that all new transport schemes undergo sensitivity testing to assess the impacts that the changes to the OBR forecasts would have on scheme benefits and viability.
- 7.23 Using the methodology for calculating low growth sensitivities as set out in TAG Unit M4¹⁴⁹, a growth rate of 6% would be applicable from 2020 to 2033, compared to circa 15% during the peak hours adopted within the Updated TA and TRNs. This represents a reduction of 7.8% of base demand and indicates that the assumptions that my team and I have made for traffic growth across the MKC and BC highway network are extremely robust (**MJP15**).

SCENARIO TESTING

- 7.24 For the purposes of the Updated TA and TRNs, various scenarios have been reviewed and assessed. At the request of BC, the effects of the Updated FTP have not been considered within the main assessment scenario. Instead, the effect of achieving the targets established in the Updated FTP is established through a separate sensitivity test.

¹⁴⁸ Appraisal and Modelling Strategy: A route map for updating TAG during uncertain times, July 2020, DfT (CD13/P)

¹⁴⁹ TAG Unit M4 Forecasting and Uncertainty, May 2019, DfT



7.25 The scenarios presented within the Updated TA¹⁵⁰ and TRNs and as agreed with BC and MKC are split between ‘Do Nothing’ and ‘Do Something’:

- Do Nothing - base traffic with committed developments but without the Proposed Development; and
- Do Something – base traffic with committed developments with the Proposed Development.

7.26 The scenarios considered within the Updated TA¹⁵¹ and TRNs are as follows:

- 2020 Base Year;
- 2033 Do Nothing;
- 2033 Do Something 1 (Base 2033 + Proposed Development);
- 2033 Do Something 2 (Do Something 1 + reduction to account for travel planning at the Proposed Development); and
- 2033 Do Something 3 (Do Something 1 + Shenley Park draft allocation).

7.27 Traffic flow diagrams representing all these agreed scenarios are included in Appendix B of both TRN2 and TRN3. The exclusion of travel planning measures in the Do Something 1 scenario results in a robust worst case scenario given that any planning permission for the Proposed Development will require the implementation of the Updated FTP and subsequent detailed Travel Plans that would be secured by way of either an appropriate planning condition or an obligation. Nonetheless, this scenario has been assessed in this manner to satisfy the requirements of MKC and BC.

JUNCTION MODELS

7.28 The input geometry for the junction models was measured from Ordnance Survey (OS) 1:1250 mapping verified through a site visit and the use of aerial photographs. On-site measurements were not taken at the junctions along A421 as it is part of the high speed network, with speed limits of 60mph and 70mph and no footways, making it unsafe to be in the carriageway with measuring equipment. The use of OS mapping to measure geometries for junction models is an acceptable method and was agreed with BC and MKC. For consistency, OS mapping was used for all junctions with the exception of Junction 3, where BC requested the use of measurements that had been taken by them on site previously. All geometries used within the junction models were reviewed by BC in detail prior to being included within TRN2 and TRN3.

¹⁵⁰ Updated Transport Assessment, May 2020, WSP, Section 6.4 (CD10/H/A)

¹⁵¹ Updated Transport Assessment, May 2020, WSP, Section 6.4 (CD10/H/A)



- 7.29 Calibration of the junction models was completed using observed queue lengths and traffic flows, using a methodology discussed and agreed with BC as set out within TRN2. 'Google Traffic' was not used to calibrate any models; however, video survey data have been used to verify queue lengths provided in the survey data and to observe the operation of the junctions to ensure the models were broadly reflecting the observed situation.
- 7.30 The assessments within TRN3 used video surveys to calibrate the junction models following the guidance set out by TRL¹⁵² where possible, however, it is not possible to use this method at every junction as the video survey data do not always meet the criteria required; therefore, an alternative method was used where necessary. The alternative method, as explained above, was discussed and agreed with BC as appropriate to ensure that the models represented the observed situation as accurately as possible.

CONCLUDING COMMENTS

- 7.31 Trip generation has been assessed by land use type. The methodology to distribute and assign trips on the local road network was agreed at the scoping stage,¹⁵³ in that the assessment of impacts would employ a 'static' spreadsheet-based transport model as previously explained. The alternative approach, to use one of the strategic transport models for the area, was not considered appropriate because neither the MKMMM model nor the BC County model would provide sufficient coverage of the entire TA study area, as agreed with MKC and BC.
- 7.32 A manual spreadsheet-based approach as agreed with both MKC and BC and adopted within the Updated TA and TRNs, would yield greater impacts at key junctions on the highway network in the absence of using a strategic transport model. As such, the results in TRN2 and TRN3 should be considered as a robust assessment in that the magnitude of the impacts identified at those junctions is unlikely to occur to the extent that is predicted.
- 7.33 The assessment of highway impacts includes provision for committed development at Tattenhoe Park and Kingsmead South with smaller committed developments included within the TEMPro derived growth factors. Separate sensitivity tests were undertaken to consider the impact of the draft allocation for the Shenley Park development in combination with the Proposed Development and to assess the effects of the Updated FTP.
- 7.34 It is clearly evident from recent research that the current TEMPro traffic forecasts for growth are unlikely to be realised given the impact of the COVID-19 pandemic on future travel behaviour.

¹⁵² Junctions9 User Guide, TRL, 2018, Appendix D (CD13/l)

¹⁵³ Transport Assessment Scoping Note, January 2020, WSP (MJP4)



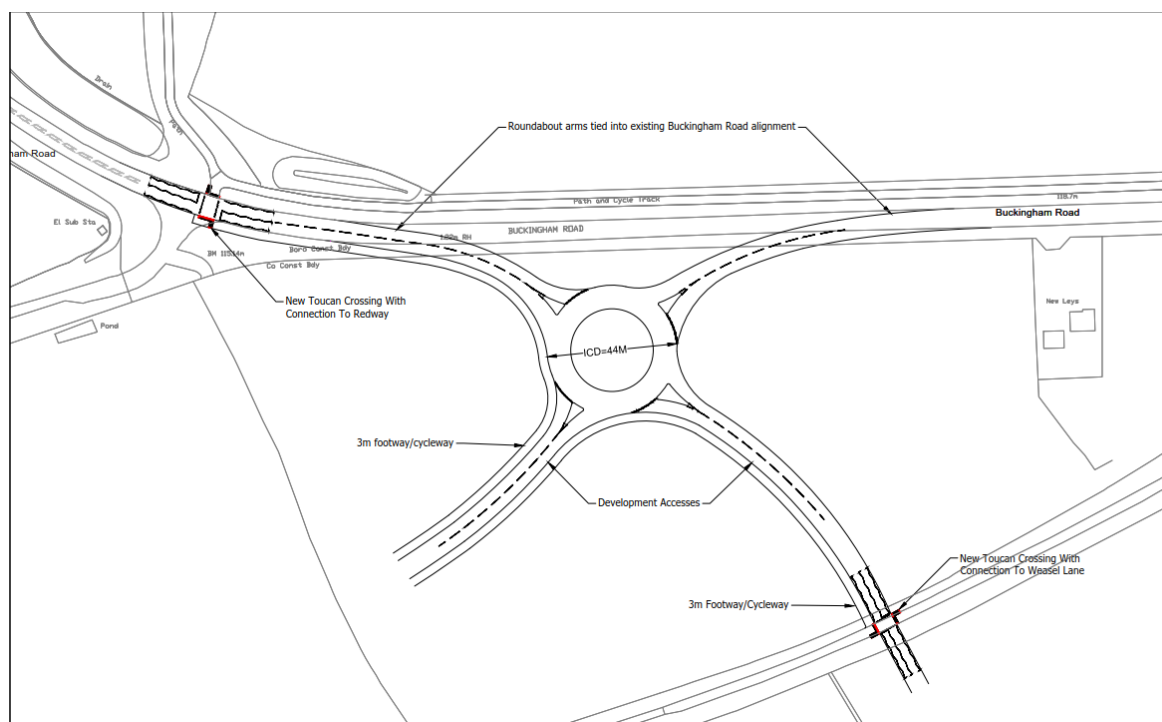
Hence, the assumptions for traffic growth based on TEMPro forecasts are optimistic, robust and present a worst case.

8 ACCESS JUNCTIONS

BUCKINGHAM ROAD ACCESS

- 8.1 The proposed access onto Buckingham Road (i.e. part of the Appeal Development), will be via a new four arm roundabout, as shown on the agreed Drawing D017C¹⁵⁴ and in **Figure 8.1** below.

Figure 8.1 - Buckingham Road Access



- 8.2 The proposed access junction was modelled using Junctions 9 (ARCADY) to ensure the capacity of the access point would be suitable to meet the needs of the Proposed Development without causing undue delay to traffic on Buckingham Road. Lane simulation mode was not used at this junction as all entry arms consist of a single lane approach in the approved scheme design. Within the Updated TA Appendix P, an additional lane marking is included on the Buckingham Road (east) arm in Drawing D017D to show a short flare and two lane entry; however, the inclusion of the lane marking would be

¹⁵⁴ Updated Transport Assessment, May 2020, WSP, Appendix P (CD10/H/A) (MJP5)



subject to detailed design. The use of lane simulation mode to model the short flare would not be appropriate in the circumstances¹⁵⁵ and BC has not requested that lane simulation mode is used.

8.3 The results of the analysis are presented in **Table 8.1**, with full model output contained in Appendix I of TRN1.

Table 8.1 - Buckingham Road Access¹⁵⁶

Arm Description	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2033 Do Something 1						
Buckingham Road S	0.5	3.73	0.34	1.7	7.12	0.63
Access SW	0.2	4.11	0.13	0.2	5.90	0.15
Access NW	0.8	6.51	0.46	0.8	7.34	0.44
Buckingham Road N	1.3	6.51	0.56	2.5	10.07	0.72
2033 Do Something 2						
Buckingham Road S	0.5	3.63	0.32	1.4	6.39	0.59
Access SW	0.1	4.02	0.13	0.2	5.49	0.14
Access NW	0.6	5.59	0.37	0.5	6.27	0.34
Buckingham Road N	1.2	6.16	0.54	2.0	8.54	0.67
2033 Do Something 3						
Buckingham Road S	0.5	3.79	0.35	2.0	7.95	0.67
Access SW	0.2	4.18	0.13	0.2	6.21	0.16
Access NW	0.9	6.69	0.47	0.8	7.82	0.45
Buckingham Road N	1.5	7.31	0.61	2.8	10.87	0.74

8.4 The results of the assessment at the Buckingham Road access roundabout shown in **Table 8.1**, show that the junction is anticipated to operate with satisfactory performance (i.e. with an RFC below 0.85) in both the AM and PM peaks in the 2033 scenarios.

A421 LEFT IN ACCESS

8.5 The access into the Proposed Development from A421 Standing Way (i.e. a part of the Appeal Development) does not require capacity assessment as it comprises an 'access only' with a

¹⁵⁵ Junctions9 User Guide, TRL, 2018, Section 14.1.2 (CD13/I)

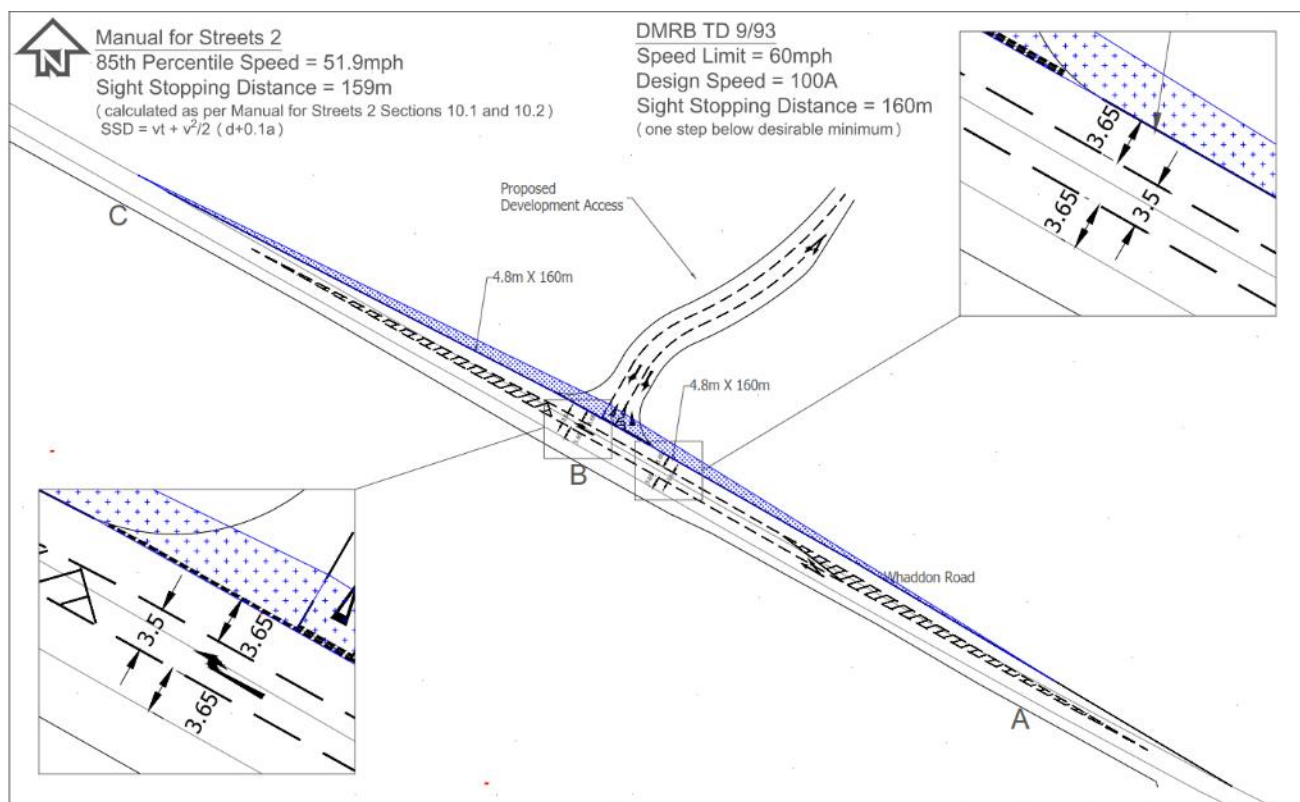
¹⁵⁶ Transport Response Note 1, September 2020, WSP, Table 7.1 (CD16/A)

satisfactory deceleration lane as an exit point from the existing local highway network. With a low hourly flow and priority within the Proposed Development over side roads, there would not be a constraint imposed on A421 Standing Way as a result of this proposed access, and traffic would not 'block back' onto A421.

WHADDON ROAD ACCESS

- 8.6 The proposed access onto Whaddon Road will be via a new 'ghosted right turn' priority junction, as shown Drawing D014D¹⁵⁷ and in **Figure 8.2** below. It is part of the Proposed Development but does not form a part of the Appeal Development given that it falls within the jurisdiction of BC.

Figure 8.2 - Whaddon Road Access



- 8.7 The proposed access junction was modelled using Junctions 9 (PICADY) to ensure the capacity of the access point would be suitable to meet the needs of the Proposed Development without causing undue delay to traffic using Whaddon Road. The results of the analysis are presented in **Table 8.2**, with full model output contained in Appendix I of TRN1.

¹⁵⁷ Updated Transport Assessment, May 2020, WSP, Appendix M (CD10/H/A) (MJP5)


Table 8.2 - Whaddon Road Access¹⁵⁸

Arm Description	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2033 Do Something 1						
Site Access to Whaddon Road (S)	0.1	5.93	0.10	0.1	5.89	0.08
Site Access to Whaddon Road (N)	0.5	10.70	0.32	0.3	9.57	0.23
Whaddon Road (S) to Site Access	0.1	6.49	0.09	0.1	6.94	0.12
2033 Do Something 2						
Site Access to Whaddon Road (S)	0.1	5.74	0.08	0.1	5.65	0.07
Site Access to Whaddon Road (N)	0.4	9.83	0.27	0.2	8.73	0.19
Whaddon Road (S) to Site Access	0.1	6.39	0.08	0.1	6.45	0.09
2033 Do Something 3						
Site Access to Whaddon Road (S)	0.1	6.01	0.10	0.1	5.83	0.08
Site Access to Whaddon Road (N)	0.5	11.03	0.33	0.3	9.48	0.23
Whaddon Road (S) to Site Access	0.1	6.56	0.09	0.1	6.63	0.11

8.8 The results of the assessment at the Whaddon Road access in **Table 8.2** show that the junction would operate with satisfactory performance (i.e. RFC below 0.75¹⁵⁹) in both the AM and PM peaks in 2033.

¹⁵⁸ Transport Response Note 2, December 2020, WSP, Table 7.2 (CD16/B)

¹⁵⁹ Appropriate RFC = 0.75 as this is priority junction on a high-speed road (50mph+) in accordance with the Junctions9 User Guide, TRL, 2018, Paragraph 3.9.2 (CD13/l)

9 IMPACT OFF-SITE PRIOR TO MITIGATION

INTRODUCTION

- 9.1 TRN2¹⁶⁰ and TRN3¹⁶¹ outline the results of the assessments of the impact of the Proposed Development on the transport network prior to mitigation. Details of the industry standard software, the scenarios assessed in the future year 2033, and the criteria for the interpretation of results are contained in Section 6 of the Updated TA.

OFF-SITE JUNCTION CAPACITY ASSESSMENTS

- 9.2 Junction capacity assessments have been completed for 18 junctions across the study area as agreed with BCC and MKC during scoping and completed using industry standard computer programs: i) Junctions 9 (ARCADY for roundabouts); and ii) Junctions 9 (PICADY for priority junctions). Junction geometries and the full pre-mitigation results with full modelling outputs are provided in TRN2¹⁶² and TRN3.¹⁶³ The results indicate that mitigation is required at a number of junctions, which are then considered further within TRN2¹⁶⁴ and TRN3.¹⁶⁵
- 9.3 I consider below the operational characteristics of the two existing junctions as part of the Appeal Development that are in close proximity to the Proposed Development (within MKC) and are contained within the red line application boundary: i) Tattenhoe Roundabout, which forms the intersection between A421 Standing Way, V1 Snelshall Street and B4034 Buckingham Road; and ii) Bottledump Roundabout, at the junction of A421 Standing Way and Whaddon Road.

Junction 5: Tattenhoe Roundabout

- 9.4 The Tattenhoe Roundabout junction has been assessed using Junctions 9 (ARCADY). The capacity assessment results for the AM and PM peaks are provided in **Table 9.1**.

¹⁶⁰ Transport Response Note 2, December 2020, WSP, Section 4 (CD16/B)

¹⁶¹ Transport Response Note 3, January 2021, WSP, Section 4 (CD16/C)

¹⁶² Transport Response Note 2, December 2020, WSP, Appendix C (CD16/B)

¹⁶³ Transport Response Note 3, January 2021, WSP, Appendix C (CD16/C)

¹⁶⁴ Transport Response Note 2, December 2020, WSP, Section 5 (CD16/B)

¹⁶⁵ Transport Response Note 3, January 2021, WSP, Section 5 (CD16/C)


Table 9.1 – Junction 5 - Tattenhoe Roundabout ¹⁶⁶

Arm Description	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2020 Base						
A – V1 Snelshall Street	24.2	115.62	1.03	18.5	97.05	1.00
B - A421 Standing Way (E)	6.2	23.59	0.87	9.8	34.71	0.93
C – B4034 Buckingham Rd	6.2	53.35	0.89	6.3	50.40	0.89
D - A421 Standing Way (W)	5.9	13.78	0.86	5.7	15.26	0.86
2033 Do Nothing						
A – V1 Snelshall Street	186.9	843.60	1.52	120.1	611.91	1.35
B - A421 Standing Way (E)	20.7	66.81	0.99	47.2	127.20	1.06
C – B4034 Buckingham Rd	48.6	311.65	1.20	59.0	405.99	1.22
D - A421 Standing Way (W)	31.5	60.90	1.00	43.9	89.29	1.03
2033 Do Something 1 (pre-mitigation)						
A – V1 Snelshall Street	424.6	2352.72	1.92	325.2	1879.59	1.73
B - A421 Standing Way (E)	162.0	506.20	1.23	398.0	1216.96	1.44
C – B4034 Buckingham Rd	559.1	4200.35	2.23	450.6	2828.96	1.86
D - A421 Standing Way (W)	110.0	181.68	1.11	99.5	193.47	1.11
2033 Do Something 2 (pre-mitigation)						
A – V1 Snelshall Street	389.6	2054.65	1.87	293.6	1710.20	1.67
B - A421 Standing Way (E)	136.4	423.67	1.20	323.1	969.81	1.38
C – B4034 Buckingham Rd	477.2	3609.37	2.10	318.5	1953.72	1.65
D - A421 Standing Way (W)	97.5	157.19	1.09	101.5	201.82	1.11
2033 Do Something 3 (pre-mitigation)						
A – V1 Snelshall Street	348.7	2114.49	1.86	228.4	1309.65	1.65
B - A421 Standing Way (E)	177.7	551.58	1.25	409.7	1278.84	1.44
C – B4034 Buckingham Rd	540.7	3745.24	2.11	468.7	2773.23	1.85
D - A421 Standing Way (W)	111.4	186.84	1.11	52.7	106.34	1.05

¹⁶⁶ Transport Response Note 3, January 2021, WSP, Table 4-3 (CD16/C)



- 9.5 The results show that in the 2020 Base scenario, the junction operates at/above capacity (i.e. RFC of 1) in both peak hours. In the future year 2033 (Do Nothing), the performance of the junction reduces with all arms except A421 Standing Way (East) operating at/above capacity (i.e. RFC of 1) in the AM peak.
- 9.6 With the addition of the Proposed Development, the performance of the junction reduces further, with congestion most evident on V1 Snelshall Street and B4034 Buckingham Road. As such, the junction is more sensitive to queueing and delay increases as the junction is operating with an RFC over 1.
- 9.7 Maximum RFC's are reduced in the Do Something 2 (i.e. with travel planning) scenario but indicate similar results to that of Do Something 1. In the sensitivity test including Shenley Park (Do Something 3), some relief is provided to V1 Snelshall Street as a result of traffic redistributing to the new V0 grid road, however the junction remains operating at/over capacity with an RFC over 1 similar to the Do Something 1 scenario.
- 9.8 The impact of the Proposed Development at this junction increases the RFC, queueing and delay to a degree that requires mitigation. Mitigation is therefore proposed for this junction and is considered in Section 10 of my evidence.

Junction 6: Bottledump Roundabout

- 9.9 The Bottledump Roundabout junction has been assessed using Junctions 9 (ARCADY) in 'lane simulation' mode to accurately reflect the unequal usage of the lanes at this junction¹⁶⁷. The capacity assessment results for the AM and PM peaks are provided in **Table 9.2**.

¹⁶⁷ Unequal Lane Usage in ARCADY using Junctions 9 – DRAFT 23/08/18, Consultancy (CD13/L)


Table 9.2 – Junction 6 - Bottledump Roundabout¹⁶⁸

Arm Description	AM			PM		
	Queue (Veh)	Delay (s)	LOS	Queue (Veh)	Delay (s)	LOS
2020 Base						
A – A421 Standing Way	5.2	14.35	B	19.9	44.86	E
B - Whaddon Road	4.5	37.88	E	6.5	67.84	F
C – A421 Buckingham Road	4.6	10.21	B	2.9	7.73	A
2033 Do Nothing						
A – A421 Standing Way	31.5	67.74	F	97.8	218.82	F
B - Whaddon Road	47.8	350.59	F	19.4	190.36	F
C – A421 Buckingham Road	11.2	22.18	C	4.9	10.61	B
2033 Do Something 1 (pre-mitigation)						
A – A421 Standing Way	40.5	85.75	F	125.4	305.45	F
B - Whaddon Road	108.9	658.39	F	31.3	273.81	F
C – A421 Buckingham Road	18.6	34.97	D	6.9	14.99	B
2033 Do Something 2 (pre-mitigation)						
A – A421 Standing Way	35.7	75.98	F	117.8	279.15	F
B - Whaddon Road	97.3	624.43	F	40.0	345.76	F
C – A421 Buckingham Road	18.2	31.58	D	6.5	13.12	B
2033 Do Something 3 (pre-mitigation)						
A – A421 Standing Way	18.8	42.94	E	91.7	208.61	F
B - Whaddon Road	81.5	455.66	F	39.8	362.36	F
C – A421 Buckingham Road	23.1	40.60	E	4.8	11.32	B

9.10 The results presented in **Table 9.2** show that in the 2020 Base the junction operates at capacity (LoS¹⁶⁹ of E/F). In the future year of 2033 (Do Nothing), A421 Standing Way and Whaddon Road are operating at/above capacity in both the AM and PM peaks with a LoS of F and corresponding maximum queueing of 48 vehicles and 98 vehicles and a delay of 351 seconds and 219 seconds respectively.

¹⁶⁸ Transport Response Note 3, January 2021, WSP, Table 4-4 (CD16/C)

¹⁶⁹ Level of Service



- 9.11 With the addition of the Proposed Development (Do Something 1), performance of the junction reduces and with a maximum increase in queueing of 109 vehicles and a delay of 658 seconds on Whaddon Road in the AM peak.
- 9.12 Maximum queueing and delay are lower in the Do Something 2 (i.e. with travel planning) scenario than in Do Something 1. In the Do Something 3 (i.e. with Shenley Park) scenario, delay on A421 Standing Way reduces to a level below the Do Nothing scenario, as a result of the reduction in trips through the junction following the introduction of a new Grid Road (V0) that would connect A421 with Kingsmead and Oxley Park further north.
- 9.13 The junction operates at/above capacity (LoS of E/F) in the 2033 Do Nothing scenario in the PM peak, with an increase in queueing and delay as a result of the Proposed Development. The results of the junction capacity assessment indicate that mitigation would be appropriate and is therefore proposed and considered in Section 10 of my evidence.

IMPACT ON VILLAGES

- 9.14 The impact on the local villages that surround the Appeal Development and Proposed Developments is considered with reference to the 'Guidelines for the Environmental Assessment of Road Traffic' (GEART).¹⁷⁰ The GEART states that whilst traffic forecasting is not an exact science, a change in traffic flow of less than 10% creates no discernible environmental impact. As such two rules are presented within the GEART for screening whether a detailed assessment is required:¹⁷¹
- Rule 1 – include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%); and
 - Rule 2 – include any other specifically sensitive areas where traffic flows have increased by 10% or more.
- 9.15 Rule 1 and 2 have been used as an appropriate methodology to assess likely impacts through the villages.

Assessment

- 9.16 Traffic flows through the villages have been identified from the flow diagrams presented within the TRN2. The traffic flows for 2033 Do Nothing and the three Do Something scenarios have then been compared to identify the forecast percentage increase in traffic. The forecast traffic flows in 2033 Do

¹⁷⁰ Guidelines on the Environmental Assessment of Road Traffic, Institute of Environmental Assessment, 1993 (CD13/H)

¹⁷¹ Guidelines on the Environmental Assessment of Road Traffic, Institute of Environmental Assessment, 1993, Paragraph 3.15 (CD13/H)



Nothing are shown in **Table 9.3** below. For comparative purposes, forecast traffic flows are also shown for 2033 Do Nothing including the allocation at Shenley Park in **Table 9.4** below.

Table 9.3 – 2033 Do Nothing Traffic Flows

Location		AM Peak			PM Peak		
		N/b	S/b	Total	N/b	S/b	Total
1	Nash	135	104	240	82	110	192
2	Whaddon	154	220	374	138	120	258
3	Great Horwood	396	243	639	280	281	561
4	Little Horwood	103	76	179	30	103	133
5	Mursley	394	295	689	314	284	598
		E/b	W/b	Total	E/b	W/b	Total
6	Newton Longville	347	428	776	416	316	732

Table 9.4 – 2033 Do Nothing Traffic Flows Including Shenley Park Allocation

Location		AM Peak			PM Peak		
		N/b	S/b	Total	N/b	S/b	Total
1	Nash	135	104	240	82	110	192
2	Whaddon	154	220	374	138	120	258
3	Great Horwood	398	246	644	282	282	563
4	Little Horwood	103	76	179	30	103	133
5	Mursley	398	305	703	322	288	609
		E/b	W/b	Total	E/b	W/b	Total
6	Newton Longville	367	439	807	423	330	753

9.17 The increase in link flow through the villages as a result of the Proposed Development is shown in **Table 9.5** for Do Something 1, **Table 9.6** for Do Something 2 and **Table 9.7** for Do Something 3.


Table 9.5 – 2033 Do Something 1 Traffic Flows

Location		AM Peak			PM Peak		
		N/b	S/b	Total	N/b	S/b	Total
1	Nash	135	104	239	82	110	192
2	Whaddon	154	220	374	138	120	258
3	Great Horwood	404	250	654	287	288	575
4	Little Horwood	111	81	192	36	110	146
5	Mursley	404	314	718	340	296	636
		E/b	E/b	W/b	Total	E/b	W/b
6	Newton Longville	406	478	884	465	379	844

Table 9.6 – 2033 Do Something 2 Traffic Flows

Location		AM Peak			PM Peak		
		N/b	S/b	Total	N/b	S/b	Total
1	Nash	135	104	239	82	110	192
2	Whaddon	154	220	374	138	120	258
3	Great Horwood	403	249	652	286	287	573
4	Little Horwood	110	81	191	34	108	142
5	Mursley	401	311	712	339	294	633
		E/b	E/b	W/b	Total	E/b	W/b
6	Newton Longville	398	472	870	458	369	827

Table 9.7 – 2033 Do Something 3 Traffic Flows

Location		AM Peak			PM Peak		
		N/b	S/b	Total	N/b	S/b	Total
1	Nash	135	104	239	82	110	192
2	Whaddon	154	220	374	138	120	258
3	Great Horwood	407	253	660	289	288	577
4	Little Horwood	111	81	192	36	110	146
5	Mursley	406	323	729	347	299	646
		E/b	E/b	W/b	Total	E/b	W/b
6	Newton Longville	427	489	916	473	393	866



9.18 The percentage change in traffic flows compared with the 2033 Do Nothing is presented in **Table 9.8** for Do Something 1 and **Table 9.9** for Do Something 2. The percentage change in traffic flows in **Table 9.10** for Do Something 3 is compared with the 2033 Do Nothing including Shenley Park allocation.

Table 9.8 – 2033 Do Something 1 Percentage Impact

Location		AM Peak			PM Peak		
		N/b	S/b	Total	N/b	S/b	Total
1	Nash	0%	0%	0%	0%	0%	0%
2	Whaddon	0%	0%	0%	0%	0%	0%
3	Great Horwood	2%	3%	2%	3%	2%	2%
4	Little Horwood	8%	7%	7%	20%	7%	10%
5	Mursley	3%	6%	4%	8%	4%	6%
		E/b	E/b	W/b	Total	E/b	W/b
6	Newton Longville	17%	12%	14%	12%	20%	15%

Table 9.9 – 2033 Do Something 2 Percentage Impact

Location		AM Peak			PM Peak		
		N/b	S/b	Total	N/b	S/b	Total
1	Nash	0%	0%	0%	0%	0%	0%
2	Whaddon	0%	0%	0%	0%	0%	0%
3	Great Horwood	2%	2%	2%	2%	2%	2%
4	Little Horwood	7%	7%	7%	13%	5%	7%
5	Mursley	2%	5%	3%	8%	4%	6%
		E/b	E/b	W/b	Total	E/b	W/b
6	Newton Longville	15%	10%	12%	10%	17%	13%


Table 9.10 – 2033 Do Something 3 Percentage Impact

Location		AM Peak			PM Peak		
		N/b	S/b	Total	N/b	S/b	Total
1	Nash	0%	0%	0%	0%	0%	0%
2	Whaddon	0%	0%	0%	0%	0%	0%
3	Great Horwood	2%	3%	2%	2%	2%	2%
4	Little Horwood	8%	7%	7%	20%	7%	10%
5	Mursley	2%	6%	4%	8%	4%	6%
		E/b	E/b	W/b	Total	E/b	W/b
6	Newton Longville	16%	11%	14%	12%	19%	15%

- 9.19 The increase in traffic flow is shown in **Table 9.8** to be greatest in Do Something 1 through Little Horwood (Do Something 1), with a forecast increase of 20% northbound in the PM peak. Little Horwood does have a conservation area and should therefore be considered 'sensitive' in nature and against the lower GEART threshold for impact (i.e. a 10% or more change in traffic flow in a specifically sensitive area). However, the actual change in traffic flow in the PM peak is only six vehicles northbound and seven vehicles southbound; a total of 13 vehicles. This level of change would be imperceptible and is not considered significant.
- 9.20 The forecast increases in traffic in 2033 through Newton Longville are shown to be less than 20%. Newton Longville does have a conservation area and should therefore be considered 'sensitive' in nature and against the lower GEART threshold for impact (i.e. a 10% or more change in traffic flow in a specifically sensitive area).
- 9.21 A scheme to introduce traffic calming through Newton Longville was previously developed and included in the 2016 TA. The scheme was subsequently revised through discussions an agreement was reached with BCC in 2016 to introduce additional delay to vehicles, reduce the attractiveness of the route, and minimise 'through traffic' entering the village, with an indicative scheme agreed as included in the Updated TA.¹⁷² With the implementation of these measures, as described further in Section 10, the residual cumulative impact of the Proposed Development through Newton Longville would not be severe.
- 9.22 Changes in traffic flow through the other Villages are 10% or less, and no additional impacts have been identified that would require mitigation.

¹⁷² Updated Transport Assessment, May 2020, WSP, Appendix AA (CD10/H/A)

IMPACT ON HIGHWAY SAFETY

- 9.23 The computer programme COBALT¹⁷³ has been used to undertake analysis of the impact of the Proposed Development on highway safety. COBALT is a computer program developed to undertake the analysis of the impact of a transport scheme on collisions as part of the economic appraisal of road schemes. My assessment is based on a comparison of collisions by severity and associated costs across an identified network in 'Without Scheme/Development' and 'With Scheme/Development' forecasts, using details of link and junction characteristics, relevant collision rates and costs and forecast traffic volumes by link and junction.
- 9.24 COBALT analysis provides a summary of the likely impact on collisions across a defined study area. Each link has been coded by the degree to which the Proposed Development will provide benefits in terms of collisions. As the Proposed Development will result in an increase in traffic, the impact will always show negative values. However, the extent to which a negative value is derived will be dependent upon the volume of additional traffic that the Proposed Development would generate.
- 9.25 **Figure 9.1** shows that the majority of links across the study area will see very small changes in 'negative benefits' (i.e. as they are described in COBALT). The only links showing more than a very small change are B4034 Buckingham Road, A421 Standing Way to the east of Emerson Roundabout and to a lesser degree, A421 Standing Way east of Tattenhoe Roundabout and V1 Snelshall Street.

¹⁷³ COBALT - (Cost and Benefit to Accidents – Light Touch) developed by the Department of Transport (DfT)



Figure 9.1 - COBALT Benefits



9.26 The main findings from the COBALT analysis show an increase of 140 collisions with 202 casualties over the 60-year appraisal period as a result of the Proposed Development, meaning that on average, there would be an additional 2.4 collisions with 3.4 casualties per year.

9.27 The increase in collisions by severity is shown below in **Table 9.11**.

Table 9.11 - COBALT Collisions - Casualty Prediction Over 60 years

	Slight	Serious	Fatal	Total Casualties
Without Proposed Development	2,857	356	48	3,261
With Proposed Development	3,037	377	50	3,464
Difference (60 years)	+180	+21	+2	+203
Difference (average per year)	+3.0	+0.35	+0.033	+3.38

9.28 To place these findings into context, the number of collisions per year on the local highway network assessed in the 2033 Base scenario would be 37.4, increasing to 39.7 with the Proposed Development. The increase in collisions with fatal and/or serious casualties is predicted to increase



by 0.38 per year as a result of the Proposed Development and is not considered to represent an unacceptable impact on highway safety.

- 9.29 It should be noted that these negative impacts do not consider any appropriate mitigation which may be required to address the impact of the Proposed Development and any safety issues that may arise. Mitigation measures are considered in the Section 10 of my evidence.

IMPACT ON PUBLIC TRANSPORT

- 9.30 The Proposed Development is forecast to generate an additional 215 bus trips in the AM peak and 106 trips in the PM peak. The public transport strategy proposes a new high frequency service between the Proposed Development, CMK, the railway station and key social infrastructure. Ideally, the target would be to provide a journey time between the Proposed Development and Central Milton Keynes of circa 20 minutes, although this would be subject to further discussion and agreement with MKC, BC and the preferred operator.
- 9.31 The proposed bus service between the Proposed Development and CMK would commence no later than the occupation of the 100th dwelling as I explained earlier in my evidence, although the exact timing will be dependent upon the overall phased 'build out' period. As dwellings become occupied, the route into the development will be extended further and the service frequency increased as previously indicated.
- 9.32 This high frequency service will be able to accommodate the forecast trips produced by the Proposed Development along with providing spare capacity to benefit the wider community. As such, a positive impact on public transport is anticipated due to the wider benefit to the community through the provision of new/enhanced services in the context and objectives set by MKC in their Mobility Strategy 2018-36.¹⁷⁴

IMPACT ON WALKING AND CYCLING

- 9.33 The Proposed Development is anticipated to generate an additional 180 pedestrian movements in the AM peak and 100 in the PM peak. Similarly, an additional 37 cycling trips in the AM peak and 38 in the PM are anticipated to be generated by the Proposed Development. The Proposed Development is surrounded by high quality pedestrian and cycle infrastructure including the Redway network and National Cycle Routes. Controlled crossing points are proposed on both Whaddon Road and Buckingham Road with existing subways available under A421 Buckingham Road/Standing Way to connect the Proposed Development with the existing Redway network.

¹⁷⁴ Mobility Strategy for Milton Keynes 2018-2036 (LTP4), March 2018, MKC (CD12/C)



- 9.34 The Proposed Development would include a network of footways and cycleways to connect various land parcels and the existing external routes. The existing infrastructure, as identified earlier in my evidence, is of a good standard and new routes across the Proposed Development would provide a benefit to the wider community by enhancing public access to existing routes such as the National Cycle Route, PRow routes and the Milton Keynes Boundary Walk.
- 9.35 I therefore consider the impact on pedestrians and cyclists to be positive, with benefits for the health and 'well-being' of both new residents at the Proposed Development and the wider community.

IMPACT ON THE STRATEGIC HIGHWAY NETWORK

- 9.36 The impacts of the Proposed Development on the strategic highway network are assessed in the Updated TA. Highways England has reviewed the impacts and has concluded that it is not severe and as such, responded to MKC and BC in December 2020 with no objection to the revised application package or updated appeal documents (**MJP16**).
- 9.37 The amendments to the trip generation and distribution included within TRN1, TRN2 and TRN3 do not have a material impact on the trips joining the strategic highway network, therefore the conclusion reached by Highways England in December 2020 is not expected to change.

CONCLUDING COMMENTS

- 9.38 TRN2 and TRN3 outline the results of the assessments, determining the impact of the Proposed Development on the transport network prior to mitigation. Details of the industry standard software, the scenarios assessed in the future year 2033, and the criteria for the interpretation of results are also identified.¹⁷⁵ The access arrangements to serve the Proposed Development are fully assessed in TRN2 and TRN3 together with the 18 junctions 'off site' on the wider highway network as agreed with BCC and MKC. Those assessments have been completed using industry standard software Junctions9 (i.e. ARCADY for roundabouts and PICADY for priority junctions). The results are summarised in TRN2¹⁷⁶ and TRN3.¹⁷⁷

¹⁷⁵ Updated Transport Assessment, May 2020, WSP, Section 6 (CD10/H/A)

¹⁷⁶ Transport Response Note 2, December 2020, WSP, Section 4 (CD16/B)

¹⁷⁷ Transport Response Note 3, January 2021, WSP, Section 4 (CD16/C)

10 MITIGATION AND RESIDUAL IMPACT

POLICY CONTEXT

- 10.1 Paragraph 108(c) of the NPPF provides that any significant impacts in terms of capacity and congestion or highway safety should be cost effectively mitigated to an acceptable degree. This is reflected in local Policy CT2 of Plan:MK which states that development proposals will be permitted that:

'Integrate into our existing sustainable transport networks and do not have an inappropriate impact on the operation, safety or accessibility to the local or strategic highway networks.'

- 10.2 Paragraph 109 of the NPPF states that that development should only be prevented or refused on highway grounds if:

'there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

JUNCTION CAPACITY

Previously Agreed Mitigation Proposals

- 10.3 Prior to the AVDC's committee resolution in June 2017, I agreed with BCC that the s106 contributions towards junction improvements at junctions 8, 9 and 10 would be commuted to a wider corridor improvement along the corridor of A421 within Buckinghamshire. Similarly, I agreed with MKC that the s106 contributions towards improvements at junctions 15, 16 and 17 would also be commuted to a wider corridor improvement along A421 within Milton Keynes.
- 10.4 The transport mitigation package previously agreed with Officers at MKC, BCC and their respective consultants prior to determination of the planning application by AVDC is summarised below.¹⁷⁸
- A commuted financial contribution to cover the cost of wider improvements along the A421 corridor and elsewhere across the local MKC network; BC/MKC to use towards implementation of a more significant improvement;
 - Highway improvements (via s278) at key junctions, including new access points along A421 Standing Way, Whaddon Road and Buckingham Road; an improved junction at Bottledump

¹⁷⁸ Transport Assessment, August 2016, Mouchel, Appendix W (CD2/E)



Roundabout and at Whaddon Crossroads and controlled crossing of Whaddon Road for pedestrians, cyclists and equestrians;

- Contribution to enable BCC to implement either the agreed traffic calming scheme or a suitable alternative for roads leading into Newton Longville and Whaddon;
- Service level agreement for the provision of a new bus service to connect the proposed development with central Milton Keynes; the service would be entirely development funded;
- Provision for a New Grid Road Reserve within the Proposed Development to enable a future link to be implemented south of Bletchley;
- Enhancement of Public Rights of Way across and in the vicinity of the Proposed Development; and
- Implementation of a site wide FTP and detailed Plans for each proposed land use.

2020 Updated TA Proposals

- 10.5 The Updated TA¹⁷⁹ is based on robust assumptions for assessment agreed with both BC and MKC. It reviews the mitigation previously agreed by BC and MKC in June 2017¹⁸⁰ and considers how that mitigation may need to be either modified or enhanced to take account of MKC's planned growth and the allocations in the Draft VALP.
- 10.6 Within the Appeal Development, the Updated TA includes mitigation at Tattenhoe Roundabout comprising partial, part-time signals and retains the previously agreed mitigation at Bottledump Roundabout.

TRN2 and TRN3 Proposals

- 10.7 TRN2 and TRN3 provide a detailed analysis of the impacts and appropriate highway mitigation measures based on alternative robust assumptions for traffic distribution and assignment in the future year of 2033. The results of the junction modelling for the mitigation scenarios consider:
- 1) Whether mitigation is required in the context of the Do Something Scenario 1 (with the Proposed Development). This scenario was used to consider the potential impacts with and without mitigation, but excludes the benefits that would arise from the implementation of travel

¹⁷⁹ Transport Assessment, August 2016, Mouchel (CD2/E)

¹⁸⁰ Report to AVDC Planning Committee, June 2017 (CD11/A)

planning measures outlined in the separately prepared Updated FTP (i.e. as shown by the results for Do Something 2) and indicates an unrealistic position and approach to mitigation;

- 2) What specific, proportionate and cost effective measures and/or planning obligations would be appropriate to mitigate the impact of the Proposed Development to an acceptable degree, as required by paragraph 108(c) of the NPPF;
- 3) If mitigation is required, that planning obligations comply with the relevant tests the NPPF and the CIL Regulations; and
- 4) The proportionate nature of any mitigation and the form it could take, either as physical highway improvements secured under section 278 of the Highways Act 1980, or by way of an appropriate financial contribution towards a range of sustainable transport measures, aligned to delivering Local Plan policies and the LTP4 for both MKC and BC.

10.8 The level of future year impact in 2033 included within TRN2 and TRN3 considers a ‘worst case’ assessment as I explained earlier in my evidence in Section 6.

10.9 At Tattenhoe Roundabout, TRN3 proposes a revised traffic signal scheme. At Bottledump Roundabout additional kerb widening is proposed. Refined kerb amendments and carriageway widening to other off-Site junctions are detailed within TRN3.¹⁸¹ In addition, a ‘monitor and manage’ approach is proposed in considering the implementation of ‘part time’ traffic signals at junction 17 Emerson Roundabout as discussed with BC and as explained later in Section 11 of my evidence.

Mitigation Results

Junction 5 – Tattenhoe Roundabout

10.10 The results following mitigation at Junction 5 Tattenhoe Roundabout are shown in **Table 10.1**, with the full model output provided in TRN3 Appendix C.

¹⁸¹ Transport Response Note 3, January 2021, WSP, Section 5 (CD16/C)


Table 10.1 – Junction 5 Tattenhoe Roundabout Mitigation Results¹⁸²

Arm Description		AM			PM		
		Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2033 Do Nothing (Pre-Mitigation)							
A – V1 Snelshall Street		186.9	843.60	1.52	120.1	611.91	1.35
B - A421 Standing Way (E)		20.7	66.81	0.99	47.2	127.20	1.06
C – B4034 Buckingham Road		48.6	311.65	1.20	59.0	405.99	1.22
Arm Description		AM			PM		
		Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
D - A421 Standing Way (W)		31.5	60.90	1.00	43.9	89.29	1.03
2033 Do Something 1 (Pre-Mitigation)							
A – V1 Snelshall Street		424.6	2352.72	1.92	325.2	1879.59	1.73
B - A421 Standing Way (E)		162.0	506.20	1.23	398.0	1216.96	1.44
C – B4034 Buckingham Road		559.1	4200.35	2.23	450.6	2828.96	1.86
D - A421 Standing Way (W)		110.0	181.68	1.11	99.5	193.47	1.11
Arm & Lane Description		AM			PM		
		MMQ (PCU)	Delay (s/PCU)	Deg Sat (%)	MMQ (PCU)	Delay (s/PCU)	Deg Sat (%)
2033 Do Something 1 (Post-Mitigation)							
1	A421 Standing Way (W) Left Ahead	12.5	22.2	89.0%	8.6	16.7	75.8%
	A421 Standing Way (W) Ahead	12.5	24.6	87.1%	8.8	18.0	68.8%
2	V1 Snelshall Street Left Ahead	178.6	626.8	147.4%	108.8	423.7	125.9%
3	A421 Standing Way (E) Ahead Left	8.0	16.9	74.9%	9.2	16.6	76.5%
	A421 Standing Way (E) Ahead	7.5	17.7	70.7%	9.2	17.5	69.8%
4	B4034 Buckingham Road Ahead Left	8.3	23.5	83.6%	20.3	58.3	97.7%

¹⁸² Transport Response Note 3, January 2021, WSP, Table 5-4 (CD16/C)



Arm & Lane Description		AM			PM		
		MMQ (PCU)	Delay (s/PCU)	Deg Sat (%)	MMQ (PCU)	Delay (s/PCU)	Deg Sat (%)
2033 Do Something 2 (Post-Mitigation)							
1	A421 Standing Way (W) Left Ahead	10.2	15.6	81.0%	8.0	15.4	73.5%
	A421 Standing Way (W) Ahead	11.3	17.8	79.3%	8.2	16.4	65.3%
2	V1 Snelshall Street Left Ahead	174.8	623.1	145.9%	96.8	385.3	122.7%
3	A421 Standing Way (E) Ahead Left	7.3	13.8	66.8%	8.4	14.8	72.4%
	A421 Standing Way (E) Ahead	6.9	14.3	61.6%	8.1	15.4	64.1%
4	B4034 Buckingham Road Ahead Left	8.9	26.2	84.0%	12.7	36.0	91.2%
2033 Do Something 3 (Post-Mitigation)							
1	A421 Standing Way (W) Left Ahead	15.2	25.9	90.6%	8.9	17.1	74.8%
	A421 Standing Way (W) Ahead	15.2	28.5	89.9%	9.2	18.4	70.0%
2	V1 Snelshall Street Left Ahead	155.4	619.1	145.4%	20.0	73.8	98.7%
3	A421 Standing Way (E) Ahead Left	7.6	14.2	68.8%	35.6	14.6	92.5%
	A421 Standing Way (E) Ahead	7.3	14.8	63.8%	44.8	15.4	92.8%
4	B4034 Buckingham Road Ahead Left	9.5	24.6	85.0%	21.3	55.2	97.6%

- 10.11 The mitigation modelling for Junction 5 indicates that in the Do Something 1 scenario queuing and delay on Snelshall Street can be reduced to below the 2033 Do Nothing scenario with the introduction of traffic signals. Both queueing and delay are lower on all other arms when compared to the 2033 Do Nothing scenario. The mitigation proposed is therefore considered adequate to mitigate the impacts of the development.
- 10.12 Concern has been raised by BC and MKC regarding the level of queueing on the internal links of the junction and the available capacity for vehicles to queue without 'blocking back' (i.e. a queue that extends from one stop line to the preceding stop line). A review of the Linsig modelling identifies the queueing anticipated at the start of the 'green' time during a particular cycle in the signal staging. The level of queueing on the internal links at the start of the 'green' time for the three scenarios tested is shown in **Table 10.2**.


Table 10.2 – Junction 5 – Vehicle Queuing on Internal Links at Start of Green Time¹⁸³

Arm	Lane	2033 Do Something 1			
		AM Peak Hour		PM Peak Hour	
		Back of Uniform Queue (UQ) at start of Green Time	Mean Max Queue (MMQ) as shown in Linsig	Back of UQ at start of Green Time	Mean Max Queue (MMQ) as shown in Linsig
Arm 5 - Gyrotory W	Lane 1	3.13	6.3	1.65	2.5
	Lane 2	3.07	6.7	2.44	4.7
	Lane 3	0.45	0.5	0.01	0.1
Arm 8 - Gyrotory N	Lane 1	1.36	1.7	2.89	3.4
	Lane 2	0.23	1.0	2.6	2.02
Arm 9 - Gyrotory E	Lane 1	2.37	4.4	2.48	5.9
	Lane 2	2.52	4.5	2.15	5.8
Arm 6 - Gyrotory S	Lane 1	1.72	3.0	2.15	2.8
	Lane 2	0.09	1.0	0.09	0.5

- 10.13 **Table 10.2** shows that at the beginning of the ‘green time’ on all the internal links, the maximum queue would be 3.1 PCUs which occurs in lane one of the western internal link. Sufficient space within the layout exists to accommodate this level of queuing. Whilst the MMQ indicates that queues will get longer, by the end of the green time they will have dissipated during each cycle. To provide additional control, traffic management, ‘Keep Clear’ road markings have been added to the layout to ensure that ‘through’ traffic movements are not blocked by any queuing within the junction in 2033. The proposed layout (shown in Appendix E of TRN3) is therefore considered sufficient to accommodate the demand generated by the Proposed Development in 2033 and the residual cumulative impact would not be severe.
- 10.14 The MKMMM shows¹⁸⁴ that in the Reference Case the eastbound approach on A421 Standing Way to the Tattenhoe Roundabout junction would be over capacity in the AM peak and approaching capacity in the PM peak; however, the junction itself is forecast to be operating within capacity. The static modelling of Tattenhoe Junction that my team has completed, presents a worst case situation which can be mitigated through the introduction of ‘part time’ traffic signals for use during the peak periods. In light of my previous comments, the introduction of traffic signals may prove to be unnecessary should redistribution (i.e. re-routing, re-timing and re-modelling) occur, and/or should the

¹⁸³ Transport Response Note 3, January 2021, WSP, Table 5-5 (CD16/C)

¹⁸⁴ MKMMM Highway Model Traffic Forecasting Report, November 2017, MKC, Figures 29 and 31 (CD12/A)



optimistic level of pre COVID 19 growth not materialise to the high level assumed within the assessments, as I explained in Section 7 of my evidence.

Junction 6 – Bottledump Roundabout

10.15 The results following mitigation at Junction 6 Bottledump Roundabout are shown in **Table 10.3**, with the full model output provided in TRN3 Appendix C.

Table 10.3 – Junction 6 – Bottledump Roundabout Mitigation Capacity Assessment¹⁸⁵

Arm Description	AM			PM		
	Queue (Veh)	Delay (s)	LOS	Queue (Veh)	Delay (s)	LOS
2033 Nothing (Pre-Mitigation)						
A – A421 Standing Way	31.5	67.74	F	97.8	218.82	F
B - Whaddon Road	47.8	350.59	F	19.4	190.36	F
C – A421 Buckingham Road	11.2	22.18	C	4.9	10.61	B
2033 Do Something 1 (Pre-Mitigation)						
A – A421 Standing Way	40.5	85.75	F	125.4	305.45	F
B - Whaddon Road	108.9	658.39	F	31.3	273.81	F
C – A421 Buckingham Road	18.6	34.97	D	6.9	14.99	B
2033 Do Something 1 (Post-Mitigation)						
A – A421 Standing Way	2.9	6.67	A	4.5	8.63	A
B - Whaddon Road	1.3	7.35	A	1.0	6.77	A
C – A421 Buckingham Road	28.1	48.61	E	4.9	12.40	B
2033 Do Something 2 (Post-Mitigation)						
A – A421 Standing Way	3.0	6.57	A	4.2	8.41	A
B - Whaddon Road	1.3	7.29	A	0.9	6.56	A
C – A421 Buckingham Road	24.2	42.51	E	5.0	10.90	B
2033 Do Something 3 (Post-Mitigation)						
A – A421 Standing Way	2.6	6.36	A	3.5	8.06	A
B - Whaddon Road	1.2	7.17	A	1.1	5.56	A
C – A421 Buckingham Road	32.1	55.86	F	4.2	9.63	A

10.16 **Table 10.3** shows that with the mitigation measures in place significant improvements in queuing and delay are evident on the Whaddon Road and Standing Way arms of the junction with minor

¹⁸⁵ Transport Response Note 3, January 2021, WSP, Table 5-6 (CD16/C)



increase in queuing and delay on the Buckingham Road arm. Overall, across the junction queuing and delay decrease and therefore the proposals are considered appropriate to mitigate the impacts of the Proposed Development. The residual cumulative impact would not be severe.

- 10.17 The results at the other off-Site junctions in the mitigated 2033 Do Something 1, 2 (travel planning), and 3 (Shenley Park) scenarios present an overall improvement in queuing and delay compared with the unmitigated scenario, and do not present a severe residual cumulative impact when compared against the 2033 Do Nothing scenario.

Junction Mitigation Summary

- 10.18 **Table 10.4** below provides a summary of the proposed junction mitigation measures identified in TRN2¹⁸⁶ and TRN3,¹⁸⁷ based on robust assumptions for traffic distribution and consideration of the residual cumulative impact of the Proposed Development in 2033.

Table 10.4 – Modelling Results and Proposed Junction Mitigation Summary

Junction Number and Name (LHA)		Is Mitigation required to accommodate the residual cumulative impact of Proposed Development	Proposed Mitigation to comply with the NPPF, MKC's/BC's LTP4 and Local Plan policies
J1	B4034 Buckingham Road/Sherwood Drive/Water Eaton Road (MKC)	Yes. The modelling results show disproportionate effects when the RFC is greater than 1.0. The local plan evidence suggests some queuing during the peak AM period. There is no specific scheme being promoted by MKC to accommodate Plan:MK 2031. The development should not be required to address problems created by local plan growth.	Improvements to the geometry of the existing roundabout
J2	B4034 Buckingham Road/ Shenley Road/Newton Road (MKC)	Yes – mitigation is required.	Improvements to the geometry of the existing double-mini roundabout to provide two lanes through the junction on Buckingham Road.
J3	Bletchley Road/Stoke Road/ Drayton Road/ Whaddon Road (BC)	Yes - mitigation is required.	Traffic calming scheme to reduce attractiveness of route and to reduce vehicle speeds
J4	Whaddon Road/ Westbrook End (BC)	No mitigation required as the junction operates within capacity (RFC of 1).	

¹⁸⁶ Transport Response Note 2, December 2020, WSP, Section 5 (CD16/B)

¹⁸⁷ Transport Response Note 3, January 2021, WSP, Section 5 (CD16/C)



Junction Number and Name (LHA)		Is Mitigation required to accommodate the residual cumulative impact of Proposed Development	Proposed Mitigation to comply with the NPPF, MKC's/BC's LTP4 and Local Plan policies
J5	A421 Tattenhoe Roundabout (MKC)	Yes. The modelling results show disproportionate effects when the RFC is greater than 1.0, as in the base scenario 2033. The Local Plan evidence highlights the junction is approaching capacity with DoS southbound 91% AM, eastbound 86% AM and northbound >85% PM over capacity with Local Plan development. There is no specific mitigation scheme proposed by MKC to account for Plan:MK 2031. The development should not be addressing problems created by Local Plan growth.	Introduction of peak hour traffic signals
J6	A421 Bottledump Roundabout (MKC)	Yes - mitigation is required.	Improvements to the geometry of the roundabout and the exit arm of A421 Buckingham Road to reduce blocking back across the roundabout
J7	A421 Whaddon Crossroads (BC)	Yes - mitigation is required.	Improvements to the geometry of the roundabout commuted to a financial contribution towards a wider corridor improvement along A421
J8	A421 Buckingham Road/Warren Road (BC)	Yes - mitigation is required.	Conversion to traffic signals commuted to a financial contribution towards a wider corridor improvement along A421
J9	A421 Buckingham Road/ Shucklow Hill/Little Horwood Road (BC)	Yes - mitigation is required.	Conversion to traffic signals commuted to a financial contribution towards a wider corridor improvement along A421
J10	A421 Buckingham Road/ Nash Road/Winslow Road (BC)	Yes - mitigation is required.	Improvements to the geometry of the roundabout commuted to a financial contribution towards a wider corridor improvement along A421
J11	Coddimoor Lane/Shenley Road/Stock Lane (BC)	No mitigation required as the there is no impact of development	Mitigation is not required.
J12	Kingsmead Roundabout (MKC)	Yes - mitigation is required.	Lane width amendments
J13	Westcroft Roundabout (MKC)	No mitigation required as impact of the development is not material	Mitigation is not required
J14	Furzton Roundabout (MKC)	Yes - mitigation is required.	Lane width amendments

Junction Number and Name (LHA)		Is Mitigation required to accommodate the residual cumulative impact of Proposed Development	Proposed Mitigation to comply with the NPPF, MKC's/BC's LTP4 and Local Plan policies
J15	A421 Bleak Hall Roundabout (MKC)	Mitigation is required. The modelling results show disproportionate effects when the RFC is greater than 1.0. The Local Plan evidence highlights a problem at this junction with DoS on the approaches of northbound 104% AM, eastbound 104% AM, westbound 111% PM, and southbound 103% PM. The junction is over capacity in the base and with Local Plan development. No mitigation is proposed at the junction to account for Local Plan growth. The development should not be addressing problems created by Local Plan growth.	Lane width amendments
J16	A421 Elfield Park Roundabout (MKC)	Yes - Mitigation is required. The modelling results show disproportionate effects when the RFC is greater than 1.0. The Local Plan evidence highlights a problem at this junction in the base and with Local Plan development. No mitigation is proposed at the junction to account for Local Plan growth. The development should not be addressing problems created by Local Plan growth.	Kerb amendments
J17	A421 Emerson Roundabout (MKC)	Yes – Mitigation is required.	Kerb amendments. Part time signals if required through a 'monitor and manage' approach'
J18	A421 Windmill Hill Roundabout (MKC)	Yes - Mitigation is required.	Kerb amendments

- 10.19 As set out in **Table 10.4**, improvements are required at a number of junctions across the study area to ensure that the impact of the Proposed Development is appropriately and proportionately mitigated.
- 10.20 Within MKC, improvements are required at ten junctions and would be implemented by way of a s278 of the Highways Act 1980¹⁸⁸ and comprise: (i) A421 Tattenhoe Roundabout; (ii) A421 Bottledump Roundabout; (iii) B4034 Buckingham Road/Sherwood Drive/ Water Eaton Road; (iv) B4034 Buckingham Road/Newton Road/Shenley Road; (v) Kingsmead Roundabout; (vi) Furzton Roundabout; (vii) A421 Bleak Hall Roundabout; (viii) A421 Elfield Park Roundabout; (ix) A421 Emerson Roundabout and (x) A421 Windmill Hill Roundabout. An alternative approach would be to provide a financial contribution towards the MK Mobility Strategy 2036 to encourage greater use of sustainable transport to/from Central Milton Keynes and surrounding areas, thereby reducing traffic on the local highway network and potentially negating the need for physical highway improvements to the junctions.

¹⁸⁸ Transport Response Note 3, January 2021, WSP, Section 4 (CD16/C)



- 10.21 Within BC, improvements were previously proposed within the 2016 TA at four junctions along A421 and within Newton Longville. TRN2 demonstrates that the improvements along A421 are required, and improvements will be commuted to a financial contribution towards a wider corridor improvement along A421. Improvements to Newton Longville are proposed by way of a financial contribution towards a traffic calming scheme in order to reduce the attractiveness of the route to 'through' traffic, including that from the Proposed Development.

Means to Secure Junction Mitigation

- 10.22 The mitigation agreed as part of the previous resolution to grant permission by AVDC was to be secured by a combination of s278 works (at Bottledump Roundabout and Whaddon Crossroads Roundabout) and improvements commuted to a financial contribution through a s106 agreement (at all other junctions). The Updated TA proposed mitigation to be secured in a similar manner, with mitigation adjacent to the Site as s278 works (at Bottledump Roundabout, Whaddon Crossroads Roundabout and Tattenhoe Roundabout) and more remote improvements secured as s106 contributions (at all other junctions).
- 10.23 The reason for this approach was that a number of the off-Site improvements are relatively small in nature, therefore MKC's preference was to secure funds to complete a larger, more comprehensive improvement on the corridor of A421, which would be of greater benefit to the local highway network and to align with policy aspirations and planned schemes.
- 10.24 Further to the submission of the Updated TA, MKC has sought to change the preferred approach to securing the mitigation as agreed in 2016 and instead has requested that the works at all junctions should be considered for implementation either under s278 of the Highways Act (1980) or by way of a s106 obligation under the Town & Country Planning Act (1990). In the interest of reaching common ground, the Appellant has agreed to secure all of the junction works via a Grampian style condition and a s278 agreement 'Highway Works Delivery Scheme' (**MJP17**), although the Appellant would still be open to provision of a financial contribution as an alternative either in part or whole, subject to agreement with MKC. In regard to the improvements proposed within BC's jurisdiction, the Council has confirmed that the means of securing and delivering the agreed works would continue to be via a combination of s278 and s106 planning obligation.
- 10.25 The estimated costs of the proposed highway improvements that would be secured via s278 are summarised in Appendix **MJP18**. These estimates are split to identify the costs of works across the highway networks of MKC and BC but exclude the cost of the access arrangements to the Proposed Development and the traffic calming scheme for Newton Longville. The cost estimates for the



improvements to Junction 16 and Junction 17 are currently being updated to reflect recent discussions with BC.

HIGHWAY SAFETY

- 10.26 TRN2 and TRN3 identify a package of mitigation at junctions across the study area to either increase capacity which will in turn reduce queueing and delay, or to improve sustainable travel options. The proposed mitigation schemes have been subject to a Stage 1 Road Safety Audit and no major safety concerns have been raised, with only minor amendments required to be designed in detail at the appropriate time.
- 10.27 The COBALT analysis¹⁸⁹ has identified that the Proposed Development is likely to have a minor impact on collisions on the A421 Standing Way, B4034 Buckingham Road adjacent to the Proposed Development and V1 Snelshall Street.
- 10.28 In consultation with BC, it is agreed¹⁹⁰ that promoting a reduced posted speed limit on Whaddon Road in the vicinity of the proposed access to reflect the context and setting of the Proposed Development would be beneficial and should positively impact on the collision rate along the road and on the severity of injury, however it is not essential to make the Proposed Development acceptable in accordance with the NPPF.
- 10.29 A traffic calming scheme is also proposed for Whaddon Road and the approaches into Newton Longville and will act as a deterrent to traffic travelling through the village and reducing the 85th percentile speed of traffic, which will also reduce the risk of collisions. The broad detail of the proposed traffic calming scheme proposed is included on the drawings contained in the Updated TA,¹⁹¹ although BC may decide to implement a different scheme in consultation with the Parish Council and local residents.
- 10.30 With the addition of the proposed mitigation package, I consider that queueing and delay would be reduced, which will have a positive effect on the anticipated impacts on highway safety. Overall, I consider that following the implementation of the proposed mitigation measures, the development proposals will not have an unacceptable or material impact on highway safety in the future year of 2033.

¹⁸⁹ Transport Response Note 2, December 2020, WSP, Section 8 (CD16/B)

¹⁹⁰ Agreed verbally during telecon between WSP/BC on 21st July 2020

¹⁹¹ Updated Transport Assessment, May 2020, WSP, Appendix AA (CD10/H/A)



PUBLIC TRANSPORT

- 10.31 A comprehensive Public Transport Strategy¹⁹² has been developed as explained earlier in my evidence. This will provide either a new high frequency bus service or enhance an existing bus service to serve the Proposed Development. It is intended that the Strategy would be secured via a service level agreement through a s106 planning obligation and would accommodate the future demand for bus based public transport resulting from the Proposed Development and will also benefit the wider community.

WALKING AND CYCLING

- 10.32 The Proposed Development includes a package of measures to improve pedestrian and cycle infrastructure in the vicinity of the Proposed Development. These measures are outlined in the Updated TA¹⁹³ and comprise:
- A Grid Road Reserve;
 - Resurfacing of Weasel Lane within the Proposed Development boundary;
 - A contribution towards resurfacing of Weasel Lane from Whaddon Road to Weasel's Lodge;
 - Resurfacing of Footpath NLO/19 within the Proposed Development boundary;
 - A contribution towards resurfacing of Footpath NLO/19 from the Proposed Development boundary to Newton Longville;
 - A new Toucan crossing on Buckingham Road to connect Weasel Lane with the Redway network;
 - A new Toucan Crossing on Buckingham Road to connect the Proposed Development with the Redway network at A421 Tattenhoe Roundabout;
 - A new Pegasus crossing on Whaddon Road to connect the Proposed Development with the Redway network at A421 Bottledump Roundabout; and
 - A financial contribution towards additional/enhanced cycle parking at Bletchley Station and CMK station.

¹⁹² Updated Transport Assessment, May 2020, WSP, Appendix AA (CD10/H/A)

¹⁹³ Updated Transport Assessment, May 2020, WSP, Figure 8.1 (CD10/H/A)



- 10.33 These improvements will provide significant pedestrian and cycle connectivity and safety enhancements to the local area and will accommodate the demand from the Proposed Development and benefit the wider community.

CONSTRUCTION

- 10.34 An Updated Construction Environmental Management Plan (CEMP)¹⁹⁴ has been prepared to accompany the updated planning application. This outlines the measures and initiatives that will be secured to minimise the impacts of the construction phase on the environment including the transport network. Through the application of the CEMP, I am satisfied that any impacts arising from the construction phase would be adequately managed and mitigated.

FRAMEWORK TRAVEL PLAN AND DETAILED TRAVEL PLANS

- 10.35 The Appellant is fully committed to the implementation of the movement strategy for the Proposed Development. At the heart of the strategy is the implementation, maintenance and monitoring of Travel Plans for all significant generators of traffic on the Proposed Development in accordance with the NPPF,¹⁹⁵ which are aimed at reducing traffic generated by the Proposed Development and increasing the use of sustainable travel modes.
- 10.36 The Updated FTP¹⁹⁶ includes details of the initial targets that will be set for each travel mode and details of the measures that will be put into place to achieve this modal shift. A costed Travel Plan Action Plan is provided in TRN2¹⁹⁷, detailing the commitment for the Travel Plan Co-ordinator to be in role for 14 years. In addition, if required by BC, the Travel Plan Co-ordinator will be appointed six months prior to occupation of the Proposed Development. MKC, BCC and Highways England (HE) previously agreed to the contents of the FTP following the submission with the 2016 revision package.

MITIGATION SUMMARY

- 10.37 A package of 'off-Site' highway measures to be secured through a Grampian condition and s278 agreement and sustainable transport interventions has been developed to mitigate the impacts of the Proposed Development on the local highway network, as detailed in **Table 10.5** and shown on Appendix **MJP19**. An alternative would be to provide a proportionate, cost effective contribution towards the MK Mobility Strategy 2036 in lieu of physical improvement works at junctions, which in

¹⁹⁴ Updated CEMP, May 2020, WSP (CD10/L)

¹⁹⁵ NPPF, 2019, MHCLG, Paragraph 111 (CD8)

¹⁹⁶ Updated Framework Travel Plan, May 2020, WSP (CD10/H/B)

¹⁹⁷ Transport Response Note 2, December 2020, WSP, Section 9 (CD16/B)



the longer term, would contribute a more holistic and sustainable transport solution to meet with MKC's future mobility objectives. BC has confirmed that the means of securing and delivering the agreed works would be via a combination of s278 and s106 obligation.

10.38 **Table 10.5** summarises the extent of junction capacity and other mitigation based on the findings contained within the Updated TA, TRN2 and TRN3.

10.39 The proposed mitigation is categorised as follows:

- 1 – Mitigation proposed within the Updated TA; and
- 2 – Mitigation proposed within TRN2 and TRN3;

Table 10.5 – Mitigation Summary

LHA	Location/Mode	Mitigation	Mitigation Category
MKC	Junction 1 - B4034 Buckingham Road/Sherwood Drive/ Water Eaton Road	Improvements to the geometry of the roundabout	2
MKC	Junction 2 - B4034 Buckingham Road/ Shenley Road/Newton Road	Improvements to the geometry of the existing double-mini roundabout to provide two lanes through the junction on Buckingham Road.	2
BC	Junction 3 – Bletchley Road/Stoke Road/Drayton Road/Whaddon Road	Financial contribution to Traffic Calming through Newton Longville	1
BC	Junction 4 – Whaddon Road/Westbrook End	None	-
MKC	Junction 5 – A421 Tattenhoe Roundabout	Introduction of peak hour traffic signals	2
MKC	Junction 6 – A421 Bottledump Roundabout	Physical works to roundabout to provide kerb realignment	2
BC	Junction 7 – A421 Whaddon Crossroads	Financial contribution to wider A421 corridor improvement in lieu of kerb realignment	2
BC	Junctions 8 and 9 – Warren Road/A421 And A421/Shucklow Hill/Little Horwood Road	Financial contribution to wider A421 corridor improvement in lieu of junction signalisation	2
BC	Junction 10 – A421/Nash Road/Winslow Road	Financial contribution to wider A421 corridor improvement in lieu of kerb realignment	2
BC	Junction 11 – Coddimoor Lane/Shenley Road/Stock Lane	None	-
MKC	Junction 12 - Kingsmead Roundabout	Lane width amendments	2
MKC	Junction 13 - Westcroft Roundabout	None	-
MKC	Junction 14 - Furzton Roundabout	Lane width amendments	2



LHA	Location/Mode	Mitigation	Mitigation Category
MKC	Junction 15 - A421 Bleak Hall Roundabout	Lane width amendments	2
MKC	Junction 16 - A421 Elfield Park Roundabout	Minor kerb amendments	2
MKC	Junction 17 - A421 Emerson Roundabout	Minor kerb amendments; Part time signals if required through a 'monitor and manage' approach	2
MKC	Junction 18 - A421 Windmill Hill Roundabout	Minor kerb amendments	2
MKC	Public Transport	High frequency bus service	1
BC	Walking and Cycling	Resurfacing of Weasel Lane within Site and from Whaddon Road to Weasels' Lodge	1
BC		Upgraded Footpath Route (NLO/19) within Site and to Newton Longville	1
BC		Grid Road Reserve with Bridleway	1
BC		New Pegasus Crossing on Whaddon Road with Connection to Redway	1
MKC		Two Number New Toucan Crossings on Buckingham Road to connect with Redway	1
BC/MKC	Travel Planning	Residential, Workplace and School Travel Plans	1
BC/MKC	Construction Traffic	Construction Environmental Management Plan	1

RESIDUAL IMPACT

10.40 In my opinion, the Updated TA and TRNs present a robust worst case assessment in relation to trip generation and the potential for background traffic growth in 2033, as explained earlier in Sections 6 and 7 of my evidence. The proposed mitigation package is also assessed on a worst case basis (Do Something 1) and does not take account of the benefits that would be derived from either travel planning (Do Something 2) or the potential for a new grid road associated with the delivery of Shenley Park (Do Something 3). In addition, the assumption for future growth using TEMPro during the AM and PM travel peak periods, as detailed in Section 7 of my evidence is extremely optimistic given the influence of the COVID-19 pandemic on future travel behaviour. The junction capacity results provided in Section 5 of TRN2 identify that with the mitigation proposed along A421, the residual cumulative impacts of the development in BC's jurisdiction would not be severe.



- 10.41 The junction capacity results provided in Section 5 of TRN3 identify that with the implementation of the proposed mitigation measures, the residual cumulative impact of the Proposed Development would not be severe. At junctions 1, 2, 5, 6, 12, 14, 15, 16, 17 and 18, an appropriate package of mitigation that addresses the impacts of the Proposed Development and also assists with accommodating the wider growth in the local area as envisaged by MKC^{198,199} is required.
- 10.42 **Table 10-6** summarises the variance across the wider highway network as a whole in relation to the change in overall delay and shows that where mitigation is required. The DS1 mitigation scenario indicates there would be an overall improvement in delay at all junctions compared to the 2033 DN with the exception of Junction 2, where there would be a residual increase in delay on Buckingham Road westbound. However, this only affects one arm of the junction which would experience increased delay during the PM peak hour only. While the static modelling shows an increase on Buckingham Road as described, the output from the MKMMM Reference Case²⁰⁰ forecasts no capacity concerns on either the links approaching the junction or at the junction itself.
- 10.43 **Table 10.6** indicates that the overall residual impact during the peak travel periods with the Proposed Development fully occupied in 2033 is beneficial and does not present a severe impact across the study area.

Table 10.6 - Overall Junction Delay - 2033 DS1 Mitigated compared to 2033 DN

LHA	Location	AM Peak	PM Peak
MKC	Junction 1 - B4034 Buckingham Road/Sherwood Drive/ Water Eaton Road	Improvement	Improvement
MKC	Junction 2 - B4034 Buckingham Road/ Shenley Road/Newton Road	Improvement	Increase on Buckingham Road (E)
BC	Junction 3 – Bletchley Road/Stoke Road/Drayton Road/Whaddon Road	Traffic calming in lieu of junction capacity improvement	
BC	Junction 4 – Whaddon Road/Westbrook End	No mitigation required	
MKC	Junction 5 – A421 Tattenhoe Roundabout	Improvement	Improvement
MKC	Junction 6 – A421 Bottledump Roundabout	Improvement	Improvement
BC	Junction 7 – A421 Whaddon Crossroads	Improvement	Improvement
BC	Junctions 8 and 9 – Warren Road/A421 And A421/Shucklow Hill/Little Horwood Road	Improvement	Improvement
BC	Junction 10 – A421/Nash Road/Winslow Road	Improvement	Improvement
BC	Junction 11 – Coddimoor Lane/Shenley Road/Stock Lane	No mitigation required	

¹⁹⁸ Mobility Strategy for Milton Keynes 2018-2036 (LTP4), March 2018, MKC (CD12/C)

¹⁹⁹ Strategy for 2050: Growth Options Assessment, January 2020, MKC (CD12/D)

²⁰⁰ MKMMM Highway Model Traffic Forecasting Report, November 2017, MKC, Figure 31 (CD12/A)



LHA	Location	AM Peak	PM Peak
MKC	Junction 12 - Kingsmead Roundabout	Improvement	Improvement
MKC	Junction 13 - Westcroft Roundabout	No mitigation required	
MKC	Junction 14 - Furzton Roundabout	Improvement	Improvement
MKC	Junction 15 - A421 Bleak Hall Roundabout	Improvement	Improvement
MKC	Junction 16 - A421 Elfield Park Roundabout	Improvement	Improvement
MKC	Junction 17 - A421 Emerson Roundabout	Improvement	Increase on all arms; Improvement with 'Monitor and Manage' approach
MKC	Junction 18 - A421 Windmill Hill Roundabout	Improvement	Improvement

10.44 The mitigation at junctions in BC's jurisdiction west of Whaddon crossroads (Junctions 7-10), would be provided in the form of a commuted financial contribution towards a wider corridor improvement to A421. The improvements to junctions in MKC's jurisdiction will be secured by means of a s278 Highway Works Delivery Scheme, as detailed earlier in this section of my evidence. A further improvement at junction 17, developed through discussions with BC and described later in Section 11, may be required and will be secured within the Highway Works Delivery Scheme through a 'monitor and manage' approach.

10.45 The Proposed Development will provide a package of measures to improve highway capacity, walking and cycling routes and public transport services as I previously indicated, although the Appellant is open to provision of a financial contribution commuted towards MKC's Mobility Strategy 2036 to improve accessibility to Central Milton Keynes, Bletchley and the railway stations and effect a sustained modal shift, should this be preferred by MKC.

CONCLUDING COMMENTS

10.46 A comprehensive mitigation package is proposed as part of the Updated TA, TRN2 and TRN3 which in my opinion will satisfactorily accommodate the impact of the Proposed Development on the transport and highway network. Overall, I consider that the proposed mitigation package is deliverable, cost effective and proportionate related to the current forecast impacts in 2033 (i.e. that make no provision for the future impact on travel and movement of the COVID-19 pandemic). The residual cumulative impacts of the Proposed Development on the local road network within the jurisdiction of MKC and BC would not be severe and as such, would not present an unacceptable impact on highway safety.



11 REVIEW BY BUCKINGHAMSHIRE COUNCIL

BUCKINGHAMSHIRE COUNCIL'S STATEMENT OF CASE

- 11.1 BC confirm in their Statement of Case (SoC)²⁰¹ (subsequently updated on 18 August 2020) the position on the use of the Buckinghamshire Council Aylesbury Transport Model (BCATM). They explain that the BCATM was not available for use at the time of preparing the Updated TA and that the model would not have covered all the roads that would likely to be affected within MKC's jurisdiction²⁰². BC also explain that a manual spreadsheet approach was agreed as the appropriate common methodology for the Updated TA. For the same reasons, the use of the MKMMM would not provide sufficient coverage for the combined assessment of the highway network within BC's jurisdiction.
- 11.2 With reference to MKC's reason for refusal, BC indicate in their SoC²⁰³ that:
- 'The reason for refusal is based on insufficient evidence to mitigate the harm of the development in terms of increased traffic flow and impact on the highway and Grid Network, specifically to Standing Way and Buckingham Road is not supported by previous officer discussions and recommendations.'*
- 11.3 BC continue in their SoC:²⁰⁴
- 'The new Transport Assessment (May 2020) produced for the appeal has updated its traffic impact assessment with the methodology once more agreed between the applicant's Transport Consultant and officers of both BC and MKC. The results of the May 2020 Transport Assessment are currently under review by BC officers.'*
- 11.4 Agreement has been reached on a number of these points which is now reflected in the draft SoCG with BC which is with the Appeal Inspector. Further discussions are currently being progressed between the Appellant and BC to present a final signed version of the SoCG to the Inquiry.

²⁰¹ BC Statement of Case, Paragraphs 74-75

²⁰² BC Statement of Case, Paragraph 74

²⁰³ BC Statement of Case, Paragraph 76

²⁰⁴ BC Statement of Case, paragraph 77



DISCUSSIONS WITH BUCKINGHAMSHIRE COUNCIL

- 11.5 Following the submission of this Appeal on 14 May 2020, a number of points have been raised in discussion with Officers at BC and their consultants²⁰⁵ who have sought clarification on: policy, accessibility, personal injury collisions, trip generation, the assumptions around the distribution of traffic, geometric parameters of junction models; calibration techniques; and the extent of the proposed mitigation. I also address other salient matters raised by Mr Bedingfeld in his Main Proof as submitted in September 2020.
- 11.6 The detail of the various points raised by BC in response to the Updated TA and Updated FTP²⁰⁶ and to TRN1²⁰⁷ are addressed in a point-by-point manner with the associated additional modelling work in TRN1, TRN2 and TRN3. The assessments within TRN2 and TRN3 supersede the predicted outcomes contained within the Updated TA in order to address the points raised by BC and show how they may influence the predicted outcomes which are currently being discussed with Officers at BC to reach agreement on an appropriate mitigation package.
- 11.7 Within the TRNs, additional modelling has been completed along A421 at the request of BC to review the impacts on the junctions using an alternative methodology. This includes the distribution of a greater proportion of traffic from the to/from the Proposed Development towards Buckinghamshire (i.e. westbound on A421 and south through Newton Longville) and using an alternative queue length calculation to calibrate the junction models.
- 11.8 By responding to BCs comments and by adopting their alternative approach, the results in TRN2 indicate that:
- 1) mitigation would be required at Junction 6 to minimise queuing and delay on Whaddon Road; and
 - 2) additional mitigation to that identified in the Updated TA may also be required at Junctions 7 and 10 to minimise queuing and delay on the minor side roads.
- 11.9 **Table 11.1** provides a summary of the mitigation measures proposed in BC's jurisdiction.

²⁰⁵ Transport Response Note 1, September 2020, WSP, Appendix A (CD16/A)

²⁰⁶ Transport Response Note 1, September 2020, WSP, Appendix A (CD16/A)

²⁰⁷ Transport Response Note 2, December 2020, WSP, Appendix A (CD16/B)

Table 11.1 – BC Junction Mitigation Summary Using Alternative Methodology

Junction	Mitigation Required
Junction 3 – Bletchley Road/Stoke Road/Drayton Road/Whaddon Road Mitigation Results	Financial contribution to Traffic Calming through Newton Longville
Junction 4 – Whaddon Road/Westbrook End	None
Junction 7 – Whaddon Crossroads	Financial contribution to wider A421 corridor improvement in lieu of kerb realignment, if necessary and justified
Junctions 8 and 9 – Warren Road/A421 And A421/Shucklow Hill/Little Horwood Road	Financial contribution to wider A421 corridor improvement in lieu of junction signalisation, if necessary and justified
Junction 10 – A421/Nash Road/Winslow Road	Financial contribution to wider A421 corridor improvement in lieu of kerb realignment, if necessary and justified
Junction 11 – Coddimoor Lane/Shenley Road/Stock Lane	None

- 11.10 Discussions are currently progressing with Officers at BC and their consultant to agree common ground prior to the Inquiry. In this regard, additional swept path analysis and geometric parameter drawings have been provided to BC (**MJP20**) and further assessments have been completed at Junctions 16 and 17. At Junction 16, BC agree that the likelihood of queues building to block back across Junction 15 in the PM peak is limited, given the robust forecast of growth forecasts, trip rates and the use of static modelling. Appendix **MJP21** sets out the rationale for the conclusion regarding Junction 16.
- 11.11 Alternative mitigation is proposed for Junction 17 in the form of ‘part-time’ traffic signals should the need arise in the future, to be reviewed through a ‘monitor and manage’ approach which BC agree is appropriate and would apply were this junction within their jurisdiction. The detail of these further assessments is included in Appendix **MJP22**.
- 11.12 At Junction 1, there would be a reduced footway provision to 1.5m on the south eastern side of the junction for a short length behind the existing bus layby. A width of 1.5m is sufficient for two pedestrians to pass one another,²⁰⁸ including a pedestrian and a wheelchair,²⁰⁹ and therefore provides an adequate provision across a short distance. The layout of the junction can be refined at the detailed design stage as part of the s278 Agreement and in discussion with key stakeholders, as

²⁰⁸ Manual for Streets, 2007, DfT, Figure 6.8 (CD13/A)

²⁰⁹ Inclusive Mobility, 2005, DfT, Figure 2.3 (CD13/Q)



set out in Appendix **MJP23**. BC agree that this approach provides sufficient flexibility to enable a suitable mitigation scheme to be developed and implemented at Junction 1.

- 11.13 An overall summary of the proposed mitigation across the wider study area is indicated earlier in my evidence in Section 10.

CONCLUDING COMMENTS

- 11.14 BC confirm in their SoC that the use of the BCATM would not be appropriate for assessing the Proposed Development given the reduced coverage of roads with Milton Keynes. BC also confirm that the MKMMM would not provide sufficient coverage of roads within Buckinghamshire, hence the request and agreement to adopt a common methodology and a bespoke assessment using 'static' junction models.
- 11.15 The TRNs respond to queries and items of clarification raised by BC following the submission of the Updated TA. An alternative assessment methodology, as requested, has been completed to review the impact of the Proposed Development.
- 11.16 Discussions with Officers at BC are ongoing to reach agreement on the potential impact of the Proposed Development and to provide a final Statement of Common Ground to this Inquiry.

12 REVIEW BY MILTON KEYNES COUNCIL

- 12.1 To facilitate progress with MKC, my team and I held a virtual meeting on 29 July 2020 and again on 18 August 2020 with the Council's appointed transport advisor, Mr James McKechnie of consultants Hydrock. Mr McKechnie explained that he had only just been formally appointed by MKC towards the end of July 2020 and that he had only started to review the Updated TA and other associated appeal documents. We discussed various initial matters:
- Whether the traffic data collected in February 2020 are representative as the month is not normally deemed 'neutral';
 - Given the unique nature of the Milton Keynes Grid Road network, what consideration has been given to the potential for the reassignment of traffic onto other routes; and
 - The release of further information and data, which have since been provided to assist Mr McKechnie to objectively evaluate the Updated TA and establish the appropriateness of the proposed mitigation.
- 12.2 In regard to the first of these points, the extent of the comprehensive data collection exercise was described in the scoping exercise²¹⁰ and subsequently agreed with BC, MKC and their respective consultants. Notwithstanding the lack of opportunity to complete traffic surveys during the more 'neutral months',²¹¹ I have completed a further comparative analysis of the variability of traffic flows along A421 Standing Way using data provided by BC and my findings are contained in a Technical Note (**MJP8**) which indicates that the February 2020 data are representative of the conditions across the local road network.
- 12.3 The second point prompted a discussion about the agreed modelling methodology and the potential for trip reassignment on congested routes. In discussing this matter further with Mr McKechnie, he accepted the principle that reassignment would occur given the unique characteristics of the road network across Milton Keynes and acknowledged that the agreed modelling methodology would not lend itself to making reliable predictions regarding dynamic the reassignment of traffic.
- 12.4 As mentioned earlier in my evidence, the use of 'static' junction models would present a 'worst case' based on the approaching demand of traffic and continuous increase in queuing and delay which in reality, is unlikely to happen as drivers would either find an alternative route, switch mode, vary their

²¹⁰ Transport Assessment Scoping Note, January 2020, WSP (MJP4)

²¹¹ TAG Unit M1.2 Data Sources and Surveys, May 2020, DfT, Paragraph 3.3.7 (CD13/G)



time of travel or even make greater use of digitisation which is now rapidly becoming the normal situation especially following the outbreak of the COVID 19 pandemic as previously explained.

- 12.5 MKC's LTP4 identifies the challenges that face the area assuming the population growth from 268,000 to circa 400,000 people in 2050.²¹² The Council accept that to accommodate this level of growth there is a need to commit to ambitious mode shift targets and to also embrace new and evolving technologies.²¹³ This position is also further endorsed in the Council's Strategy for First Last Mile Travel.²¹⁴
- 12.6 Further discussions were held with Hydrock on behalf of MKC during September and October 2020, with review and agreement to the CVs of the WSP independent RSA audit team that were to undertake the Stage 1 RSAs (**MJP24**). Correspondence continued through Autumn 2020 with Hydrock in relation to updates to the work provided subsequently in TRN2 and TRN3 (**MJP25**).

MILTON KEYNES COUNCIL'S STATEMENT OF CASE

- 12.7 MKC's SoC refers to the previous Mouchel TA submitted in August 2016 (i.e. the 2016 TA) and draws a comparison between the predicted outcomes in that assessment compared with the Updated TA.²¹⁵ What the Council's SoC fails to acknowledge is that all technical matters had been previously addressed and a mitigation package agreed with MKC planning and highway Officers, including a draft s106 prior to the Council's refusal of planning permission.
- 12.8 The decision to update the 2016 TA was based on the need to update base data (i.e. 2009 base data previously supported the MKTM). In discussing matters with Officers at MKC, BC and their respective consultants earlier this year,²¹⁶ it was agreed during scoping discussions that the survey data and assessment work should be appropriately updated. I am therefore of the opinion that this Inquiry should only consider the Updated TA and subsequent TRNs.
- 12.9 A true comparison of both the 2016 TA and the Updated TA cannot and should not be made as the adopted methodologies are quite different as explained in the Updated TA.²¹⁷ The Council's SoC appears to acknowledge that the previous use of the MKTM with a base year of 2009 would be inappropriate, but then goes on to question the validity of the approach taken to update matters, which was agreed during scoping with their Officers and MKC's consultant SMT (**MJP4**) prior to

²¹² Mobility Strategy for Milton Keynes 2018-2036 (LTP4), March 2018, MKC, Paragraph 1.1, page 2 (CD12/C)

²¹³ Mobility Strategy for Milton Keynes 2018-2036 (LTP4), March 2018, MKC, Pages 2-13 (CD12/C0)

²¹⁴ Strategy for First Last Mile Travel, MKC, Page 6 (CD12/E)

²¹⁵ MKC Statement of Case, August 2020, Paragraph 18

²¹⁶ Transport Assessment Scoping Note, January 2020, WSP (MJP4)

²¹⁷ Updated Transport Assessment, May 2020, WSP, Section 1 (CD10/H/A)



preparation of the Updated TA. Given the overriding need to adopt a common methodology across both MKC and BC's highway network and that neither the MKMMM nor the BCATM were considered appropriate tools, then I am of the opinion that the approach taken in the Updated TA (and subsequent TRNs) to assess the impacts of the Proposed Development is appropriate and robust.

- 12.10 MKC's SoC²¹⁸ addresses relevant policy matters that are referred to by the Council in their reason for refusal; specifically, Plan:MK policy CT1 'Sustainable Transport Network' and notes that the Appeal Development is not supported by robust evidence to address points 1-5. My evidence demonstrates a proportionate response to deliver improvements to key infrastructure that would comply with Development Plan policies and accommodate the mobility requirements of future residents and the wider community as identified in the Updated TA²¹⁹ and TRNs.^{220,221}
- 12.11 MKC's SoC also refers policy CT2(A1) 'Movement and Access'²²² and suggests that there is insufficient evidence that the Proposed Development would minimise the need to travel, promote sustainable modes of travel, improve accessibility and assist in reducing carbon. For the reasons explained earlier in Section 4 of my evidence and also in the Updated TA,²²³ I believe this assertion by MKC is unfounded.
- 12.12 I also address relevant sections of the NPPF and the PPG earlier in Section 5 of my evidence. I note that MKC refer at paragraphs 51 and 52 of their SoC²²⁴ to the neutrality of the recommended periods for collecting traffic data and respond as follows:
- i) The Department of Transport's (DfT) Transport Appraisal Guidance (TAG)²²⁵ differs from the PPG in that it also includes November. School holidays and bank holidays should be avoided to record 'typical' traffic conditions;
 - ii) On scoping the Updated TA, we agreed with Officers of MKC, BC and their respective consultants the extent of the data collection exercise and secured the necessary permission with their full knowledge of the timing, scope and duration of the survey work across the local road

²¹⁸ MKC Statement of Case, August 2020, Paragraphs 31–33

²¹⁹ Updated Transport Assessment, May 2020, WSP, Section 8 (CD10/H/A)

²²⁰ Transport Response Note 2, December 2020, WSP, Section 5 (CD16/B)

²²¹ Transport Response Note 2, January 2021, WSP, Section 5 (CD16/C)

²²² MKC Statement of Case, August 2020, Paragraphs 34-35;

²²³ Updated Transport Assessment, May 2020, WSP, Section 4 (CD10/H/A)

²²⁴ MKC Statement of Case, August 2020, Paragraphs 51-52

²²⁵ TAG Unit M1.2 Data Sources and Surveys, May 2020, DfT, Paragraph 3.3.7 (CD13/G)



network. At no time did either MKC Officers or their consultant SMT suggest that surveys would need to wait until April which would have been the first available neutral month; and

- iii) It is common practice to agree with highway authorities to complete traffic surveys during the months January – March provided they are clear of school holiday periods. During scoping discussions, MKC’s consultant accepted the extent and timing of the traffic surveys across MKC’s network and did not indicate that further proof should be provided to draw correlation with other more neutral months.

12.13 Notwithstanding MKC’s concerns in their SoC, I have discussed the matter further with Mr McKechnie and prepared a separate Technical Note that compares historical data along the A421 corridor with the more recent February 2020 data traffic data (**MJP8**) which indicates that traffic flows along the A421 corridor in February are representative with other neutral months.

MODELLING

12.14 The SoC²²⁶ explains that the impacts of the Proposed Development have been assessed with reference to two iterations of the MKC strategic model (i.e. the MKTM and the MKMMM) and most recently within the Updated TA, as agreed with MKC’s consultant and precludes the use of a strategic tool. MKC suggests that the three methodologies “*must be compared in reaching on the impact of the scheme*”. In this regard, I comment as follows:

- The MKTM which had a 2009 base year and a future year of 2026 which formed the basis for the 2016 TA. That model has since been recalibrated and validated to a new base year 2016 to produce the MKMMM that now supports Plan:MK and hence the forecast of wider impacts across the transport network through to the end of the Plan period 2031. It follows therefore, that the MKMMM rather than the MKTM is the most current strategic tool for assessing the wider cumulative impact across the local highway network within MKC’s jurisdiction;
- The Updated TA adopts a common methodology, agreed by MKC and BC, that uses ‘static’ junction modelling and makes no provision for the potential reassignment of traffic away from the more congested routes as previously explained;
- The MKMMM includes the Proposed Development within the Reference Case due to its close proximity to Milton Keynes.²²⁷ The Reference Case has been used to provide the baseline 2031

²²⁶ MKC Statement of Case, August 2020, Paragraphs 54-56

²²⁷ Milton Keynes Multi Modal Model Update, Highway Model Traffic Forecasting Report, November 2017, Aecom (CD12/A)



forecast to test Plan:MK options which indicate that the travel demands of the Proposed Development could be accommodated on the local highway network;

- MKC indicate that the MKMMM represents an “unmitigated scenario”, which is true in that neither the previously agreed nor the more recently proposed mitigation proposals are included within the model runs. However, the forecast results in the 2031 Reference Case represent a good appreciation of the likely impacts across the wider network and provide a reliable evidence base which clearly indicate that the cumulative travel demands that would arise from the Proposed Development could be safely accommodated. The MKMMM 2031 Reference Case helps to inform where mitigation may be required, but also includes the benefit of strategic infrastructure schemes²²⁸ in the future modelled year that would also influence predicted outcomes; and
- Reference is made to the ‘high level review’ contained within Technical Note 18.²²⁹ The TN compares the overall conclusions reached across modelling platforms prepared by MKC, BC and also WSP on behalf of the Appellant, and shows a broad correlation across the different modelling outputs. The TN indicates that the corridor of A421 is forecast to be congested in the Base and Reference Cases for 2031 and 2033 using MKC and BC’s modelling platforms respectively. The mitigation package previously agreed in the 2016 TA to support the future travel demands of the Proposed Development to 2026 (i.e. this was the assumed final year of occupation), was determined on a *nil detriment* basis, which both MKC and BCC accepted went beyond the requirements of the NPPF, which suggests that schemes should only be refused if the residual cumulative impacts are severe or effects on highway safety are unacceptable.

12.15 The SoC²³⁰ also suggests that “*the use of such models can be more problematic at a localised scale.*” MKC also indicate that the way development traffic is “*loaded*” onto a network “*is generally necessarily a crude representation and not reflective of actual access proposals*”. In regard to the first of these points, I reiterate that the MKMMM has not been directly used to determine the forecast impacts of the Proposed Development within the agreed study area as explained earlier in my evidence.

²²⁸ Milton Keynes Multi Modal Model Update, Highway Model Traffic Forecasting Report, November 2017, Aecom, Section 4.8, Table 8 (CD12/A)

²²⁹ Technical Note 18 (TN18), June 2019, WSP (CD3/B)

²³⁰ MKC Statement of Case, August 2020, Paragraphs 57-58;



12.16 Strategic highway/transport models inform the wider impacts and consider the influence of major infrastructure schemes, but also identify where more detailed investigation may be required to determine appropriate mitigation. The Plan:MK modelling²³¹ tests a number of scenarios and explains the likely impacts at key junctions/links in 2031. The housing and jobs growth on the Proposed Development is included within the demand forecast scenarios in the MKMMM which identifies the cumulative impact across the wider highway network.²³² In regard to the second of these points, zones identified within strategic models do not always replicate specific development sites; similarly, the connection of a zone onto the highway network may in some cases be representative and not reflect the actual proposed access arrangements, which again is common practice.

2016 TRANSPORT ASSESSMENT – MOUCHEL (2016 TA)

- 12.17 The SoC²³³ explains that the Council’s decision to refuse the planning application for the Appeal Development and Proposed Development was predicated on: *“there being a lack of sufficient evidence provided by the appellant at that stage.”* However, at the time the application was refused by MKC, all technical highways matters comprising the evaluation of impacts and the extent of mitigation had been accepted by MKC Officers and their highways consultant. An agreement on all transport related matters had also been reached with BC.
- 12.18 MKC explain the basis for the original work completed by Mouchel.²³⁴ A hybrid approach enabled the use of the MKTM to assess junctions within the Council’s jurisdiction combined with ‘static’ models along the corridor of A421, as agreed with Officers at MKC, BC and their respective consultants. The agreed methodology and the adoption of trip rates embedded within the MKTM were accepted at that time as the best and most appropriate methodology.
- 12.19 MKC raise the issue of the potential for trip reassignment.²³⁵ Both authorities accepted the principle that on a congested network trip reassignment (including re-moding and peak spreading) would occur. However, MKC, BC and their respective consultants did agree that a more appropriate and

²³¹ Milton Keynes Multi Modal Model, Impacts of Plan:MK, November 2017, Aecom (CD12/B)

²³² Milton Keynes Multi Modal Model Update, Highway Model Traffic Forecasting Report, November 2017, Aecom, paragraph 9.3.1, page 160; Figures 29 and 31 (CD12/A)

²³³ MKC Statement of Case, August 2020, Paragraph 5 and Paragraph 59

²³⁴ Mouchel was acquired by WSP in October 2016

²³⁵ MKC Statement of Case, August 2020, Paragraph 61 v



robust 'worst case' approach for determining the impacts at some of the key junctions along the corridor of A421 and adjoining local roads would be to develop 'static' junction models.

- 12.20 In regard to the proposed 'access only' from A421 Standing Way, the 2016 TA includes a plan layout²³⁶ of the proposed arrangement, indicating radii and a deceleration lane. The principle and design of this arrangement was previously agreed with MKC and their consultant and is unchanged.

MAY 2020 WSP TRANSPORT ASSESSMENT (UPDATED TA)

- 12.21 MKC's SoC²³⁷ raises other issues which I have subsequently discussed with Mr McKechnie comprising:
- The principle for the reassignment of traffic which he accepts and is explained earlier in my evidence. Given the unique nature of the MKC Grid Road network, there is potential for reassignment to occur as explained in Section 6 of my evidence;
 - The neutrality of traffic data collected in February which I addressed earlier in evidence (**MJP8**);
 - Walking isochrones at Figures 3.4 and 3.6 of the Updated TA. The assertion made by MKC is that the walking and cycling catchments are more extensive than is actually the case. In this regard, with a strategic greenfield site, it is normal practice to measure isochrones from an access point. Nonetheless, the catchments have been re-measured from the centre of the Proposed Development and are included within TRN1²³⁸; and
 - The method of calibrating junction models, which has subsequently been updated within TRN2²³⁹ and TRN3²⁴⁰ to address comments raised by BC.

2020 TRAVEL PLAN (UPDATED FTP)

- 12.22 The SoC²⁴¹ correctly identifies a 12% point reduction in the residential vehicle mode share five years post opening of the Proposed Development. A similar reduction is forecast for employment uses. There are no modal shift targets for educational uses. In regard to the appointment of a Travel Plan Manager (TPM), I confirm that beyond the initial 12 month period, the TPM role would be reviewed to establish how duties and responsibilities are cascaded to Travel Plan Co-ordinators (TPCO) who

²³⁶ Drawing D013A, December 2015, Mouchel (MJP5)

²³⁷ MKC Statement of Case, August 2020, Paragraph 5 and Paragraph 62 i - vi

²³⁸ Transport Response Note 1, September 2020, WSP, Figures 4-1 and 4-1 and Appendix D(CD16/A)

²³⁹ Transport Response Note 2, December 2020, WSP, Section 2 (CD16/B)

²⁴⁰ Transport Response Note 3, January 2021, WSP, Section 2 (CD16/C)

²⁴¹ MKC Statement of Case, August 2020, Paragraph 5 and Paragraph 62 ix - xii



would be responsible specific elements of the Proposed Development. Funding requirements would pass to the TPCO to implement agreed interventions. At this stage I envisage that the provision of the Updated FTP and other more detailed plans would be secured by way of a s106 planning obligation with BC in relation to the Proposed Development.

MKC HOLDING OBJECTION TO BC APPLICATION

- 12.23 MKC issued a holding objection letter to BC on 11th February 2021 in response to the planning application currently residing with BC for determination. Within that letter, MKC suggest that the Updated TA is superseded by TRN3. For the avoidance of doubt, elements of the Updated TA have been superseded by TRN3 however, a substantial part of the Updated TA remains current and valid²⁴².
- 12.24 MKC acknowledge in their letter that the methodology (as agreed with MKC during scoping discussions) does not allow for redistribution of traffic as congestion builds and also that the forecast base year of 2033 is more congested than the previously assessed 2026 base year in the 2016 TA.
- 12.25 MKC also acknowledge that the mitigation package overall is more substantial than indicated within the 2016 TA.

MEETING WITH MKC

- 12.26 Further to the receipt of Mr McKechnie's Main Proof in September 2020 and subsequent discussions prior to the second Case Management Conference, I subsequently held a virtual meeting with him on 23rd March 2021 during which he raised a number of general and technical points pursuant to his evidence as set out in Appendix **MJP26** for which he was to provide further detail to allow my team and I to review prior to exchange of evidence. I further requested this information in a letter dated 7th April 2021 (**MJP27**) and received a response from Mr Paul Keen on the afternoon of the 13th April 2021 (i.e. the day for exchange of evidence). Prior to this, I received a copy of MKC's formal consultation response on 12th April 2021 to BC on the revisions to the planning application. In this regard, I have not had sufficient time to consider either Mr Paul Keen's letter to me or the formal consultation response and must therefore reserve my position to respond with supplementary evidence as appropriate.

²⁴² Transport Evidence Directory, March 2021, WSP (CD16/E)



STATEMENT OF COMMON GROUND BETWEEN MKC AND NLPC/WBC

12.27 A SoCG between MKC and NLPC/WBC was issued to all appeal parties to the appeal on 31st March 2021 which includes high level technical points of dispute with the Updated TA and TRNs. Some of the topics raised by MKC/NLPC have been addressed earlier in my evidence but under the circumstances, I reserve my position to respond with supplementary evidence, assuming the full technical details will be contained in either Mr McKechnie or Mr Burbridge's Main Proofs.

CONCLUDING COMMENTS

- 12.28 MKC's SoC fails to acknowledge that all technical matters and mitigation had been previously addressed and agreed with MKC planning and highway Officers prior to the refusal of planning permission at the Committee in November 2019.
- 12.29 In discussing matters with Officers at MKC, BCC and their respective consultants earlier this year, it was decided that the data and assessment work should be appropriately updated. Despite this, MKC's SoC suggests that the impacts identified in the 2015 TA, 2016 TA and the Updated TA should be compared, however a true comparison of both the 2016 TA and the Updated TA cannot and should not be made, as the adopted methodologies are quite different as explained in the Updated TA and do not allow for 'like for like' comparison.
- 12.30 I have been in discussion with Mr McKechnie in relation to a number of points of clarification on matters within the Updated TA and TRNs including the traffic data collected in February 2020, the reassignment potential of the Milton Keynes grid road network, and the provision of additional data to assist MKC's review.
- 12.31 My evidence demonstrates a proportionate response to deliver improvements to key infrastructure within the local area that would accommodate the mobility requirements of future residents and the wider community, complying with Plan:MK Policy CT1. Further, my evidence explains that the Proposed Development would minimise the need to travel, promote sustainable modes of travel, improve accessibility and assist in reducing carbon, complying with Plan:MK Policy CT2(A).
- 12.32 Discussions with Officers at MKC are ongoing to reach agreement on the assessment methodology and impact of the Proposed Development to provide a final Statement of Common Ground to the Inquiry.



13 REASON FOR REFUSAL OF PLANNING PERMISSION BY MILTON KEYNES

13.1 The reason for refusal is set out earlier in my evidence but is stated below for ease of reference:

'That in the opinion of the Local Planning Authority there is insufficient evidence to mitigate the harm of this development in terms of increased traffic flow and impact on the highway and Grid Road network, with specific reference to Standing Way and Buckingham Road, thus this will be in contravention of Policies CT1 and CT2 (A1) of Plan:MK.'

PLAN:MK POLICY CT1

13.2 This policy is addressed in more detail in the Updated TA.²⁴³ Policy CT1 Sustainable Transport Network sets out requirements for how the Council will promote sustainable development:

- *'i. Promote a safe, efficient and convenient transport system*
- *'ii. Promote transport choice, through improvements to public transport services and supporting infrastructure, and providing coherent and direct cycling and walking networks to provide a genuine alternative to the car*
- *'iii. Promote improved access to key locations and services by all modes of transport and ensure good integration between transport modes*
- *'iv. Manage congestion and provide for consistent journey times*
- *'v. Promote and improve safety, security and healthy lifestyles*
- *'vi. Continue to engage with relevant stakeholders along the East-West Rail line and Expressway to identify operational benefits, which provide additional support for a more sustainable transport strategy and/or economic growth of the city*
- *'vii. Engage with the National Infrastructure Commission to set in place connections from Central Milton Keynes to surrounding communities, including a fifth track constructed between Bletchley and Milton Keynes Central*
- *'viii. Promote the usage of shared transport schemes in the borough.'*

13.3 Based on the implementation of the proposed mitigation package comprising highway improvements, the enhancement of public transport services and active travel routes, I firmly believe

²⁴³ Updated Transport Assessment, May 2020, WSP, Section 2 (CD10/H/A)



that contrary to MKC's assertion, the Appeal Development and the Proposed Development would fully comply with this policy.

PLAN:MK POLICY CT2

13.4 Policy CT2 Movement and Access requires development proposals to:

'minimise the need to travel, promote opportunities for sustainable transport modes, improve accessibility to services and support the transition to a low carbon future.'

13.5 In regard to planning applications, Policy CT2 states that development proposals will be permitted that:

- *'(A)1. Integrate into our existing sustainable transport networks and do not have an inappropriate impact on the operation, safety or accessibility of the local or strategic highway networks;*
- *2. Mitigate impacts on the local or strategic highway networks, arising from the development itself or the cumulative effects of development, through the provision of, or contributions towards necessary and relevant transport improvements including those secured by legal agreement;*
- *[...]*
- *6. Do not result in inappropriate traffic generation or compromise highway safety;*
- *(B). Development proposals that generate significant amounts of movement or impact on level crossings must be supported by a Transport Statement or Transport Assessment and will normally be required to provide a Travel Plan, with mitigation implemented as required.'*

13.6 I have previously explained the extent of the comprehensive assessment to determine transport impacts. I am of the opinion that, subject to the implementation of the proposed mitigation package, comprising improvements to the local road network, public transport and routes for cyclists/pedestrians as summarised earlier in **Table 10.5** and Section 10 of my evidence, the Appeal Development and the Proposed Development would also comply with policy CT2 (A1) of Plan:MK.

CONCLUDING COMMENTS

13.7 The Proposed Development will deliver a range of transport and highway related improvements that are designed to mitigate impact and also provide wider community benefits. On the basis of my evidence presented to this Inquiry, I believe that the Proposed Development complies with policies



CT1 and 2 of Plan:MK and would deliver a range of infrastructure improvements that would mitigate impacts and provide wider community benefits.



14 REPRESENTATIONS BY THIRD PARTIES

- 14.1 Newton Longville Parish Council and West Bletchley Council (NLPC and WBC) have objected to the Proposed Development from submission of the planning applications in 2015 through the provision of various technical notes and comments to AVDC/BCC and MKC. NLPC and WBC made representations at the MKC Planning Committee in November 2019 regarding technical matters within the 2016 TA which had been discussed at length and agreed with Officers from both MKC and BCC.

NEWTON LONGVILLE PARISH COUNCIL AND WEST BLETCHLEY COUNCIL

- 14.2 NLPC and WBC are afforded 'Rule 6' status at the Appeal and therefore submitted their SoC²⁴⁴ outlining the matters that they will address in their evidence. Various data and supplementary information have been provided to their consultant fulfilling all requests including raw traffic survey data and distribution diagrams.
- 14.3 NLPC & WBC raise concerns in evidence submitted in September 2020 regarding the collection of traffic data during a period when roadworks were in operation to the north west of Milton Keynes. In this regard, the diversion route outlined for the proposed roadworks was not signposted from A421 and had no effect on the traffic data collection exercise, as confirmed by BC in their response to the Updated TA.²⁴⁵
- 14.4 NLPC and WBC also queried the use of Ordnance Survey (OS) mapping to measure geometric parameters for input to the junction modelling. This is standard practice at outline stage, especially on the high speed road network such as A421, where it would be inappropriate for measurements to be taken from the live carriageway.
- 14.5 Matters relating to the modelling of A421 Tattenhoe Roundabout were also raised, including some of the model construction and the potential for 'blocking back' of the queue on B4034 Buckingham Road towards the access into the Proposed Development. To address this point, a further assessment of A421 Tattenhoe Roundabout has been undertaken to refine the part-time signalisation scheme mitigation proposed in the Updated TA and is provided in TRN3.
- 14.6 This subsequent assessment addresses NLPC and WBC's concerns regarding the model construction. It also provides further assurance that an improvement using 'part time' traffic signals

²⁴⁴ NLPC and WBC Statement of Case, August 2020

²⁴⁵ Transport Response Note 1, September 2020, WSP, Appendix A (CD16/A)



would be effective to accommodate peak demand flows as proposed within the Updated TA and TRN3 and thereby avoid any potential queue 'blocking back' towards the Proposed Development access roundabout along B4034 Buckingham Road.

- 14.7 NLPC and WBC have raised concern with the increase in the total journey time along A421 as a result of the Proposed Development. It is not appropriate to simply add together the delay at each junction along the corridor of A421 based on models using the Junctions9 software. Static junction models are not designed to assess a corridor network, and in an unconstrained network, simply adding delay to delay is not representative of the situation that would occur given the distance between the junctions and 'free-flow' time taken to travel along the corridor. Static junction modelling tests a peak hour culminating in the assessment of a peak 15 minute period²⁴⁶; adding together the mean maximum delay for the peak 15 minutes at each junction is incorrect and misleading.
- 14.8 To assist the Inquiry, I contacted Mr Burbridge by email on 31st March 2021 to suggest that we should prepare a SoCG (**MJP28**); hitherto, I have still to receive a reply to this request and confirmation that he would be willing to prepare a Statement prior to commencement of the Inquiry on the 11th May 2021.

WHADDON PARISH COUNCIL

- 14.9 Whaddon Parish Council (WPC) also raised concerns regarding the collection of traffic data during a period when roadworks were in operation to the north of Milton Keynes. In this regard, WPC requested data at the junction of Coddimoor Lane, Stock Lane and Shenley Road from the 2015 and 2020 traffic surveys to allow comparison of flow. The traffic data provided, as contained within the 2016 TA and the Updated TA indicate small variances in flow overall, suggesting that the roadworks that were being completed during the period of my company's traffic surveys (i.e. February 2020) to the north of Milton Keynes did not impact on the junction.
- 14.10 The effect of the diversion due to the roadworks (had it been signed from A421 to take traffic away from Whaddon village), would have been to increase the traffic on A421 through Bottledump and Tattenhoe roundabouts. The assessments contained within the Updated TA, TRN2 and TRN3 would therefore include more traffic than would be 'normal'. Nonetheless, I am of the opinion that the roadworks to the north of Milton Keynes did not affect the traffic surveys and that the data used within the assessments are robust.

²⁴⁶ Junctions9 User Guide, TRL, 2018, Section 8.2.3 (CD13/I)



CONCLUDING COMMENTS

- 14.11 NLPC and WBC have objected to the Proposed Development from submission of the planning application in 2015. NLPC and WBC made representations at the MKC Planning Committee in November 2019 regarding technical matters within the 2016 TA which had been discussed at length and agreed with Officers from both MKC and BCC.
- 14.12 I have provided within my evidence Technical Notes and TRNs to address the traffic data/roadworks concerns and to provide an advancement of the mitigation scheme proposed for Tattenhoe Roundabout comprising peak hour traffic signals to demonstrate that a solution is available which does not cause blocking back of traffic towards the proposed Buckingham Road access roundabout.



15 OVERALL SUMMARY AND CONCLUSIONS

- 15.1 Planning permission for the Proposed Development was originally sought in 2015 from both AVDC (15/00314/AOP) and MKC (15/00619/FUL). Since then discussions with both authorities continued and in June 2017, AVDC resolved to grant planning consent subject to the signing of a s106 Agreement.
- 15.2 Negotiations have progressed between all parties to finalise the S106 agreement, and although the document has not yet been completed, it is at an advanced stage. The duplicate planning application made to MKC was refused planning permission in November 2019. The single reason for refusal referred to the traffic impact of the Proposed Development, notwithstanding the recommendation by planning and highway Officers at the Council that there were no transport grounds for refusing planning permission.
- 15.3 The Updated TA was prepared to update the transport evidence base associated with the planning applications prepared in 2015 and subsequent Regulation 22 submission in August 2016. Scoping discussions were held with Officers at MKC and BCC and their respective consultants and the scope of the Updated TA accorded with the methodology agreed with both authorities at that time.
- 15.4 A review of planning policy at a national, regional and local level relevant to the Proposed Development has been undertaken. This identifies that the Proposed Development accords with a range of policies at all levels, thereby securing a highly sustainable development.
- 15.5 The Proposed Development would access the local road network that leads towards Milton Keynes and M1 in the east and Buckingham and M40 in the west. There is an existing network of footways, PRoW and cycle routes that pass adjacent to and through the Proposed Development.
- 15.6 A review of highway safety indicates that whilst a number of collisions have occurred across the study area, there are no particular patterns/trends that the Proposed Development will materially impact.
- 15.7 The Proposed Development includes the provision of up to 1,855 dwellings (including up to 60 extra care units), an employment area, neighbourhood centre, a primary school and a secondary school. Comprehensive strategies for public transport, walking and cycling are proposed to create a sustainable community that would influence and encourage travel by non-car modes. A separately prepared Framework Travel Plan (the Updated FTP) includes further measures to encourage travel by non-car modes that would be cascaded to more detailed Travel Plans for each of the proposed land uses.



- 15.8 A comprehensive data collection exercise was undertaken in February 2020 to inform the Updated TA. The data collection exercise was completed prior to any travel restrictions being introduced by the UK government associated with the COVID-19 Pandemic. The dataset is representative of typical traffic flows and provides a robust survey of traffic conditions at that time and forms the basis for the highway network assessment contained within the Updated TA.
- 15.9 A worst case assessment of junctions across the local road network has been undertaken that considers the impacts of the Proposed Development on all travel modes during both the construction and operational phases of the Proposed Development. In this regard, the assumptions for growth to 2033 using TEMPro forecasts precede the outbreak of the COVID 19 pandemic and are extremely optimistic. Furthermore, due consideration has been given to impacts on surrounding villages, highway safety and the Strategic Road Network (SRN).
- 15.10 The transport evidence that supports the Draft VALP indicates that there would be some increase in on congestion on the A421 but that the impacts could be addressed in the planning application process.
- 15.11 The mitigation scenario results from the impact analysis contained within TRN2 and TRN3 provide similar conclusions to the Local Plan evidence that supports both Plan:MK and the Draft VALP, but disproportionately identifies the cumulative impact at specific junctions in 2033 due to the nature of the adopted 'static' modelling methodology, which makes no allowance for the redistributive effect that would be derived from a more strategic modelling tool. The impact of the development and efficacy of the mitigation package for the Proposed Development must therefore be considered holistically across the transport network and in conjunction with the aims and targets of the MK Mobility Strategy 2018-2036 (LTP4) and the MK Strategy 2050.
- 15.12 The Inspector presiding over the Draft VALP EiP reported to AVDC (BC) that they should consider the options to increase the allocation for housing in close proximity to Milton Keynes. As a result, AVDC included a Main Modification to the Draft VALP to allocate further development along the corridor of A421 at Shenley Park, given the Inspector's suggestion that the location was appropriate for further development to accommodate envisaged growth to 2033.
- 15.13 A review of highway safety identified that the Proposed Development could have an impact on a small number of surrounding links. However, taking account of the proposed mitigation measures, this impact is not considered to be material and would be acceptable in accordance with paragraphs 108 and 109 of the NPPF, policy CT2 of Plan:MK and policy T4 of the Draft VALP.



- 15.14 The impact on public transport, walking and cycling has been considered in the Updated TA. In this context, the proposed mitigation package comprising improvements to all travel modes will also contribute towards delivering wider community benefits and as such, there are no material impacts envisaged in the future year 2033.
- 15.15 Overall, I consider that both the Appeal Development and Proposed Development comply with:
- Adopted Local Plan policies CT1 and CT2 (A1) of Plan:MK;
 - MKC's Mobility Strategy for Milton Keynes 2018-2036 'Mobility for All' and the Council's Strategy for First Last Mile Travel 2017;
 - The draft allocation for the Proposed Development in the Draft VALP;
 - BC's Local Transport Plan 4 (LTP4); and
 - Section 9 'Promoting Sustainable Transport' of the NPPF.
- 15.16 Subject to the implementation of a comprehensive mitigation package of transport and highway improvements as indicated in **Table 10.5**, the residual cumulative impacts of the Appeal Development and the Proposed Development in 2033 would not be severe and the impact on highways safety would not be unacceptable. In this context, paragraph 109 of the NPPF indicates that permission should not be refused on either highway capacity or safety grounds.



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