TECHNICAL NOTE 5

DATE:	27 July 2022	**CONFIDENTIALITY:**	Public
SUBJECT:	Review of the Transport Evidence that supports the Bedford Borough Council Local Plan 2040		
PROJECT:	Land at College Farm, West of Shortstown	**AUTHOR:**	[redacted]
CHECKED:	[redacted]	**APPROVED:**	[redacted]

1. INTRODUCTION

1.1 This Technical Note (TN) has been prepared to support representations made by Gallagher Developments Ltd (GDL) in support of the promotion of land at College Farm (hereinafter referred to as the Site) to the west of Shortstown, Bedford. This TN considers relevant policies and the technical transport related evidence that supports Bedford Borough Council's (BBC) preferred spatial strategy for the draft Local Plan 2040.

2. BEDFORD BOROUGH COUNCIL LOCAL PLAN 2040

Policy DS2(S) Spatial Strategy

2.1 Policy DS2(S) sets out BBC's spatial strategy to deliver sustainable development and working towards making Bedford a *net zero* carbon emissions Borough. There is particular emphasis at strategic locations adjacent to urban areas and growth locations within the corridor of A421, which includes major transport initiatives including the Black Cat to Caxton Gibbet A428 highway improvement and East West Rail (EWR) Central section between Bedford and Cambridge.

2.2 The policy identifies locations on the EWR/A421 corridor with the potential for rail based growth, including the provision of a new station at Wixams on the Midland Main Line. In this regard, the development of land to the south of Bedford and west of Shortstown would enable the development of a sustainable community with active travel links to the rail network and would make a significant contribution to influencing a sustainable shift in travel behaviour.

Policy HOU12 South of Bedford Area

2.3 The overarching vision for the area south of Bedford is to develop an 'Arc' of leading places of innovation that would include multi-functional green infrastructure and walkable neighbourhoods to maximise the opportunity for low carbon living. In this regard, the area south of Bedford has good connectivity with Bedford and Shortstown and other communities including New Cardington that would be enhanced with the development of the proposed station at Wixams and EWR.

2.4 The promotion of development across the area identified by Policy HOU12 will enable both existing and new communities to be linked by active travel routes, thereby reducing the use of the private car and hence emissions and congestion. In this regard, the development of land at College Farm (draft Policy HOU17), would make a significant contribution towards achieving the Council's vision and would include a transport Mobility Hub that would also be replicated elsewhere across other allocated sites.

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Policy HOU17 Land at College Farm, Shortstown

2.5 Development of the Site presents an excellent opportunity to create a sustainable residential community that would significantly contribute towards the wider South of Bedford Area (Policy HOU12). The Site is ideally placed to enhance the connectivity with the existing communities of Shortstown and New Cardington and establish 'green' linkages with the new Wixams Station further west.

2.6 The 'Key Principles' of development included in the draft policy identify at point (iii) that development of the Site would be dependent on securing the delivery of transport improvements in accordance with *"an agreed Infrastructure Delivery Plan".* In this regard, it is assumed that a bespoke Infrastructure Delivery Plan (IDP) would be agreed with BBC to complement a comprehensive Transport Assessment (TA) that would be submitted to support a subsequent outline planning application. It is noted that this policy does not specifically refer to either BBC's Infrastructure Delivery Plan (IDP) or the IDP Stepped Trajectory which are both discussed later in this TN.

2.7 A TA would assess the impact of the proposed development on the surrounding highway and transport network and also identify appropriate mitigation measures based on a comprehensive analysis using the Bedford Borough Transport Model (BBTM). Sustainable linkages would be identified and planned to maximise the opportunity for sustainable travel.

2.8 A transport Mobility Hub would be provided centrally within the Site and would broadly contain:

- Secure and weather proof bus stops/shelters, with Real Time Passenger Information (RTPI) to accommodate frequent bus services that would probably comprise a new 'start up' service to connect College Farm with the proposed station at Wixams and other local stations in Bedford. The RTPI system would display arrival/departure details of bus services that would serve Bedford town centre, New Cardington and the stations at Wixams, Bedford and Bedford St Johns. Alternatively, a Demand Responsive Bus Service (DRBS) could also be provided to enable local residents to 'call up' a service via an 'App' to suit their travel requirements;
- 'Back to base' Car club Electric Vehicles (EV) and bay(s) (two – three spaces would be provided subject to further discussion with the operator), that could be operated either by Enterprise who recently entered a partnership with Bedford Borough Council to operate a car club in the town centre or a similar operator;
- Either 'one way' shuttle or 'back to base' 'e' bike sharing with access and payment by 'App' and stored securely; 'e' bikes would be provided and located at the Mobility Hub secured in lockable stands. The bikes could be booked either via an 'online' App or directly at the Hub. It is proposed that a similar number would also be provided at the various local stations

including Wixams, Bedford and Bedford St Johns as deemed appropriate. In this regard, each residential homeowner would receive a £500 discount voucher included within their 'Welcome Pack' that could be used towards either the purchase or hire of an 'e' bike from the Mobility Hub. To place this into context, the purchase of a basic 'e' bike would be in the order of £500 -£600 from Halfords (or similar retail outlet), hence the homeowner's discount voucher would broadly cover the initial cost;

- Alternative secure 'e' bike storage facilities at Wixams station to enable an electric 'Brompton' bike to be folded and stored securely in a locker;
- EV Charge Points (EVCPs) would be provided to accommodate fast charging that could be accessed 24/7; *[Note – from 2022, legislation will require that all new homes should accommodate fast EV charging which could also be adapted for 'e' bike charging];*
- Secure pedal cycle stands – either 'Sheffield' type, two-tier or similar, in accordance with BBC's cycle parking policy;
- Bike tyre pump and repair facilities;
- Digital pillar linked to 4G/5G high speed internet connection at the Hub, to provide transport information, public transport ticketing, way finding/distances and information on local services; and
- Covered space to provide weather protection incorporated within the main community facilities, including a café/kiosk (e.g. Costa or equivalent) and delivery lockers to accommodate 'first/last mile' trips and minimise large delivery vehicles having to access residential roads.

3. BEDFORD BOROUGH TRANSPORT MODEL

3.1 The Assessment[1] completed by consultant Aecom on behalf of BBC and confirms that the site allocations have been refined following five iterations of testing using the BBTM. The Assessment considers both initial and final packages of mitigation. It is noted at paragraph 2.2.3 of the Assessment that the 2030 Reference Case assumptions cover six local authority areas.

3.2 Each local authority's assumptions have been provided and incorporated into the forecasts adopted in the BBTM. In addition to the land use assumptions, the BBTM considers the potential changes to transport infrastructure from 2018 (i.e. the BBTM base year). In this regard, Tables 2.4 and 2.5 of the Assessment identifies the highway infrastructure schemes that have been included in the 2030 Reference Case and includes inter alia, the A428 Black Cat to Caxton

[1] Aecom: Bedford Borough Transport Model: Assessment of Local Plan Preferred Strategy 2040 – 5 May 2022

Gibbet improvement, Wixams Station and the EWR Western and Central sections; the latter is still awaiting the announcement of the preferred route alignment.

3.3 Table 2.6 in the Assessment identifies the initial mitigation measures that have been tested using the BBTM including inter alia, the widening of A421 between the junctions of A421/A6 and A421/A603 Cambridge Road and shuttle bus links between the new rail stations at Wixams and Broadmead. WSP understand that following a further review of the Local Plan 2040 Preferred Strategy, BBC proposed further changes to the mitigation measures identified by Table 2.6, including inter alia, improvements to the junctions of A421/A600, A421/A603 and A421 Marsh Leys.

3.4 The final mitigation measures BBC consider necessary to accommodate the envisaged demand of the Local Plan growth are identified in the Assessment in Table 2.7. In this regard, the following points are relevant and significant to the delivery of infrastructure to the south of Bedford:

i) The widening of A421 between A6 and A603 is programmed to open by 2030. To ensure delivery, National Highways (NH) would need to include a preferred scheme in the Roads Investment Strategy 3 (RIS3) 2025-30, for implementation during the Roads Period 3 (RP3) 2025-30. In this regard and notwithstanding NH's approach to *'Monitor and Manage'*, WSP understand that BBC and NH are currently discussing the various options as part of a wider feasibility review;

ii) Improvements to the junction of A421/A600 are proposed and programmed to open by 2030. This includes the installation of peak hour traffic signals on the northbound approach on A600 leading towards the southern roundabout of the existing 'dumbbell' junction. In this regard, given the level of uncertainty over future growth projections, WSP propose that a *'Monitor and Manage'* approach would be more appropriate. Any scheme to introduce traffic signal control at the junction of A421/A600 must be considered in conjunction with NH's wider initiative to potentially widen A421 to dual three lanes between the junctions of A421/A6 and A421/A603;

iii) Improvements to the junction of A421/A603, which includes the signalisation of the access to/from Priory Business Park. Table 2.7 indicates that the proposed improvement would be opened by 2040; however, WSP consider that the potential impact of traffic delays at that junction and potentially on the mainline A421, should also be considered by NH as part their proposal to widen A421 by 2030.

3.5 The final and fifth iteration of the Assessment using the BBTM reflects further updated assumptions around the potential site allocations and revisions to growth forecasts that were developed by BBC in April 2022. WSP understand that the fifth iteration of modelling using the BBTM includes almost an additional 14,000 dwellings and just over 10,000 jobs by 2040, in addition to the growth assumed in the 2030 Reference Case.

3.6 The Assessment acknowledges and identifies that further mitigation is required on A421 to the south of Bedford to address the forecast levels of peak hour congestion. This is a matter previously raised by NH in their evidence to the Black Cat to Caxton Gibbet Development Consent Order (DCO) Examination where they indicated that at this stage, they would adopt a *'Monitor and Manage'* approach as previously indicated when considering the impact of traffic growth on the corridor of A421. In this regard, WSP consider this to be an appropriate response to the Examination by NH and is supportive of this position given the level of uncertainty with future forecasts of vehicle growth.

3.7 Figures 7.19 and 7.20 of the Assessment show the forecast location and scale of the average junction delays in the 2040 Local Plan scenario, including mitigation measures, in the AM and PM peak periods respectively. In this regard, A600 and the junction of A421/A600 performs well during the peaks with minimal delays. The average delay during the peak AM/PM periods in 2040 across the wider highway network within vicinity of the Site are acceptable and would not be considered severe in the context of the National Planning Policy Framework (NPPF).[2]

3.8 In this regard, Figures 7.25 and 7.26 indicate the 2040 average Volume/Capacity (V/C) ratios during the AM/PM peak periods and indicate that key junctions surrounding the Site will operate with minimal delay and congestion with average V/C ratios of 75-85% during the AM peak period. Figure 7.26 indicates that the average V/C ratio would vary between 85-95% at the westbound merge on A421 during the peak PM period, which is indicative of the demand on A421 further west.

3.9 The Assessment confirms that with the planned mitigation phased over the Local Plan period, as indicated by the IDP Stepped Trajectory, which is discussed later in this TN, that the cumulative transport impact of the Site at College Farm with some 1,000 dwellings as an integral part of the Preferred Strategy for the Local Plan 2040, would be acceptable and would not result in either significant delay or congestion.

4. INFRASTRUCTURE DELIVERY PLAN

4.1 The Infrastructure Delivery Plan (IDP) prepared by Aecom on behalf of BBC forms part of the evidence base for the Preferred Strategy draft Local Plan 2040 and identifies the infrastructure requirements to meet the level of growth across the Borough in a sustainable manner. This TN

[2] NPPF, paragraph 111, MHCLG, July 2021

comments on the various transport related commitments in the IDP that are of particular relevance and significance to the Site.

Roads

4.2 The IDP confirms at paragraphs 3.1.17 - 3.1.19 the various spatial distribution scenarios for housing delivery over the Plan period to 2040. At the Regulation 18 'Issues and Options' stage, six development options were outlined as potentially forming part of the growth strategy. BBC derived a number of options from considering combinations of the spatial scenarios and concluded that Option 2b would be consistent with the emerging Local Plan strategy which is supported by the IDP

4.3 Section 4 'Infrastructure Assessment: Transport', sets out the transport infrastructure requirements to support the delivery of the draft Local Plan 2040 for all modes of travel, including the promotion of walking and cycling, public transport, sustainable Mobility Hubs and the implications for vehicle based transport. In addition, the level of proposed mitigation to support the Local Plan growth to 2040 is assessed with a stepped trajectory to identify when transport infrastructure would be required.

4.4 Paragraph 4.3.5 and Figure 4.2 identify the sections of the Strategic Road Network (SRN) within the Borough. A428 Black Cat to Caxton Gibbet is identified as a major transport scheme that is still awaiting a decision by the Secretary of State (SoS) following the recent DCO Examination as previously indicated. This major scheme is identified as 'Project 62' in Appendix C of the IDP and is funded by Government through the Roads Investment Strategy (RIS).[3] The scheme is essential infrastructure that is required to accommodate planned growth in housing and employment through to 2040 and is fully supported.

4.5 At paragraph 4.3.23, the IDP sets out the scheme to improve the Black Cat roundabout further east of the Site and to introduce a new three tier junction that will allow traffic to flow freely on A1 by travelling under the junction with a new dual carriageway for A421/A428 over the junction. In addition, there would be new grade separated junctions at Caxton Gibbet and Cambridge Road that would connect the new dual carriageway to the existing A428.

4.6 The A428 Black Cat to Caxton Gibbet proposal is a major highway scheme that would also include improvements to bridges and existing infrastructure, active travel provision and environment measures and become an important link in the SRN that will also provide greater flexibility and connectivity with the local highway network. The IDP confirms at paragraph 4.3.23 that subject to the SoS approving the DCO application, the project is expected to commence towards the end of the Roads Period 2 (RP2) 2020-25. In this regard, it is recognised that the

[3] Department for Transport, Roads Investment Strategy 2: 2020-2025, March 2020

scheme is seen as critical infrastructure for the region and would accommodate the anticipated future growth in housing and employment to the south of Bedford.

4.7 Other committed and planned schemes that are key to the delivery of BBC's Preferred Strategy are identified at paragraph 4.3.27 of the IDP. Of note are the planned schemes along the corridor of A421 at Marsh Leys further west; the junction of A421/A428, A421/A603 Cambridge Road and Priory Business Park; and A421 widening to dual three lanes in both directions between the junctions of A421/A6 and A421/A603 Cambridge Road. All these highway scheme improvements will assist in overcoming the forecast congestion issues identified through to 2030 and also accommodate the envisaged Local Plan growth in 2040.

Rail

4.8 Bedford Borough is currently served by four stations: Bedford Station, which sits on the Midland Main Line and Bedford St Johns, Kempston Harwick and Stewartby which sit on the Marston Vale Line. Figure 4.15 of the IDP illustrates Bedford's wider connectivity by rail. The IDP recognises at paragraph 4.4.9, that although the Marston Vale Line provides a link between Bedford and Bletchley, there is currently no direct service between Bedford and Milton Keynes Central. The route options for EWR are currently being explored regarding re-establishing a link between Bedford and the East Coast Mainline and further east to Cambridge.

4.9 New and planned rail schemes are essential to enhance connectivity and provide choice in travel mode to influence future behaviour. A new station funded by BBC is planned at Wixams on the Midland Main Line south of Bedford. This will be served by Thameslink services and will cater for the planned growth at Wixams of some 6,000 homes. The EWR Central Section between Bedford and Cambridge (Stage 3), will greatly enhance east – west connectivity between Oxford and Cambridge and will assist in facilitating the growth in housing and employment across the wider Oxford – Milton Keynes – Cambridge Arc.

4.10 In addition, Bedford Station is planned to be redeveloped as part of EWR which would enable Bedford to become a key interchange station. The Central section (Stage 3) of EWR, is described at paragraph 4.4.19 and identified as 'Project 104' in Appendix C of the IDP and would connect Bedford with Cambridge and significantly improve east – west connectivity, with an approximate journey time of some 24 minutes subject to the selected route option.

4.11 As well as improving east – west connectivity, the benefits would be significant across the wider region and at intermediate stations. The scheme is to be funded by Government and would be the subject of a DCO application probably in late 2023. The EWR route is a major infrastructure scheme for the region and will make a significant contribution towards improving east - west connectivity and is fully supported. EWR and Wixams Station would provide greater choice for both existing communities south of Bedford and future residents on the Site.

Bus

4.12 Bus services are explained in some detail in Section 4.5 of the IDP. It is recognised that Bedford is the main transport hub within the Borough and is well connected with regional/local bus routes. Figure 4.16 and Table 4.2 of the IDP indicates pre-Covid bus services and frequencies. This suggests that services around Shortstown operated with a greater than 30 minute frequency, although this frequency increases further to the west around Wixams and in Bedford urban area.

4.13 In 2021, BBC published a bus strategy for the Borough, the 'Bus Service Improvement Plan' (BSIP). The BSIP sets out the gaps in the existing network and identifies a number of initiatives which are set out at paragraph 4.5.9 of the IDP. The details of bus schemes in Bedford to support the 2040 Local Plan growth are identified in the IDP Project Schedule, Appendix C of the IDP. In this regard, based on data from the National Trip End Model (NTEM), there is expected to be a 10% increase in bus trips in Bedford Borough between 2020 and 2040.

4.14 To mitigate the impact of the 2040 Local Plan growth, in addition to committed and planned scheme improvements, the IDP sets out a range of initiatives indicated by way of 'Projects 108 - 117'. These include, inter alia improvements to bus infrastructure, bus priority at traffic signal controlled junctions and provision of new 'start up' services which are supported and seen as integral to providing a fully integrated sustainable package to accommodate the envisaged Local Plan growth.

Active Travel: Walking and Cycling

4.15 Over 15% of residents in the Borough travel to work either by walking or cycling, whereas the regional average is 14% as indicated by paragraph 4.6.2 of the IDP. Paragraph 4.6.4 and Figure 4.17 of the IDP illustrate the most significant cycle flows in and around the Borough. The main concentrations are around the existing urban areas, with significant flows of cycling commuters within and beyond the borders of the Borough and noticeably to the south of St Neots. The network of Public Rights of Way (PRoW) is also extensive across the Borough which provide access for leisure base trips but also support other trip purposes.

4.16 Parts of the National Cycle Network (NCN) provide inter connectivity across the Borough including NCN51, identified at paragraph 4.6.7 of the IDP, which is a long distance cycle route that runs east – west and connects Colchester and the Port of Harwich in the east to Oxford in the west via Bury St Edmunds and Cambridge. The route provides a strategically important link through Bedford, Kempston and further west through Marston Vale towards Milton Keynes and east linking with Willington and Sandy via the emerging Bedford River Valley Park. NCN12 is another long distance route as identified by paragraph 4.6.8 and Figure 4.18 of the IDP. The route extends through the villages of Great Barford, Roxton and Chawston in the east of the Borough. NCN12 and NCN51 connect at the River Great Ouse to the east of Willington.

4.17 It is understood that BBC is currently preparing a 'Local Cycling and Walking Infrastructure Plan' (LCWIP) in response to Government's National Strategy for Walking and Cycling. This initiative is identified as project 120 at Appendix C of the IDP. In this regard, there are a number of active travel schemes that reflect the future ambitions of the Council that will be included in the emerging LCWIP, including: i) improvements to an adjoining the Bedford Cycle Network; ii) Cycle infrastructure within and connecting to outlying villages and the creation of a northern section of the 'Outer Green Wheel'; iii) enhancement of NCN51 and iv) improvements to and along the 'Green Wheel'.

4.18 The vision for the Bedford 'Green Wheel' is to develop and enhance the existing network of traffic free paths and routes around the Bedford urban area for use by pedestrians, cyclists and where possible equestrians. Although the route is cyclable, some areas will require upgrading as indicated by Figure 4.20 of the IDP. BBC also has wider plans to improve the pedestrian and cyclist access and connectivity across A421 at major crossings. As a general principle, the promotion of active travel initiatives to enhance the connectivity between the Site, Bedford, and other development areas to the south of Bedford is fully supported.

4.19 In addition, the Express Cycleway between East Bedford and Little Barford is described at paragraph 4.6.14 and identified as project 123 in Appendix C of the IDP. The route would provide an alternative travel corridor and potentially incorporate NCN12 between east Bedford and Little Barford and would link the proposed new Settlement with adjacent areas including Great Barford, Willington and Roxton.

4.20 The principle of providing the Express Cycleway would enhance connectivity between Bedford urban area and the proposed new settlement further to the east and make a significant contribution towards active travel measures across the wider region to the south of Bedford. The principle of providing this route and local connections is fully supported but would require significant funding from various sources, including Government, EWR and adjacent settlements.

4.21 To support the promotion of active travel measures, BBC wishes to see the establishment of a network of Mobility Hubs throughout the Borough. This would support the decarbonisation ambitions of the 2040 Local Plan and potentially act as the catalyst to create a sustainable shift in personal transport and mobility by supporting a change in behaviour and also provide opportunities for managed shared transport as indicated by Appendix B of the IDP.

4.22 The creation of a network of Mobility Hubs is identified as 'Project 118' in Appendix C of the IDP and would assist in the promotion and use of sustainable, low carbon transport. The proposed Mobility Hub on the Site, as indicated by paragraph 2.8 of this TN, would be centrally located connected by direct and safe pedestrian/cycle routes to community facilities.

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5. INFRASTRUCTURE DELIVERY PLAN: NEED FOR A STEPPED TRAJECTORY

5.1 The BBTM forecasts that several junctions and routes across the Borough would operate over capacity in 2030. In this regard, the PM peak hour (1700-1800) is forecast to present greater levels of congestion compared with either the morning AM peak or interpeak hours. On the corridor of A421 in proximity to the Site, several junctions are forecast to operate with a V/C ratio that either approaches or exceeds 100%. The junctions with the greatest forecast delays are largely found nearer to Bedford town and along the corridor of A421 as indicated by Figures 2-1 and 2-2 in BBC's IDP, 12 May 2022.

5.2 Table 3-1 of the IDP "Need for a Stepped Trajectory" identifies committed and planned transport infrastructure, including the A428 Black Cat to Caxton Gibbet highway scheme, EWR Central section Bedford to Cambridge and Wixams Station. WSP agree with BBC, that these schemes would effect large scale improvements to strategic and regional infrastructure and help provide capacity for Local Plan growth. Table 3-1 also includes transport schemes that have been informed by the assessment of various growth options using the BBTM and include inter alia, widening of A421 to dual three lanes to the west between the junctions of A421/A6 and A421/A603 Cambridge Road, in addition to improvements to many of the junctions along the corridor of A421 as previously indicated.

5.3 The delivery of transport schemes will be influenced by a number of factors including the scale of the improvement, location, planning permission, stakeholder consultation and above all funding. In this regard, the BBTM assumes that both the A428 Black Cat to Caxton Gibbet highway scheme and EWR Central section would be implemented and fully operational by 2030. Notwithstanding, the Secretary of State's decision on the A428 Black Cat to Caxton Gibbet DCO application and the announcement of the preferred route for EWR, WSP consider that delivery by 2030 would be achievable with robust project management and as such, both transport schemes should be available to accommodate the envisaged 2040 Local Plan growth.

5.4 BBC explain that in the absence of site specific modelling of transport impacts, the exact nature of the relationship between transport infrastructure schemes and the proposed growth cannot be fully determined and is largely based on professional judgement; this is noted at Section 5, paragraph 5.3 of the Stepped Trajectory. In this regard, WSP understand that sites with a capacity of at least 500 dwellings and 500 jobs have been selected to test the dependency of the larger sites with appropriate mitigation. Table 5-1 of the IDP Stepped Trajectory identifies the Site at College Farm (Site ID 81) as a large 2040 Local Plan development site with a capacity of 1,000 dwellings.

5.5 The dependency between the Site (and other sites) and transport infrastructure is explained in paragraphs 5.6 – 5-12 and presented at Table 5-2 of the IDP Stepped Trajectory. The Table is a matrix that colour codes the dependency of large development sites with major transport infrastructure schemes. A red cell with a number '2', indicates that BBC judge that a transport infrastructure scheme directly supports the delivery of a specific development site and is considered that it would be highly unlikely that a development could be brought forward without the associated transport scheme being in place either prior to or at the early development phases.

5.6 A yellow coded cell with a number '1' in Table 5-2 indicates that the implementation of a transport infrastructure scheme is judged to indirectly support development of a site. This would assume that a site could be brought forward without the associated transport infrastructure scheme, although it is noted that the transport scheme in question would still support delivery of a specific site. In this regard, although WSP do not disagree with the process adopted by the Council to evaluate the dependency of the various large development sites on the implementation of transport infrastructure, it is important to recognise that in most instances where there is an indirect relationship it would be more reasonable to assert that where sites are colour coded yellow and marked '1' in Table 5-2, the transport scheme in question would *assist* in supporting the delivery of the site.

5.7 The Council has identified that development and delivery of the Site at College Farm would be directly supported by the proposed improvements to the junction of A421/A600 which includes the introduction of peak hour traffic signals on the northbound approach of A600 leading towards the southern roundabout of the dumbbell junction. Although it is recognised that some peak hour delay and congestion may be forecast in 2040 at that junction, WSP is of the opinion that a *'Monitor and Manage'* approach should be adopted, in conjunction with the wider and more extensive improvements to widen A421 between the junctions of A421/A6 and A421/A603 Cambridge Road.

5.8 The implementation of an improvement to the junction of A421/A600 should not prejudice either the commencement or the full occupation of dwellings on the Site. Given the general uncertainty of future forecasts of traffic growth, the adoption of a *'Monitor and Manage'* approach would be consistent with the current views of both NH and BBC and any future highway scheme to improve the junction should therefore be assessed as part of the more extensive proposal by NH to widen A421 between the junctions of A421/A6 and A421/A603 Cambridge Road.

5.9 BBC also identify in Table 5-2 of the Stepped Trajectory, that the widening of A421 between the junctions of A421/A6 and A421/A603 Cambridge Road is colour coded yellow with a '1' and indirectly supports the development of the Site at College Farm. However, WSP is of the opinion that much of the demand on A421 to the west of the junction with A600 is a function predominantly of natural background growth on the mainline A421 and traffic generated by other development areas to the west and east of the Site.

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5.10 WSP consider that the widening of A421 to a dual three lane carriageway in each direction between the junctions of A421/A6 and A421/A603 Cambridge Road would only *assist* in supporting the development and delivery of much needed housing on the Site. Such a major scheme improvement to widen A421 would therefore need to be promoted and funded through Government's RIS for implementation during the subsequent Roads Period 3 (RP3) 2025-30. Given the general uncertainty over future traffic growth forecasts, it would be essential to coordinate and implement any potential improvements to the junction of A421/A600 with the wider, more comprehensive scheme to improve A421 between the junctions of A421/A6 and A421/A603 Cambridge Road.

6. RECOMMENDATION

6.1 WSP broadly support BBC's Preferred Strategy for the Local Plan 2040 but recommend that further consideration is given to adopting a *'Monitor and Manage'* approach in considering the necessity for peak hour traffic signals at the junction of A421/A600. Any such improvement should therefore be considered in conjunction with the wider scheme for the potential widening of A421 between the junctions of A421/A6 and A421/A603 Cambridge Road and should not prejudice either the implementation or full occupation of the proposed development on the Site at College Farm.