

## Land North of Cambridge North Station Milton Avenue Cambridge

22/02771

### TRANSPORT ASSESSMENT TEAM COMMENTS

**REF:** 2053 **CASE OFFICER:** Fiona Bradley  
**AUTHOR:** Tam Parry  
**DATE:** 22<sup>nd</sup> February 2023

#### HEADLINE

**No Objection subject to Mitigation Package:** Sufficient detail has been presented to make a sound assessment. The development is able to proceed on the basis of a first phase of buildings S4, S5, S6 and S7 followed by a monitor and manage approach for buildings S8 and S9.

**Mitigation Required:** The following obligations/conditions are required to make the development acceptable in planning terms and have been agreed with the applicant:

- A total Transport Contribution based on the floor area of 65,000sqm and 425 dwellings and the amounts as advised in the IDP of £13,465,000.
- A strategy to monitor and manage trips to and from the site
- Progression beyond the extent of the full application be subject to monitor and manage.
- Mitigation at the A14 / A10 interchange
- Measures to ensure that residents of the housing are retained as being car free.
- Mobility Hub – Car Club and Bike Scooter Provision obligation to deliver
- On Site cycle routes, pedestrian crossings and traffic calming obligation to deliver
- Cambridgeshire Guided Busway works to remove vehicle traps
- Cowley Road highway improvement works obligation to deliver.
- Monitoring of local parking and contribution of £75,000
- Wayfinding scheme to be agreed and obligation to deliver
- Public transport information to be agreed and obligation to deliver.
- Enhanced bus shelter provision at Cambridge Station obligation to deliver.
- Multi storey car park and car parking management strategy obligation to deliver.
- Improvements to existing lighting on Station Square and Milton Avenue.
- Travel Plan

It is recognised that if the Total Transport Contribution sought cannot be secured, then in our view it would compromise the wider comprehensive development of the area as sought through the Local Plan. The failure to secure sufficient funding through developer contributions will not allow sufficient transport intervention to be implemented such that the traffic impact for the area as whole can be mitigated.

**Proposal Description:** Details provided

**Masterplan and Connectivity:** Details provided

<b>Study Area:</b> Accepted	
<b>Trip Generation:</b> Details provided	
<b>Distribution and Assignment:</b> Details provided	
<b>Junction Modelling:</b> Not required	
<b>Mitigation:</b> To be agreed.	

## Background

These comments are further to a Transport Assessment provided by PJA Transport Consultants as part of an application for 425 residential dwellings and 53,700sqm of commercial floorspace for Use Classes E(g) i (offices), ii (research and development), with an enlarged car park and mobility hub. The first 27,600sqm of commercial floorspace of this development is a full application, with the remainder outline and subject to reserved matters.

These comments are further to comments dated 7<sup>th</sup> September 2022 and additional information supplied by the applicant.

The planning statement refers to a total of 53,700sqm of commercial floorspace, and the Transport Assessment refers to a total of circa 65,000sqm of commercial floorspace. The application form refers to the full application being 78,812sqm and the outline application being 38,400sqm (total development floorspace of 117,212sqm). It is not clear whether all of these different figures relate to each other, and whether the figure used in the Transport Assessment is up to date. For these comments the figure used in the Transport Assessment are used.

This site forms part of the North East Cambridge Development Area and as such must be considered in the context of the wider aspirations for the area as set out in the Area Action Plan and emerging developer-led Transport Strategy. It is noted that the consultant working on behalf of this site has had some considerable input into the Transport Strategy.

It is noted that the Local Plan Policy SS/4 requires developments provide high quality and comprehensive transport solutions.

## Approach to Development

CCC has published a Transport Position Statement dated February 2022 which lists several development principals for new development in the NEC area. These principals are best suited to an existing development site that is being intensified, as it details that developments should not increase the peak hour vehicle trips on the network. This approach is not relevant for this site, as there is no development at the moment.

For the purposes of the transport work on this application the NEC AAP has been assumed as being in place. This is because this development is within the AAP area, and as noted above is new development on undeveloped land. For the AAP area as a whole, each development area has been assigned a vehicle trip and parking budget. This application has sought to keep within both of these budgets, which is consistent with the approach were the NEC AAP fully approved.

The AAP approach to transport is set out in the Transport Evidence Base (TEB) report dated June 2020. This sets out a trip budget approach for the vehicle trips generated by the combined developments within the NEC AAP. This also assumes that the vehicle flows on Milton Road

are kept very similar to those surveyed in 2017. The trip budget approach assumes that whilst new development will generate new vehicle trips, that existing development will reduce their vehicle trips and mode share, because they are able to make use of new transport infrastructure that is coming forward in the area.

As a result of the work undertaken in support of the Area Action Plan, this development whilst generating a significant number of vehicle trips, has not been required to model the impact of these trips on the highway network and to undertake junction capacity assessments, (as would usually be done), to ascertain whether this would result in a significant impact on the highway capacity. This is because this work has already been done as part of the Transport Evidence Base. This found that the NEC AAP development will have a severe impact on the surrounding highway network, unless a holistic trip budget approach is undertaken.

On the basis of the above CCC agrees with the findings of the Transport Assessment and the additional information supplied.

### **National Policy Context**

Comment 1 Reference is made to the relevant transport policies including the Transport Evidence Base for the NEC AAP.

### **Existing Local Transport Network**

#### Walking and Cycling Routes

Comment 2 The applicant highlights that there are footway and cycleways along the CGB, Cowley Road and Milton Avenue leading between Cambridge North station and Milton Road.

Comment 3 The site is near to the proposed Waterbeach Greenway which links Waterbeach with Cambridge North Railway station, and onwards onto the Chisholm Trail for journeys to central and south Cambridge, or the rest of the Cambridge City cycle network.

Comment 4 It is noted that the cycle route on Milton Avenue and Station Row will merge with that for the spatial plan, and could form a link between the Waterbeach Greenway route and the Chisholm Trail routes. The applicant has not made direct reference between the routes provided in the masterplan and the routes within the spatial framework plan and the movement and connectivity plan for the wider area as set out in the North East Cambridge Area Action Plan.

#### Local Public Transport Services

Comment 5 This is noted to be the Citi 2 and Busway B services serve the site with a bus stop that is outside Cambridge North Station. These provide peak hour services to and from Ely, St Ives, Cambridge centre and Addenbrookes Hospital.

Comment 6 Cambridge North has rail services connecting to and from Kings Lynn, Norwich, Cambridge, Stanstead Airport and London, with the Midlands and Bury St Edmunds connected via interchange at Cambridge and Ely.

### Local Roads

#### Existing Traffic Conditions

Comment 7 The TA details the surrounding road network, and details that Milton Road between the site and Cambridge is subject to improvement works to provide cycle lanes and bus lanes.

Comment 8 The TA has considered the latest 60 months' accident record together with an analysis of any trends or clusters. The extent of the area considered is agreed. This notes that there have been 24 accidents within the study area in the last five years, with most of these recorded as slight. Most of the accidents are on Milton Road which is subject to the improvements outlined above.

#### **Site Access and Layout**

Comment 9 Please refer to Highways Development Management comments for the highways access and layout. Changes are proposed to the Cowley Road junction with Milton Avenue, the Link junction with Milton Avenue, as well as the cycle lane along Milton Avenue.

Comment 10 It is noted that the site contains several walking and cycle routes, that link across the site and northwards towards the undeveloped land, as well as Cowley Road.

#### **Car Parking**

Comment 11 The applicant proposes a mobility hub with 725 parking spaces, of which 622 are to be provided for rail users, comprising the current provision of 428 spaces and an additional 194 spaces that may be required by the rail operator. The additional 103 spaces comprises 20 for the Novotel, and the remaining 83 for the commercial development. This will provide the existing surface car park, as well as the expected additional 194 spaces required for the railway station should it be needed. CCC is not convinced that the railway station will require the additional 194 spaces, due to the likely future switch away from the car for trips in the Cambridge area.

If it is not needed, then the parking will be used for the current and future phases of commercial development. This is counter to the overall aims of the AAP area development which seeks to minimise car parking, It could also lead to other developments in the NEC AAP area not being able to come forward due to the trip budget being used by this development, . A method of control will be needed

in the S106 to ensure that the 194 spaces are not permanently used for the commercial developments and can be given over to rail uses as and when required.

The total amount of parking expected for the railway station was noted to be 600 in the Transport Assessment for the railway station.

- Comment 12 The applicant also proposed to provide a further 417 spaces in addition to the mobility hub within the basements of the buildings. This gives a total provision of  $83 + 417 = 500$ . With the additional 194 spaces to be reallocated in the future this gives a total provision of 694 spaces. This is within the parking budget for the area of 873 spaces. For the commercial element this represents a parking ratio of 1 parking space per 130sqm of floorspace based on a development quantum of 65,000sqm of commercial development and 500 spaces, and 1 space per 94sqm with 694 spaces. This provision is in line with the parking ratios as set out in the NEC AAP.
- Comment 13 As part of the NEC AAP each development area has been assigned a parking budget. This has been set to guide the NEC AAP development, as the overall trip generation which within the NEC area could be linked to the amount of parking provided. This area has been set a parking budget of 873 spaces between the residential and commercial land uses, which has been accepted by the applicant.
- Comment 14 The residential development is proposed to be car free, with only parking for disabled residents and visitors.
- Comment 15 A method will be required within the leases, tenancy agreements or contracts for the 425 dwellings to ensure that residents are not able to bring a car to the site, unless permitted by the managing body. A method will also be needed to ensure that a controlled parking zone in the surrounding area can be implemented if required.

### **Cycle Parking**

- Comment 16 A total of 2191 cycle parking spaces are provided, with the amount set at the cycle parking standards of one space per 30sqm of commercial development. This is with a mixture of provision of 20% Sheffield stands, 10% for non-standard cycles and 5% at street level. This is recommended to be agreed.
- Comment 17 The commercial buildings will also include lockers, showers and changing facilities which will enable and encourage employees to cycle to and from work.
- Comment 18 The cycle parking for the dwellings would be provided with one space per bedroom. The parking will be in secure cycle stores, located close to the street

or central garden. These should be close to the entrances to each of the buildings. The details can be agreed at the reserved matters stage, and the principals set out are recommended to be agreed.

### **Forecast Trip Generation and Distribution**

- Comment 19 The applicant outlines the trip budget that has been suggested for this development area in table 5.1. The trip budget allows 214 arrivals in the AM peak and 182 departures in the PM peak. This is also referred to in Table 2.10 of the published High Level Transport Strategy for the NEC AAP. This trip budget has been accepted by the applicant.
- Comment 20 The approach taken to the vehicle trip generation for the site is taken from the amount of available car parking on the site. The office trip generation profile is taken from the North East Cambridge Transport Evidence Base and is agreed. The laboratory trip profile is taken from the University of Cambridge Department for Material Sciences and Metallurgy trip profile, with a sensitivity test based on Peterhouse Technology Park. The assessment assumes that the car parking is 2.5% full at 0700 with a peak occupancy of 85% of the parking. This is as per the NEC Transport Evidence Base Report assumptions and is agreed.
- Comment 21 The ground floor uses around the site are assumed to support the wider office and residential developments or the local area, and no allowance of trip generation for these sites has been made. This is agreed.
- Comment 22 The trip generation for the dwellings has been taken from the Transport Evidence Base and the mode shares from adjusted census data. The residential development is a car free development, and so there are very few forecast car trips to and from the development. This is agreed.
- Comment 23 Applying the above methodology and the additional car parking (611 spaces for commercial uses) the trip generation is proposed to be 171 arrivals in the AM peak with 18 departures, and 174 departures in the PM peak with 21 arrivals. This is within the trip budget for this site. When the slightly higher trip rates are applied for the lab sensitivity test this shows that the trip budget is very slightly exceeded in the AM peak arrivals and PM peak departures.
- Comment 24 If parking in the surrounding residential areas remains uncontrolled, there could be the potential for employees to drive to the surrounding area and park, and then walk into the site. The heads of terms allow for a contribution towards a Controlled Parking Zone in this area should it be required. Some employees could also drive to Milton Park and Ride and then travel by public transport for the last mile to the site.

## Mode Shift

Comment 25 The applicant has undertaken some more detailed work on the potential for mode shift and has projected that the eventual mode shares will be broadly similar to the mode shares at CB1 adjacent to Cambridge Station. This supports the assertion by the applicant that CB1 can be used as a guide for this location.

Comment 26 Table 4.2 details that this will vary with district as different areas have varying potential to switch modes. Overall the non-car driver mode shares assume that 19% of trips will be by train, 8% are walk or run, and 25% are cycle.

The applicant also projects that 55% of those living in the area will work in Cambridge City, 34% within South Cambridgeshire and only 10% working further afield. All of these trips will be by non car modes as there is no car parking provided for these dwellings. 48% are projected to cycle, 23% by bus, 15% by train and 12% on foot.

Comment 27 The applicant has considered where people currently live and where they might live in the future, and what mode of travel they can use, and applied this to the approximately 3000 new jobs that are being created in Appendix C, This picks out that changes in population are due in the Chesterton and airport areas of the City, and within Northstowe and Waterbeach in particular in South Cambridgeshire. Overall this shows that of the future employees, 27% will live in the City, 39% in South Cambridgeshire and 34% in other districts. Analysis has also been undertaken on how mode shift can occur from each area to enable the development mode shift targets to be met.

Within the City the car driver mode share is projected to fall from 37% in the 2011 census to 5%. Bus use is projected to increase from 6% to 16%, and cycling increasing from 42% to 51%. The bus mode share across the City is in line with some of the higher areas of bus use, to reflect increased bus use of the Citi 2 route and that enabled by the improvements to Cambridge bus services. The cycle mode share is also increased to reflect the improved connectivity offered by the Chisholm Trail, Madingley Road, Milton Road as well as other works within the City to improve cycle routes.

Within South Cambridgeshire the car driver mode share is projected to fall from 78% to 34%. Bus use is projected to increase from 2% to 17%, and cycling increasing from 9% to 25%. The bus mode share is in line with the expected improvements to several key bus corridors to Cambourne, Waterbeach and Cambridge Airport. The cycle mode share is also increased to reflect the improved connectivity to South Cambridgeshire from the 12 radial Greenway routes, as well as work within the City to connect these routes to the Chisholm Trail and to improve cycle routes within the City.

Travel by train represents the largest proportion for trips from outside of the area with a projected mode share of 39%. Overall train travel is projected to represent 19% of trips to the site. This is slightly below the proportion for CB1 and reflects the lower train frequencies and destinations that are served by Cambridge North.

This evidence suggests these positive changes to reducing car driver mode share can be made subject to the successful delivery of the appropriate transport infrastructure, and the corresponding changes in behavioural patterns. This strategic transport includes measures to improve bus services as part of the making connections, the new busways to Cambourne and Waterbeach, as well as the dozen greenway cycle routes, completion of the Chisholm Trail and other improvements to cycle routes within Cambridge City.

Comment 28 There will need to be ongoing monitoring of the trip budget to ensure that vehicle trips to and from this development do not exceed the trip budget for this site. The Monitoring Strategy and the Travel Plan that supports the application will need to consider how travel enhancements and demand management measures can be used to assist the site to meet its trip budget, and what measures may be needed if there is an exceedance in the trip budget.

### **Capacity Assessment**

Comment 29 It is noted that National Highways has not requested that the flows are tested at the A14 interchange with the A10. However, they have requested that the monitoring strategy monitors vehicles travelling through the interchange and queue lengths are monitored on the off slips, as well as a potential contribution being required for mitigation at the junction should this be required.

### **Proposed mitigation and Accessibility**

Comment 30 The Transport Assessment (para 6.4.4) identifies several measures that could benefit the site and would enable the site to achieve its high non car mode share. Some of these measures are also outlined within the NEC AAP Transport Evidence Base. CCC have been working with the applicant with regards to the Heads of Terms for the S106.

Comment 31 The Infrastructure Delivery Plan (IDP) is part of the suite of documents that make up the proposed submission of the NEC AAP. This document details the transport infrastructure that is required to enable the Area Action Plan to come forward in a way that would enable trips to and from the area to be by non car modes. The IDP also sets out the approximate cost of this infrastructure and the overall amount of financial contribution which should be sought from developments within the NEC AAP for the wider transport infrastructure for the NEC area.



The transport infrastructure in the IDP is largely based on the infrastructure requirements listed in the Transport Evidence Base. Whilst the developer consortium for the NEC area has been working on this list to update it, this work has not yet been concluded.

The development is expected to increase the number of pedestrian, cycle and public transport trips to the site, and the Transport Evidence Base determines that with the additional infrastructure in the area that is identified within the Infrastructure Delivery Plan, then it is possible for the development in the AAP to be bought forward.

Appendix 1 of the proposed submission AAP notes that the total floor area for the NEC AAP is planned to be 188,500sqm, with 23,500sqm within the Chesterton sidings area of this application location. This application is on a part of the Chesterton sidings area and is for 65,000sqm, or approximately 34% of the total planned development of office and lab within the whole AAP area.

CCC therefore consider that whilst the IDP is a useful guide as to the level of investment into transport infrastructure that is required, to enable the AAP and any additional development over and above this to come forward. However, its key limitation is that it is focused on the infrastructure detailed in the TEB.

The analysis by the applicant on the population growth in the surrounding area, and the ability for future employees in the City and South Cambridgeshire districts to switch from car driving bus and cycling highlights that the very low car drive mode share is possible in this area. However, this does mean that this development is dependant on strategic transport infrastructure outside of what is set out in the IDP to come forward, to enable employees from the wider area to use the bus and cycle to and from the site.

The GCP's investment programme is over subscribed, and with the rapid increase in construction costs, it currently highlights that there is a risk to its delivery programme. This therefore presents a risk to the NEC AAP area, as without the GCP transport infrastructure, it may in the future not be possible to keep within the trip budget if development continues over and above the projected amount in the AAP. It is therefore imperative that sufficient developer funding is not only secured to allow the core AAP interventions to be delivered, but, also allows for the increased requirements of a higher development quantum.

In summary it is recognised that if the IDP contribution sought below cannot be secured, then it would compromise the wider comprehensive development of the area as sought through the Local Plan. The failure to secure sufficient funding through developer contributions will not allow sufficient transport intervention to

be implemented such that the traffic impact for the area as whole can be mitigated.

CCC supports development as long as the transport infrastructure that supports it is in place to enable the very low car drive mode share. It would therefore seek the following measures contributions to be made by the applicant in order to mitigate the impact of the development related trips on the surrounding transport network. These are based on the Heads of Terms that are being developed with the applicant and area as follows:

#### S106

- A total Transport Contribution based on the floor area of 65,000sqm and 425 dwellings and the amounts as advised in the IDP of £13,465,000. This includes elements for Local, Internal and Strategic infrastructure as defined within the Transport Evidence Base. The proportions of each to be determined in conjunction with the planning authority.
- A strategy to monitor and manage trips to and from the site
- That development beyond the extent of the Full application be subject to agreement of an updated Transport Assessment not proceed unless written approval is given by CCC.
- A sum to be used for mitigation at the A14 / A10 interchange to be taken from the Local element of the Total Transport Contribution.
- Measures to ensure that residents of the housing are retained as being car free.
- Mobility Hub – Car Club and Bike Scooter Provision obligation to deliver
- On Site cycle routes, pedestrian crossings and traffic calming obligation to deliver
- Cambridgeshire Guided Busway works to remove vehicle traps and introduce enforcement cameras – obligation to deliver or contribution. To be taken from the internal element of the Total Transport Contribution.
- Cowley Road highway improvement works obligation to deliver. To be taken from the internal element of the Total Transport Contribution. The amount to be determined with the City Council and applicant.
- Monitoring of local parking and contribution of £75,000 to be taken from the local element of the Total Transport Contribution.
- Wayfinding scheme to be agreed and obligation to deliver

- Public transport information to be agreed and obligation to deliver. To be taken from the internal element of the Total Transport Contribution.
- Enhanced bus shelter provision at Cambridge Station obligation to deliver. To be taken from the internal element of the Total Transport Contribution.
- Multi storey car park and car parking management strategy obligation to deliver.
- Improvements to existing lighting on Station Square and Milton Avenue. To be taken from the internal element of the Total Transport Contribution.
- Travel Plan including a commitment to undertake additional travel plan measures should there be an exceedance in the trip budget.