

80 dwellings, Digital Park, Station Road, Longstanton

S/3854/19/FL

TRANSPORT ASSESSMENT TEAM COMMENTS

REF: 1764 **CASE OFFICER:** Kate Poyser

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DATE: 28th October 2021

HEADLINE

No Objection subject to Mitigation Package: Sufficient detail has been presented to make a sound assessment.

Indicative Mitigation: The mitigation package should be as follows:

- To agree a Travel Plan using Smart Journeys as the Travel Plan coordinator as a condition
- condition for the design of access points to the CGB to be approval by CCC prior to construction
- condition requiring the replacement of the existing shelter for the southbound bus stop located opposite no.2 Station Road, to include bus stop cage road markings.
- To ensure connectivity to the north, west and south for walking and cycling.
- Installing a new 3.5m wide footway along the site frontage to connect to the Endurance Estates footway.
- Undertake a review signal settings for junctions of Stirling Road and Pathfinder Way in agreement with CCC.
- Contribution of £34,000 towards the improvement of connectivity between this area and Northstowe.
- Contribution of £86,000 towards new and improving cycle routes in the surrounding area.
- Contribution of £45,000 towards the Cambridge Guided Busway capital cost.
- Contribution of £11,000 towards bus stop shelter maintenance.

Proposal Description: Accepted

Study Area: Accepted

Traffic Data: Accepted

Trip Generation: Trip rate is agreed

Distribution and Assignment: Agreed

Assessment Scenarios and Traffic Growth: Agreed

Junction Modelling: Agreed

Mitigation: Agreed by the applicant

Background

These comments are further to a Transport Assessment provided by EAS Transport Consultants as part of an application for up to 80 dwellings on land adjacent to Cambridge Guided Busway on Station Road B1050 Longstanton.

These comments are further to comments dated 23rd June 2021 and additional information provided by the applicant.

National Policy Context

Comment 1 Reference has been made to the Northstowe Area Action Plan, the Local Plan of 2018 and the Cambridge City and South Cambridgeshire Transport Strategy.

The site is within the Northstowe AAP area, and so this site should facilitate transport connections within the wider town. The site bounds onto phase 3b as well as the Cambridge Guided Busway (CGB) and B1050.

Existing Local Transport Network

Walking and Cycling Routes

Comment 2 The applicant highlights that there is no footway on the west side of the B1050 between the CGB and further to the south. This spans the site frontage and also land to the south of the plot which is within the Northstowe AAP area.

The provision of a footway / cycleway along site frontage of the B1050 is welcomed. This should extend along the whole of the frontage and connect to a similar provision for the Endurance Estates application to the south. The details of this path should be agreed with Highways Development Management.

Comment 3 The site is a crossing place between phase 3B of 1000 dwellings and enables a link between phase 3B and Longstanton Park and Ride and into Northstowe, via the CGB crossing of the B1050. Residents of this site will also need to access the local centre which lies to the south at The Green by making use of the footways alongside the B1050.

Local Public Transport Services

Comment 4 The site is within 450m from Longstanton CGB stop and 100m from the nearest Citi 5 bus stops which are located on the B1050 to the north of the CGB crossing. The Citi 5 is a two hourly service with limited infrastructure at these bus stops.

The applicant proposes to improve the bus stop shelter for the southbound bus stop. However, due to limited verge at the existing location of the bus stop it is not possible to locate a bus stop shelter at the northbound bus stop.

Local Roads

Existing Traffic Conditions

- Comment 5 The vehicle flows recorded at the junctions of the B1050 with the CGB, the site access and the Park and Ride junctions on 6th February and 15th May 2019. These dates are agreed. The higher flows from May have been used in the junction modelling.
- Comment 6 The applicant has reviewed the latest accident data that is available. The conclusions of the analysis is agreed. The application related flows are not expected to significantly increase the accident risk in the area.

Site Access and Layout

- Comment 7 Please refer to Highways Development Management comments for the highways access and layout.
- Comment 8 The revised site layout does now accommodate a direct desire line between the access point to phase 3B and the B1050 at its junction with the CGB. This will be much easier to use as it is segregated from traffic and has a 3m wide shared use path. This change to the layout is welcomed and will help this site and phase 3B connect much better to the rest of Northstowe via the CGB.

An access to the shared use path alongside the CGB is also possible from the north west corner. It is noted that the applicant has been in contact with the manager of the CGB to ascertain what the design requirements are for this connection.

The circular path along the south of the site connecting to the adjacent land and the B1050 is appropriate. This will also allow a future walking and cycling connection between this plot and the Endurance Estates land to the south, as well as to the path on the west side of the B1050.

- Comment 9 The government has suspended the use of shared surface spaces in public spaces. Accordingly CCC will only adopt shared surfaces which serve small cul de sacs of around 12 dwellings. Accordingly the area marked shared key focal spaces on the movement parameter plan will require careful design and consideration in the fullness of time. This has been discussed with Highways Development Management Team.
- Comment 10 It is noted that the cycleway on the parameter plan does not extend the full extent of the site frontage. However, this is shown on the access detail plan in an appropriate manner and is secured by a suggested Grampian condition.

Connections between developments

- Comment 11 This development with Northstowe Phase 3B and the development land to the south have worked together to update and coordinate their movement strategy.

This plot provides for a walking and cycling and emergency vehicle access to Phase 3B to the west, and to the Endurance Estates plot to the south. These connections align with the movement parameter plan for phase 3B. The principals of these connections are agreed. There should be no barriers in place for these connections to be made.

Parking

Comment 12 The provision of car and cycle parking will be in accordance with the Local Plan. This is agreed, however, there should be a requirement for the cycle parking to be located as convenient as the car parking at the reserved matters stage.

Forecast Trip Generation and Distribution

Comment 13 The applicant has applied a vehicle trip rate of 0.384 departures in the AM peak for houses and 0.191 departures for flats using TRICS. In the PM peak vehicle trip rates of 0.347 inbound for houses and 0.183 for flats are used. With the mix of 42 houses and 32 flats this results in a trip generation of 23 outbound vehicles in the AM peak and 22 inbound vehicles in the PM peak. This equates to a similar trip rate to that applied to the Northstowe Phase 3 application and is therefore appropriate.

Comment 14 The applicant has applied 2011 census journey to work data and derived a distribution of 84% south and 16% north. This is agreed and results in the majority of vehicles leaving and approaching towards the A14.

Traffic Flow Scenarios

Comment 15 The applicant has modelled the Cambridge Guided Busway, the proposed site access at the Park and Ride junction, and the junctions of Stirling Road and Pathfinder Way with the B1050. The following scenarios modelled are agreed.

- 2019 baseline;
- 2019 baseline with application flows;
- 2036 baseline with committed developments including Northstowe Phase 3;
- 2036 with committed developments and application flows.

The CGB, site access with John Henry and the Park and Ride access are modelled as a linked linksig network. The site access has also been modelled as a priority junction.

Comment 16 The flows modelled give a worst case scenario of the possible flows at this location. Southbound traffic in the AM peak is controlled by the signals in

Willingham to the north. The maximum possible amount of traffic that can reach these junctions from these signals is lower than the flows that have been modelled. As a result the results reported below in the AM peak are considered to be worst case scenarios which are not likely to occur.

Comment 17 The base junction models have been validated against observed queue data and this is agreed.

Comment 18 The forecast base year flows in 2036 have been taken from the Phase 3A TA and are agreed. Northstowe phases 1, 2 and 3 with Rockmill End in Willingham and the Endurance Estates application are included as committed developments. The applicant has forecast an increase in busway use in accordance with TEMPRO traffic growth. This is agreed.

Comment 19 Table 6.11 in the TA demonstrates that the CGB busway junction operates within capacity in 2019 and 2036 with and without the development traffic. The development traffic results in very little change to the Degree of Saturation and queue at the junction.

The site access junction for traffic exiting the site operates within capacity in both 2019 and 2036 with and without the development traffic in both the Linsig and PICADY models. The right turn into the site has a maximum queue of 4 vehicles in the AM peak, an increase of 1 vehicle to the existing use of the site access junction. In the PM peak the right turn queue is 1 vehicle which is the same as the existing use.

The park and ride junction operates within capacity in 2019 and 2036 with and without the development traffic. The development traffic results in very little change to the Degree of Saturation and queues at the junction.

Comment 20 The model results indicate the queues are not expected to form up to the site access junction from either the CGB crossing to the north in the PM peak, or the park and ride junction to the south in the AM peak. This is agreed.

Comment 21 The applicant has modelled the B1050 junctions of Pathfinder Way and Stirling Road with Northstowe Phase 3 traffic flows and the traffic generated by both Digital park and Endurance Estates applications.

In the future year scenario with Northstowe phase 3 and the traffic from these applications, the junctions will operate over capacity on the southbound arm of the B1050 in the AM peak. As a result of these two developments in the AM peak the DoS increases from 115% to 122% on the southbound arm of the junction with Stirling Road. When Northstowe Phase 3 traffic is added to these flows, the DoS increases 133% in the AM peak and 92% in the PM peak.

The applicant proposes to change the signal timings at the junctions. This mitigation reduces the DoS to 113% with the two developments, and to 124% with Northstowe phase 3 traffic. Adjusting the signal timings mitigates the impact of the proposed traffic at this junction, not considering the lower flows referred to above.

Travel Plan

Comment 22 The applicant proposes to use Smart Journeys as the Travel Plan Coordinator for this site. This is appropriate, and will allow the residents to benefit from travel plan measures being applied to Northstowe phase 1.

Comment 23 Further comments on the travel plan will be made when it is submitted for approval as a condition, should approval be given.

Mitigation

Comment 24 The following mitigation package is considered to be essential to mitigate development and has been agreed by the applicant. This is detailed below.

Conditions

- Travel Plan to be agreed prior to occupation. This Travel Plan to include using Smart Journeys as the Travel Plan coordinator;
- That the design of access points to the CGB to be approval by CCC prior to construction;
- That the applicant undertakes works to replace the existing shelter for the southbound bus stop located opposite no.2 Station Road, to include bus stop cage road markings. The details of the proposed bus shelter and works should be agreed with the Local Highway Authority with the S278 agreement to be agreed prior to occupation, with the works to be undertaken as part of a S278 agreement.
- The developer must submit a scheme in accordance with the co-ordination document providing for connectivity walking/ cycling/ emergency access to the north west and south, without encumbrance or intervening land.
- That the applicant implements a new 3.5m wide footway along the site frontage to connect to the Endurance Estates footway, should approval be granted. The path to be provided along the entire length of the site frontage to Station Road between the existing guided bus signals to the north and the adjoining land to the south, and to include the diversion or culverting of any drain along the frontage as necessary, in accordance

with details to be submitted. The details of the works should be agreed with the Local Highway Authority with the works to be implemented prior to occupation, and to be undertaken as part of a S278 agreement.

- To facilitate shared use walking and cycling on the existing footway on the eastern side of the B1050 between the site access and the park and ride access.
- Undertake a review of signal settings and make any changes required for the junctions of Stirling Road and Pathfinder Way in agreement with CCC.

S106

- Contribution of £34,000 towards the improvement of connectivity between this area and Northstowe.
- Contribution of £86,000 towards new cycle and improving cycle routes in the surrounding area.
- Contribution of £45,000 towards the Cambridge Guided Busway capital cost.
- Contribution of £11,000 towards bus stop shelter maintenance to be passed to Willingham Parish Council.