

**Application no: 21/01630/OUT**

**Location:** Land at North West Bicester Home Farm, Lower Farm and SGR2 Caversfield

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## Transport Schedule

**Recommendation:**

**Objection for the following reasons:**

- The application seeks to bring forward the full development ahead of the A4095 diversion. The traffic assessment provided shows that this would have a severe congestion impact on the local network, and the proposed mitigation would make queueing worse on Lords Lane.
- The number of dwellings proposed to access onto Charlotte Avenue is too high, given the narrow width of this road in places at its northern end. Without mitigation, there is a risk of footways being overrun as vehicles attempt to pass one another, with consequent risk to the safety of pedestrians, and deterioration of attractiveness for sustainable transport.
- The need for improvements to cycle provision on Braeburn Avenue, as a result of vehicle traffic generated by the development, has not been addressed.

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

<b>Contribution</b>	<b>Amount £</b>	<b>Price base</b>	<b>Index</b>	<b>Towards (details)</b>
Highway works 1	47,289	Dec 2020	Baxter	Improvements to junction of Charlotte Ave/B4100
Highway works 2	278,330	Dec 2020	Baxter	Improvements to junction of B4100/A4095
Ped/cycle infrastructure	362,465	Dec 2020	Baxter	Improvements to cycle route between site and town centre/stations
Public transport services and infrastructure	696,118	Dec 2020	RPI-x	Improvement of bus services and infrastructure at NW Bicester
Travel Plan	2,832	Dec 2020	RPI-x	Monitoring the travel

Monitoring				plan over its life
Public Rights of Way	50,000	July 2021	Baxter	New public right of way and improvements to public rights of way in the vicinity of the site
Ped/cycle bridge	<b>TBC</b>			The provision of a pedestrian/cycle bridge over the watercourse into the adjacent site to the west

Other obligations (ones previously not specified are in italics):

- *A contribution towards alterations to the Elmsbrook spine road to mitigate the impact of the development - amount to be agreed.*
- Proportionate contribution to Major Infrastructure costs (primarily the strategic link road/A4095 realignment through the NW Bicester allocation), *plus a proportionate share of the cost of the new railway bridges, which were forward funded from Homes England HIF funding. Additionally we are required to seek a Network Rail shared value payment.*
- Off site highway works as set out in our previous response
- Vehicular and ped/cycle connections into Elmsbrook and the adjacent site - *a commitment to provide a connection to the boundary and allow access across the boundary.*
- Participation in North West Bicester Bus Forum
- Measures to ensure the delivery of the ped/cycle bridge - *in addition to the contribution, a license will be required to allow others access to the site in order to construct the bridge.*

Justifications for contributions were provided in our previous response.

Conditions are as set out in previous responses. A specific condition is recommended regarding the construction access off the B4100 layby. Given the changes required to the layby, it is not considered sufficient to cover this in a Construction Traffic Management Plan.

### **Construction access**

The development shall not commence on any phase until full details of construction accesses and haul routes serving that phase including position, layout, drainage, gates, signage and alterations to the adjacent highway including the B4100 layby have been submitted and approved in writing by the Local Planning Authority and the works have been completed in accordance with the approved details.

## Key points

- The amendment includes a Technical Note (Velocity TN007) which seeks to address our objections and concerns.
- It includes an assessment of the Howes Lane/Bucknell Rd/Lords Lane junction, testing the impact of the full development coming forward before the A4095 is realigned under the new railway bridge. This shows a severe impact, and the proposed mitigation would partially improve, but partially worsen the situation, with no overall benefit.
- It includes further assessment of the Elmsbrook spine road, concluding that the narrow section of Charlotte Avenue is suitable for the development traffic proposed to use it. I disagree with this conclusion and consider there is a risk of vehicles overrunning the footway. The assessment does not address my point previously raised about the lack of cycle facilities on Braeburn Avenue.
- A revised parameter plan has been submitted, removing the word 'potential' from the pedestrian and cycle connections to adjacent sites.
- Concern has been raised for the safety of pedestrians, especially from Elmsbrook, accessing the public footpath which leads southwest from the B4100 layby, immediately north of the proposed haul route.

The note seeks to address my previous objections as follows:

### **Assessment of the traffic impact in the absence of the A4095 realignment**

A further technical note (Velocity TN006 – A4095 Interim Improvement) has been attached to TN007, seeking to address this issue through the introduction of a mini roundabout at the junction of Bucknell Rd and Howes Lane, to increase traffic capacity. To assess the performance of the existing junction arrangement at Howes Lane/Bucknell Rd, which is the critical junction, the applicant has created a model of the junction using industry standard TRL Junctions 10 software. Turning movement counts from recent (2022) surveys were input to the model, and the results confirmed that the junction is currently operating over capacity.

There is a discrepancy between observed and modelled queues, which suggests that there may be issues with some of the parameters in the model. However, the Technical Note presents an argument that it is a reliable model for predicting how the current junction would perform in 2026.

The applicant has carried out an assessment of the existing junction using traffic flows provided by OCC from a revised 2026 reference case of the Bicester Transport Model, as requested. This new reference case assumes that the A4095 realignment is not

open to traffic in 2026, which is a realistic scenario since the loss of external funding arrangements for the scheme. The BTM flows were input into the Junctions 10 model. The Junctions 10 output attached to the technical note shows that in 2026, the current junction arrangement would be very significantly over capacity, with a queue of 193 vehicles on Bucknell Rd/Lords Lane in the morning peak and 112 on Howes Lane in the pm peak.

Adding the proposed development traffic shows a predicted significant increase in queueing and delay at the junction, giving rise to queues of 340 vehicles on Lords Lane in the morning peak. This would block junctions upstream, leaving them unable to function effectively.

A model of the proposed mini roundabout junction was also created in Junctions 10, and was tested using the 2026 reference case flows, and then with the development trips added. This would appear to improve performance in the am peak, but in the pm peak, while it reduces queueing on Howes Lane, queues on Bucknell Road/Lords Lane would be significantly worse queueing compared to the existing arrangement. The scenarios can be compared between the 'summary of junction performance' tables in Attachment B (existing arrangement) and Attachment J (Mini Roundabout mitigation). This is acknowledged in paragraph 3.7.7. The predicted pm peak queue of 208 PCU's (passenger car units) would stretch further than the quoted 1,196m, as this only allows 5.75m per PCU. Parts of the queue would be more spaced out than this, which means the back of the queue is very likely to reach or extend across the Banbury Road junction.

Based on the modelling, therefore, we would not consider the mini roundabout to be effective mitigation for the impact of the development. It would be unacceptable to introduce a scheme which significantly worsens queueing on the network to the north.

I also do not consider that the mini roundabout would offer a significant benefit for pedestrians and cyclists. While the eastern footway under the railway bridge would be widened along some of its length, there would be a pinch point of 1 metre on the western side. Given that the vehicle tracking shows HGVs driving tight to the kerb, and the fact that the path is alongside a wall, this is a serious deterioration in conditions for pedestrians and could be considered unsafe. Losing this stretch of footway would inconvenience users from Lords Lane accessing the Aldershot Farm Bridleway by forcing them to walk past the mini roundabout to cross Bucknell Road and then Howes Lane.

Also the vehicle tracking shows that the southern kerblines and footway is likely to need to be moved to accommodate vehicle movements and prevent conflict between movements at the Howes Lane arm.

Given the unsuitability of the proposed mitigation, it is necessary to consider the impact of the development on the current junction arrangement, which as set out above, I

consider to be severe, and therefore the Highway Authority would continue to recommend that the full development does not go ahead prior to the opening of the realignment of the A4095.

Scenarios with lesser quanta of development at the site could be tested, but given the already serious congestion predicted by 2026, it is only likely to be considered acceptable to allow a small amount of development, if that gives rise to only a marginal additional impact.

### **Congestion impact at junction of Charlotte Ave and B4100**

The Technical Note acknowledges that there would be an adverse impact on this junction, and argues that by agreeing to make the requested contribution towards improvements at the junction, appropriate mitigation has been offered. On the basis of the acknowledgement of the issue, and the confirmation that the contribution is agreed, I can remove this objection.

### **Assessment of Elmsbrook Spine Road**

The Technical Note refers to drawing 4600-1100-070 Rev A included at attachment B, but this is actually an attachment labelled B, that follows attachment J. As stated in my response from January 2022, I do not consider it appropriate to extrapolate from DMRB TA 77/99 and come to the conclusion that a 4.1m wide road has sufficient capacity for 482 one way and 804 two-way flows over an hour.

The proposed additional 207 dwellings, over and above the 52 dwellings currently accessed via these narrowings, present a significant increase in likelihood of cars passing lorries, and therefore a risk to the safety of pedestrians due to vehicles overrunning the footway, when considering that 4.1m is insufficient for a car to pass an HGV. In my opinion this stretch of the spine road is not suitable for the levels of traffic proposed to use it. I reiterate that the number of dwellings proposed to access onto Charlotte Avenue should be reduced to help mitigate this. Additionally a contribution should be made towards minor improvements on Charlotte Avenue to protect pedestrians from overrunning vehicles.

Paragraph 2.4.10 states that the level of cycle demand makes it suitable for cycling to be on carriageway in accordance with LTN 1/20. I agree this is suitable for the traffic volumes on this section of Charlotte Avenue, between the school and the bus gate. However, in my previous response I highlighted a need for segregated provision in Braeburn Avenue, where traffic volumes are higher, and this point has not been addressed.

### **Pedestrian/cycle connections through to adjacent sites**

I note that the Access Parameter Plan has been updated to show pedestrian and cycle connection points to adjacent sites as 'Pedestrian and cycle connection – subject to adoption and/or future development proposals beyond the boundary'. I am satisfied with this because it has removed the word 'potential'. It is acknowledged that a connection can only be made into the adjacent site if permission is granted by the other party to allow access across the boundary or if this is achieved by adoption. We would require a clause in the S106 legal agreement requiring the connection to be made to the boundary and for access to be permitted across the boundary from the site.

Regarding the footbridge, the contribution is welcomed, but further technical work is required to assess the topographical survey and proposed bridge layout and cross section and demonstrate that the contribution would be sufficient. Further discussion is required between OCC and CDC on this, as the bridge is likely to be within open space, and unlikely to be adopted by OCC.

**Other points**

- The updated site access arrangement drawings are acceptable subject to technical audit.
- The applicant agrees to points raised in relation to proposed construction access. An additional point has been raised regarding safe pedestrian access to the public footpath leading southwest from the layby, immediately north of the haul road. This will need to be considered in the design.

**Officer's Name: Joy White**

**Officer's Title: Principal Transport Planner**

**Date: 11 May 2022**