

UPDATE TO OXFORDSHIRE COUNTY COUNCIL'S RESPONSE TO CONSULTATION ON THE FOLLOWING DEVELOPMENT PROPOSAL

District: Cherwell

Application No: 17/02534/OUT-3

Proposal: OUTLINE - The construction of a business park of up to 60,000 sq.m (GEA) of flexible Class B1(a) office / Class B1(b) research & development floorspace; parking for up to 2,000 cars; and associated highways, infrastructure and earthworks

Location: Land North Of Bicester Avenue, Garden Centre, Oxford Road, Bicester.

Response date: 21st August 2018

This update details the findings of an independent assessment of the applicant's transport modelling (see full report at Appendix 1), responds to points made in a letter from the applicant to CDC dated 8th August 2018, and responds to points raised in CDC's Planning Committee report. All points in OCC's previous responses continue to apply.

OCC continue to object on highway grounds as the Transport Assessment does not adequately assess the impact of the development or demonstrate that it can be adequately mitigated.

In order to make an informed decision, it is recommended that Members defer this application until such time that evidence is available to determine whether or not it is possible to overcome the highway objection.

In summary:

Transport Modelling

- Independent assessment of the applicant's LinSig signalised junction modelling has concluded that there are a number of inaccuracies that *"create an unacceptably high margin of error, meaning that the results could not be relied upon"*. This indicates that the development could have a greater impact on the highway network than originally envisaged.
- With the highway mitigation proposed, the Lakeview Drive junction provides insufficient capacity for the whole development. It does not appear possible to increase the capacity of this junction within the highway boundary any further than already proposed. Given that access is not a reserved matter this needs to be resolved before a decision can be made by CDC's planning committee.
- To provide sufficient capacity for the entire quantum of development proposed, it is likely that vehicles would need to be diverted away from the A41 by a scheme such as the South East Perimeter Road.
- To establish how much development could be carried out at the site without causing a severe impact on the highway network (prior to the SEPR or scheme of similar benefit being in place), errors with the modelling would need to be corrected and further tests would be needed.

Points raised by the applicant in letter to CDC dated 8th August 2018

- The applicant's comments primarily relate to S106 contributions. OCC reiterate that, while there is no agreement on the contributions, the reason for the highways objection is because **the Transport Assessment does not adequately assess the impact of the development or demonstrate that it can be adequately mitigated.**
- The main concern raised by the applicant is viability. If the above objection relating to highway impact can be overcome, S106 contributions can be negotiated with the aid of an open book viability assessment if necessary post any committee resolution to grant permission.
- Under 'Infrastructure Needs', bullet point 2 of Bicester Policy 4 explicitly requires: "Contributions to improvements to the surrounding local and strategic road networks." To not collect a strategic transport contribution from this development would undermine the Local Plan and set an unacceptable precedent.

Points raised in CDC's Planning Committee Report

- It is stated at paragraph 8.14 that OCC's response was only received only a few days prior to the deadline for writing reports. To clarify, our response of 7th August 2018 was a revised response to the amended transport assessment submitted by the applicant. OCC's original response was submitted 27th February 2018.
- OCC understand that CDC have appointed an independent transport consultant to review this application. The remit of the consultant is unclear. If any further evidence is provided, OCC respectfully request adequate time to review this. Members are urged not to accept any conclusions of the independent planning consultant without OCC reviewing and responding to them first. It is particularly concerning that at paragraph 8.15 of the committee report it is suggested that CDC will be using the independent transport consultant's advice rather than the Local Highway Authority's.
- OCC have highlighted in previous responses that the applicant's transport modelling assumes a higher junction capacity than the accepted industry standard, thus underestimating the transport impact of the development. Paragraph 8.9 states that third party advice has been sought on this, specifically on the appropriate threshold above which signalised junctions stop being considered to operate within capacity. Further technical detail on this is provided on pages 7 and 8 below. Notwithstanding this, the fact remains that as currently modelled the results already show that the mitigation scheme is not adequate in terms of the resultant queueing.
- Paragraph 8.6 discusses the access to the development, but only considers the off-highway roundabout junctions on Lakeview Drive from which the Office Park would take access. This interpretation of 'access' is also reflected in the conclusion at 8.16. Access onto the highway network is in fact at the junction of Lakeview Drive and the A41, and, as highlighted in our response, the Highway Authority considers the impact of the development on queueing at this junction to be severe, and that it is very uncertain as to whether there could be a suitable mitigation scheme that could be delivered within the highway boundary. As stated in paragraph 8.6, the means of access is to be considered as part of this application, and the principle of the development depends upon the access being acceptable.

- Paragraph 8.9 states that “OCC considers the... modelling within the TA to be robust.” However, as stated in this update, we have found significant inadequacies with the LinSig modelling which suggest that the results could underestimate the traffic impact.

Detailed comments are provided below.

Officer's Name: David Flavin

Officer's Title: Senior Planning Officer

Date: 21st August 2018

Transport Schedule

This update details the findings of an independent assessment of the applicant's transport modelling, responds to points made in a letter from the applicant to CDC dated 8th August 2018, and responds to points raised in CDC's Planning Committee report. All points in OCC's previous responses continue to apply.

Recommendation:

Objection for the following reasons:

- The Transport Assessment does not adequately assess the impact of the development.
- As predicted in the Transport Assessment, the proposed development would have a detrimental impact on the existing network which the proposed mitigation would not adequately mitigate. The proposals are therefore contrary to Local Plan Policy (including Policy Bicester 4: Bicester Business Park, and Policy SLE 4: Improved Transport and Connections) and the Local Transport Plan.

Transport Modelling

Independent assessment of A41/Oxford Road LinSig modelling (see Green Signals Consulting Ltd report at Appendix 1) which was sent to the applicant 17/08/18, has highlighted the following issues:

- The services entry arm (from the Esso filling station and Burger King) on the Esso Junction is a give way lane represented as J2:4/1. This arm has been incorrectly configured as having no opposing lanes – which gives an unrealistically high capacity for this approach
- Matrix estimation indicates that not all turning counts have been entered. Looking at the PM demand flow for the same approach arm (services entry arm of Esso Roundabout), only 98 pcu's were modelled instead of 127pcu's. It is thought that if matrix estimation is being used, this should be completed.
- Lane widths used in the model are incorrect. Where it has been possible to measure lane widths from scale plans, the lane widths used in the calculation of saturation flow appear to be consistently wider than the measured lane widths. This probably won't make much difference to the results (the relative increase in capacity should be the same), as it is incorrect in both the base and proposed models. This however will result in an over optimistic calculation of saturation flows in both models.
- Saturation flows have shown to be generally higher than would normally be. This causes traffic capacity to be over-estimated. Where there is only one lane serving any given destination, the lane should be treated as a nearside lane in the saturation flow calculations. This is because slow vehicles will delay the entire route flow, unlike multiple lane / route choice approaches, where faster vehicles are able to overtake in the offside lane.

- The Oxford Road northbound stream (exit arm) of Pingle Drive/Oxford Road junction (presented as Arm J1:4 in the model) is shown without a pedestrian crossing across it, despite a signalled crossing across southbound. Presently, a pedestrian crossing goes across both the northbound and southbound traffic streams. This modelling inaccuracy is likely to create an artificially higher saturation across the junction.
- Use of lane connectors to allow weaving will allow overly optimistic distribution of traffic flows and allows inappropriate route selection. If/where lanes are not immediately available at the exit of the previous junction, intermediate exit lane lanes may be required to accurately model lane and route choices. Alternatively, route flows may need to be manually set to manage traffic flows on weaving connectors.
- For Controller 1, no controller specification or design has been available to enable us to make a modest check.

The report goes on to conclude that although the modelling results look reasonable, the errors create an unacceptably high margin of error, meaning that the results cannot be relied upon.

Notwithstanding the above points, it is clear that with the highway mitigation proposed, the Lakeview Drive junction provides insufficient capacity for the whole 60,000 m² development. Our response of 7th August 2018 highlighted the unacceptable queueing on Lakeview Drive. Further, it does not appear possible to increase the capacity of this junction within the highway boundary any further than already proposed. Whilst this has not been put directly to the applicant, understanding that the mitigation is not sufficient to meet the Highway Authority's concerns, one would have expected the applicant to come up with an amended or different scheme to provide additional capacity, if this were feasible. To provide sufficient capacity for the entire quantum of development proposed, it is likely that vehicles would need to be diverted away from the A41 by a scheme such as the South East Perimeter Road. To establish how much development could be carried out at the site without causing a severe impact on the highway network (prior to the SEPR or scheme of similar benefit being in place), errors with the modelling would need to be corrected and further tests carried out.

Points raised by the applicant in letter to CDC dated 8th August 2018

Viability

The main concern raised by the applicant is viability. If the above objection relating to highway impact can be overcome, S106 contributions can be negotiated with the aid of an open book viability assessment if necessary post any committee resolution to grant permission. In the meantime, OCC wish to clarify the following points:

Request for contributions

The applicant suggests that OCC's response of 7th August 2018 raised requests for highways and public transport contributions for the first time. This is incorrect. OCC's response of 27th February 2018 stated that "*any new Section 106 or Deed of Variation agreed for this development site will need to maintain the remaining contributions in the existing S106 associated with permission 07/01106/OUT (as varied in November 2013) proportionately to the scale of new development*". The amounts requested in the 7th August 2018 response were calculated using the formula used in the Cherwell Developer Contributions Supplementary Planning Document which was adopted at the end of February 2018.

South East Perimeter Road or scheme of similar benefit.

Under 'Infrastructure Needs', bullet point 2 of Bicester Policy 4 explicitly requires: "Contributions to improvements to the surrounding local and strategic road networks." To not collect a strategic transport contribution from this development would undermine the Local Plan and set an unacceptable precedent. For the avoidance of doubt, OCC would seek to collect from this development towards this scheme. As highlighted above, unless such a scheme is delivered it is unlikely that this development could be fully implemented without having a severe impact on the highway network. The SEPR is a requirement of the local plan and is outlined in LTP4. The scheme has some funding secured and has a preferred route option. The contribution figure of £2,965,186 was calculated using the newly adopted Cherwell DC Contributions SPD. The SEPR is currently on hold pending a decision on the Oxford-Cambridge Expressway which is why the contribution request states: "or scheme of similar benefit".

Robust assessment of the highway network local to the site

As set out above and in our previous response, OCC do not agree that a robust highways assessment has been carried out. The capacity thresholds set out in the TA are not appropriate, there are further errors with the modelling and there is insufficient mitigation proposed. This is particularly important as the junction that provides access to Bicester 4 is one of those causing most concern. Given that access is not a reserved matter this needs to be resolved before a decision can be made by CDC's planning committee.

Public Transport Contributions

As set out in OCC's previous response:

- Bicester Policy 4 requires that "good accessibility to public transport services should be provided for, including the accommodation of new bus stops to link the development to the wider town".
- The walking distance from the site to the northbound bus stop on the A41 is not only in excess of 400 metres from much of the site, but it also requires both carriageways of the A41 to be crossed on foot. While this might be acceptable for 'able bodied' people, not providing a bus service within the recommended walking distance would make employment less accessible for people with walking difficulties. In addition, the arrival times of buses on the main road service from Oxford cannot be predicted with any degree of reliability due to variable traffic congestion.
- The Council wishes to encourage the use of modes other than the car for journeys to work in the Bicester area. The provision of an on-site bus service is seen as being a much more attractive proposition than the long walk, across a busy dual carriageway road to a bus stop with a highly variable bus service. The provision of a guaranteed on-site bus service at journey-to-work times would provide employees with some certainty of departure times.

Strategic Rail Infrastructure

As set out in OCC's previous response:

The extra travel demands arising from this proposal in common with other proposals has led and continues to lead towards the delivery of enhanced rail infrastructure provision, including the East West Rail provision. The extant Section 106 planning obligation for previous proposals at this site made provision to support the enhanced rail infrastructure. Part of the enhancements have been brought forward in advance of individual development growth and as such will be ready to help accommodate the extra transport demands from initial

development occupation. The Local Plan Policy SLE 1 recognises the importance of public transport, such as rail infrastructure in supporting employment development in areas of the district, including Bicester. Policy SLE 4 also identifies that new development will be required to provide contributions towards transport impacts of development and recognises that development should facilitate the use of sustainable modes of transport to make the fullest possible use of public transport etc. OCC's local commitment to contribute to the East West Rail improvements includes a requirement for £11.06m to deliver the improvements. Using the formula the newly adopted Cherwell DC Contributions SPD, the appropriate proportion of that requirement attributable to this development proposal is £670,532.

Points raised in CDC's Planning Committee Report

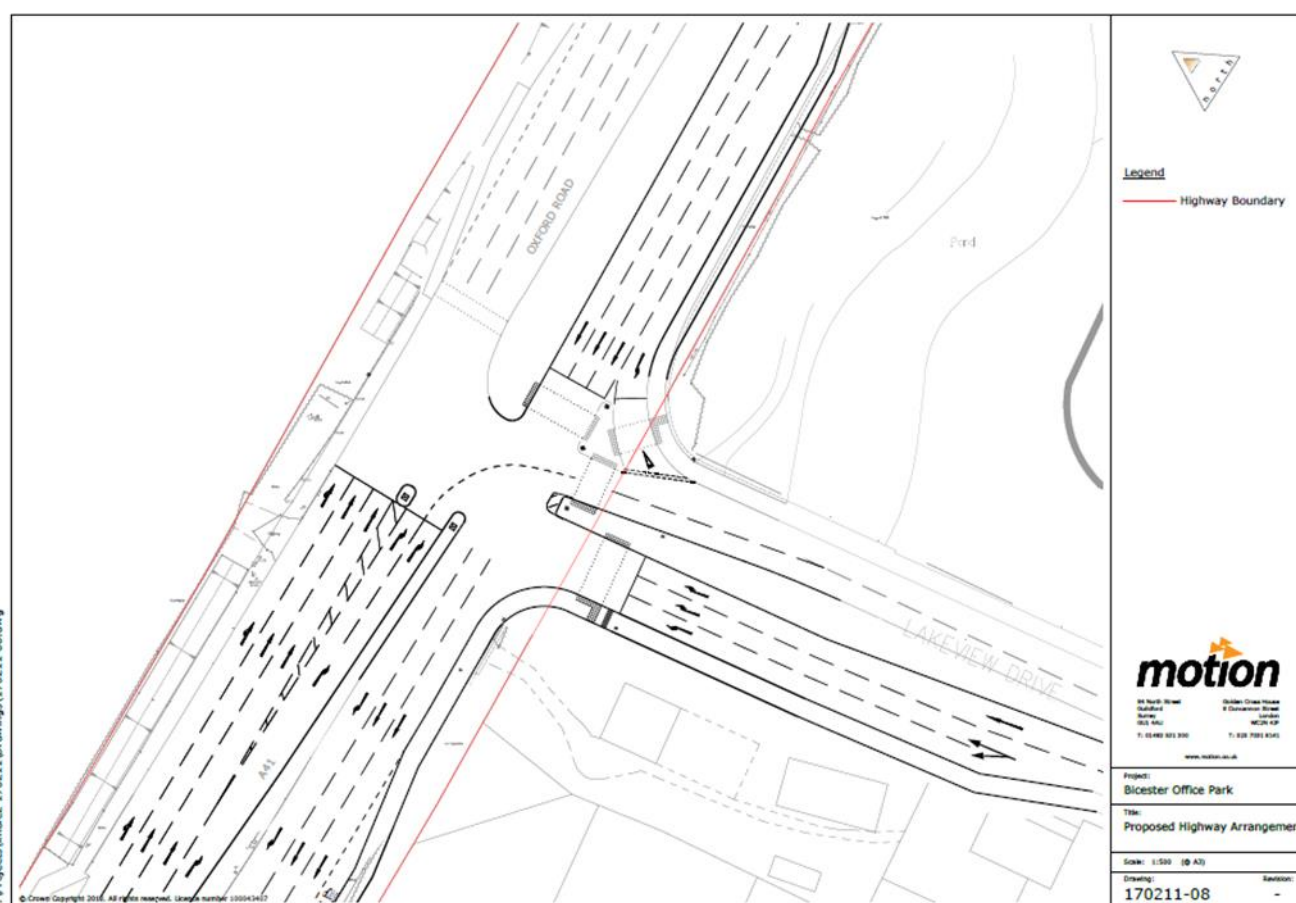
- It is disappointing that OCC's responses of 27th February 2018 and 7th August 2018 have not been briefly summarised under section 6, 'Response to Consultation', or listed as an objection. Instead it is attached as an Appendix. We would like to clarify that, where our latest response is stated as having been received only a few days prior to the deadline for writing reports (paragraph 8.14), this was a revised response to an amendment from the applicant.
- OCC understand that CDC have appointed an independent transport consultant to review this application. The remit of the consultant is unclear. If any further evidence is provided, OCC respectfully request adequate time to review this. Members are urged not to accept any conclusions of the independent planning consultant without OCC reviewing and responding to them first. It is particularly concerning that at paragraph 8.15 of the committee report it is stated that "*Officers therefore cannot recommend the application for approval until such a time as OCC's concerns with regards to the impact on existing junctions are resolved **unless the independent transport consultants conclude otherwise***" [emphasis added]. This suggests that CDC will be using the independent transport consultant's advice rather than the Local Highway Authority's.
- Paragraph 8.9 states that third party advice has been sought on the appropriate threshold Degree of Saturation above which signalised junctions stop being considered to operate within capacity. It is the County Council's firm belief that in the transport industry it is widely accepted that where the Degree of Saturation (DoS) of a link in a LinSig model is shown to operate in excess of 90% DoS, that link is operating over capacity. The following extract from the TfL document "Traffic modelling Guidelines" supports this comment:

2.6.1.4 Junction Performance

It is useful to be aware of the relationship between traffic delay and DoS in order to best optimise junction performance during proposal development. The relationship illustrated within Figure 8 strengthens the considerations outlined in Part A, which highlight the role stable network performance can play in maintaining journey time reliability. Engineers should be mindful that delay begins to increase exponentially above approximately 85% DoS. At junctions operating close to zero Practical Reserve Capacity (PRC), corresponding to approximately 90% DoS, small reductions in capacity can result in a significant increase in delay. For this reason a DoS of 90% represents an upper limit of practical capacity for signalised junctions. Unsignalised junctions typically have a lower practical capacity limit, with DoS in the range 80-85%. Junction capacity relationships are important when designing schemes in order to ensure that new proposals perform capably within the existing network.

Notwithstanding this, the LinSig modelling results for queuing show that the mitigation scheme is not adequate in terms of the resultant queueing. In other words, OCC is not objecting on the basis of an obscure technicality, but on predicted queueing, as paragraph 8.10 goes on to explain.

- Paragraph 8.6 discusses the access to the development, but only considers the off-highway roundabout junctions on Lakeview Drive from which the Office Park would take access. This interpretation of ‘access’ is also reflected in the conclusion at 8.16. Access onto the highway network is in fact at the junction of Lakeview Drive and the A41, and, as highlighted in our response, the Highway Authority considers the impact of the development on queueing at this junction to be severe, and that it is very uncertain as to whether there could be a suitable mitigation scheme that could be delivered within the highway boundary. As stated in paragraph 8.6, the means of access is to be considered as part of this application, and the principle of the development depends upon the access being acceptable. The following plan is copied below to give members an idea of the proximity of the proposed junction to the highway boundary:



- Paragraph 8.9 states that “OCC considers the... modelling within the TA to be robust.” However, as stated in this update, we have found significant inadequacies with the LinSig modelling which suggest that the results could underestimate the traffic impact.

Officer’s Name: Rashid Bbosa / Joy White
Officer’s Title: Transport Engineer/ Principal Transport Planner
Date: 20 August 2018

APPENDIX 1:

A41 - Oxford Road Bicester Linsig Report