

TECHNICAL NOTE

Job Name: Bicester Gateway Phase 1b Residential
Job No: 46463
Note No: 006
Date: 30 April 2020
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Subject: Response to OCC comments 23rd March 2020

Executive Summary

This Technical Note (TN) provides our response to comments raised by Oxfordshire County Council (OCC) on the transport and highway material submitted in support of the Bicester Gateway Phase 1b planning application.

The TN rebuts the objections raised by OCC.

We conclude that points raised by OCC can be addressed, that no objection has been raised to the sustainability of the development, and that the development proposals would not lead to a severe impact on the road network. Therefore the points raised by OCC do not form a reason for refusing the grant of planning permission for the Bicester Gateway Phase 1b proposals.

1. Introduction

- 1.1. This Technical Note (TN) provides our response to comments raised by Oxfordshire County Council (OCC) on the transport and highway material submitted in support of an outline planning application for the redevelopment of the Bicester Gateway Phase 1b site in Bicester (Cherwell District Council's reference: 20/00293/OUT). The OCC comments are set out in a document dated 23rd March 2020.
- 1.2. The comments raised by OCC relate to the following key points:
 - Pedestrian and cycle access proposals
 - Parking
 - Traffic impact assessment
 - Travel Plan.
- 1.3. A response is provided in this Technical Note. The comments raised on the Travel Plan are addressed in outline form here. A revised Travel Plan incorporating the comments made has been prepared and is to be submitted separately to this note.
- 1.4. Overall, the points raised by OCC can be addressed positively:
 - A majority of the comments raised relate to issues discussed and agreed on at the time of scoping the transport and highway assessment work to be produced in support of the application.

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- The nature of other comments seems to attempt to coordinate proposals put forward in support of the Phase 1b scheme and proposals emerging in support of the adjacent Bicester Gateway Phase 2 proposals (Catalyst Bicester). Bloombridge has always been supportive of closer coordination between the Phase 1 and Phase 2 developments at the Bicester Gateway site, but this needs to be done taking fully into account the planning context for these emerging development proposals. This context is clarified in this note as a response to OCC's comments.

- 1.5. This note concludes that points raised by OCC can be addressed and that therefore they do not form a reason for refusing granting planning permission to the Bicester Gateway Phase 1b proposals.

2. Pedestrian and Cycle Access

- 2.1. OCC raise a number of points in relation to the revised Bicester Gateway Phase 1b proposals related to pedestrian and cycle access. These are considered below.

Phase 1 committed infrastructure – Meeting CDC Local Plan policy and delivering improvements

- 2.2. The pedestrian and cycle access strategy put forward in support of the revised development proposals on the Bicester Gateway Phase 1b site is entirely consistent with the pedestrian and cycle access strategy supporting the consented development at Bicester Gateway Phase 1.
- 2.3. In particular, it reflects the committed pedestrian and cycle infrastructure improvements delivered by the Hotel on the Phase 1a site which, at the time (2016-17), had regard for the potential for Phase 2 and the wider policy context, and which include:
- A shared pedestrian and cycle facility along the Phase 1a plot frontage on the A41, providing a direct link to the facilities existing north of the development along the A41 and into Bicester town centre, and therefore connecting to existing and committed employment and retail developments along this corridor, in line with the requirements of the Cherwell Local Plan policy for Bicester 10.
 - A traffic signal controlled crossing of the A41 north of the A41/Vendee Drive roundabout, delivering a safe connection to the network of pedestrian and cycle routes through the Kingsmere development, in line with the requirements of the Cherwell Local Plan policy for Bicester 10.
- 2.4. The extant consent for Bicester Gateway Phase 1b, as agreed with OCC, commits to delivering a further section of upgraded shared footway/cycleway along the entire frontage of the Phase 1b site along the A41:
- This facility would connect to Wendlebury Road to the south of the development using the disused slip road to the former A41 junction to Chesterton and therefore would offer a dedicated off carriageway route and a potential alternative to the National Cycle Route 51 which currently carries on north on carriageway along Wendlebury Road to the left-in/left-out junction with the A41 southbound carriageway by the entrance to the Bicester Avenue Garden Centre. This would form an improvement to the cycle network locally (and was agreed with the County on this basis).
 - This additional section of shared footway/cycleway along the A41 was planned so as to connect the Phase 1b development to the facilities delivered by the Phase 1a plot and therefore taken together would provide a consistent response to the Cherwell Local Plan policy requirements for Bicester 10.
 - It would be odd for the Phase 1b improvements not to connect with what is now being delivered with the construction programme for Phase 1a.

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- 2.5. Therefore, the pedestrian and cycle access strategy supporting the extant consent for the Bicester Gateway Phase 1 development, agreed with OCC, not only meets the requirements of the Cherwell Local Plan policy for Bicester 10 but also delivers improvements to the local cycle network.
- 2.6. The pedestrian and cycle access strategy supporting the revised development proposals at Bicester Gateway Phase 1b replicates the commitments associated with the extant consent for the site as set out above. Therefore, it meets the Cherwell Local Plan policy for Bicester 10, in terms of access by walking and cycling and wider connectivity and would deliver improvements to the local cycle network.
- 2.7. But, more importantly, the pedestrian and cycle access strategy put forward in support of the revised development proposals on the Phase 1b plot connects and is consistent with the infrastructure improvements that are committed and being delivered by the Phase 1a site. It therefore fully integrates with the infrastructure improvements that are committed in the immediate vicinity of the Phase 1b plot. Only the Phase 1a improvements are committed and these form the basis on which the revised development proposals should be considered. Phase 2, which is not committed, cannot (acting reasonably) set a new strategy.

Phase 1 improvements are committed – Phase 2 proposals are not

- 2.8. The main comments raised by OCC on pedestrian and cycle access suggest a total change of approach to the Phase 1b site. OCC request that pedestrian and cycle access facilities for Phase 1b be delivered not along the A41 frontage of the Phase 1b plot, but on Wendlebury Road. This would be wholly inconsistent with the Phase 1a committed infrastructure improvements (all on the A41), lead to a disjointed provision for pedestrians and cyclists and therefore is not considered a suitable response. It is far better to encourage pedestrian and cyclists to use the off carriageway route already committed with the Phase 1 strategy, leaving the promoters of Phase 2 to deal with the access constraints and opportunities relating to their application. Our clients have offered co-ordination, but OCC suggesting a wholly new accessibility strategy for the Phase 1 plots is not considered reasonable.
- 2.9. One explanation for this requested change of approach could be that OCC are trying to link the Phase 1b development to emerging proposals for the Bicester Gateway Phase 2 site (Catalyst Bicester). Integration between the Phase 2 and Phase 1b developments makes good transport planning sense and is supported by Bloombridge. However, the determination of the Phase 1b proposals cannot be linked to the emerging Phase 2 proposals as the Phase 2 proposals do not have committed status in planning terms. Since there is an extant consent on the Phase 1 plot, and as such, the Phase 1 infrastructure proposals are committed and indeed part delivered, it should be for the emerging Phase 2 proposals to respond to the committed Phase 1 infrastructure. Moreover, Phase 2 is substantially larger in scale than Phase 1b and should, therefore, take on its fair share of infrastructure costs.

Comparative pedestrian and cycle activity

- 2.10. OCC's comments raise the point that being a residential-led development, the new proposals for Phase 1b are likely to attract a higher number of pedestrian and cycle movements to and from the site, and this is the main reason for OCC asking for further infrastructure improvements. The Transport Assessments submitted in support of the extant consent and the new proposals allow a comparison between predicted pedestrian and cycle activity between the extant consent and the new development proposals.
- 2.11. This exercise has been carried out as follows for each scheme:
- Pedestrian, cycle, public transport (bus) and rail trips have been combined to reflect the fact that site users will walk/cycle to their bus stop/rail station.

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- A number of trips has been calculated on the basis of the MSOA mode split as this is the baseline mode split accepted with OCC and it provides a consistent means of comparison.
- However, both schemes aim at maximising sustainable travel to and from the plot, and declared 5-years mode share targets in the FTPs supporting each scheme. A comparison is also undertaken on that basis therefore.
- These calculations have been undertaken in the AM and PM peak hours, as the MSOA data used, as requested by OCC, is derived from journeys to work that occur mainly in the AM and PM peak hours.

2.12. The numbers are detailed below.

Table 1: Pedestrian and cycle activity comparison

Mode split scenario	Peak hour	Extant Consent	New proposals
MSOA	AM	21	23
	PM	21	25
5 year FTP target	AM	87	52
	PM	83	56

- 2.13. The table above shows that if the two schemes are considered on the common basis of the MSOA based journey-to-work mode splits, it is predicted that they would generate a similar number of pedestrian and cycle trips to and from the Phase 1b plot – ie 1 pedestrian/cyclist approximately every 2.5 to 3 minutes. OCC requested that these mode splits be considered and therefore they are expected to form an agreed basis for comparison. The conclusion here is that the new proposals would not lead to a significant increase in pedestrian and cycle movements to/from the development. Therefore, the pedestrian and cycle strategy agreed for the extant consent is considered suitable to support the new development proposals. This was the basis of our pre-application discussions with the County.
- 2.14. The extant consent aimed at improving sustainable travel patterns to and from the plot and this is reflected in the 5 year mode split target set in the FTP supporting the extant consent. The aim there was to achieve a 10% point reduction in single car use, this reduction then leading to a small increase in mode share for other modes. This is a typical target for an office development. This ‘transfer’ of trips was estimated to lead to an increase in pedestrian and cycle activity, estimated to reach a maximum of 87 two-way trips in the AM peak (representing a total 20% mode share (walk, cycle, PT, rail)). The extant consent and its agreed pedestrian and cycle provision was therefore considered adequate to accommodate this potential level of pedestrian and cycle activity.
- 2.15. The new development would generate significantly fewer trips than the extant consent. The 5 year mode split target set in the FTP supporting the new development is for a total of 37% mode split for residential trips and 16% for employment trips (walk, cycle, PT, rail), so similar to and higher than the target set for the extant scheme. However, these targets would apply to a lower number of trips and therefore equate to a predicted maximum of 56 pedestrian and cycle trips in the PM peak. So it is expected that in terms of actual number of trips, the new development will lead to a lower pedestrian and cycle activity to/from the Phase 1b plot. This further confirms that the pedestrian and cycle strategy supporting the extant consent is suitable to support the new development proposals.

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Proposed crossing to Vendee Drive Link

- 2.16. As part of the pedestrian and cycle access strategy supporting the revised development for the Phase 1b plot, an improvement to the crossing of the Vendee Drive Link is proposed. The proposal as shown on Drawing 46463/5501/001 includes elongating the splitter island at the A41/Vendee Drive roundabout to create a refuge for pedestrians and cyclists to cross the Vendee Drive link in three short crossing movements. The crossing of the westbound side of the carriageway would be 5.8m, the crossing of the eastbound side of the carriageway would be 4.1m. The refuge island proposed is 2m wide allowing for cyclists to stop and wait. These distances are considered adequate considering the relatively low level of predicted traffic on Vendee Drive Link accounting for committed developments on Bicester Gateway (i.e. Phase 1).
- 2.17. OCC have commented that these proposals are not acceptable to them but without providing any justifications for their statement. As a response, we point out that the proposed informal crossing shown in drawing 46463/5501/001 is an improvement on the scheme supporting the consented Phase 1b scheme delivering an improvement to the benefit of the future residents and users of the site. If OCC's concerns relate to Phase 2, then Phase 2 is responsible for resolving those concerns.

Providing for pedestrians and cyclists along Wendlebury Rd

- 2.18. OCC request that the Phase 1b proposals make provision for pedestrians and cyclists along Wendlebury Rd, and flag this point as a reason for objection.
- 2.19. As detailed above:
- suggesting that the Phase 1b development provides for pedestrians and cyclists along Wendlebury Rd is a total change of approach, when compared to the approach agreed with OCC as part of the extant consent on the Phase 1 site. It is also a change of approach to that agreed pre-application.
 - Furthermore, the Phase 1a development is currently being delivered including the delivery of the committed new crossing across the A41 and the upgraded shared footway/cycleway along the A41 frontage of the Phase 1a plot. Suggesting a switch to Wendlebury Rd would lead to a confusing, disjointed cycle and pedestrian route network with the Phase 1a route along the A41 effectively 'leading to nowhere'.
- 2.20. OCC clarify that the Phase 1b development may generate demand for pedestrian movement along Wendlebury Rd to:
- Access the Bicester Avenue site to the north,
 - Access other locations north of Bicester Avenue (Tesco) along a shorter route.

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- 2.21. Regarding access to the Bicester Avenue site, there are no points of access for pedestrians and cyclists into this site from the south and all users have to access from the one point on the northern side next to the left-in/left-out junction with the A41 southbound carriageway. There is no mechanism through which Bloombridge would be able to secure a new pedestrian and cycle access into Bicester Avenue to the south. Therefore, from Phase 1b, the routes to Bicester Avenue either on the A41 or on Wendlebury Rd would lead to the same existing access into Bicester Avenue. Both routes are estimated to be 500m in length and therefore there is no benefit in using Wendlebury Rd in terms of distance. Again, the Phase 1a development is currently delivering an improved segregated pedestrian and cycle route along the A41, a facility which is better than the facility currently available on Wendlebury Rd. The public realm and internal layout of the Phase 1b proposals also clearly guide pedestrians and cyclists either directly westwards to the committed route alongside the A41 or northwards to the western end of Vendee Drive and across the proposed, elongated splitter island. The A41 therefore forms a good pedestrian and cycle link to Bicester Avenue.
- 2.22. Considering reaching destinations further along the A41 (Tesco, Bicester Village, Bicester town centre, the railway stations etc), as the existing route from the development to these destinations is already along the A41, and there is no benefit in using Wendlebury Rd, the A41 frontage forms a suitable pedestrian and cycle route.
- 2.23. OCC flag the presence of the NCR51 along Wendlebury Rd as a further reason for the revised Phase 1b proposals to deliver facilities on Wendlebury Rd. The cycle strategy supporting the revised Phase 1b proposals is consistent with the strategy supporting the Phase 1 consent and would deliver an off carriageway cycle route along the A41 as an alternative to the current on carriageway NCR on Wendlebury Rd. It has previously been agreed that this will deliver an improvement to cyclists. Therefore, the Phase 1b proposals do account for the NCR and deliver betterment, in terms of safety and convenience, the criteria identified by OCC. This strategy has previously been agreed and is now being implemented.
- 2.24. OCC then indicate that provision should be made as part of the Phase 1b proposals to cater for the following:
- Phase 1b pedestrians and cyclists may wish to access the site from Wendlebury Rd – The strategy clearly points all pedestrian and cycle movements to/from the Phase 1b development to the A41, Wendlebury Rd being used for vehicular access only.
 - Phase 1b should plan for future interaction with the proposed employment development on the Phase 2 site – There is no certainty that the Phase 2 development will be delivered. The Phase 2 development is not a commitment and therefore the Phase 1b proposals cannot be determined in reference to the emerging Phase 2 proposals. It is for the Phase 2 development to consider how to integrate with the committed Phase 1 development, a point raised separately by Bloombridge.
- 2.25. The Regulating Plan for Phase 1b (Figure 12 of the Design & Access Statement) shows (in yellow arrows) two possible points of future connections with Phase 2, plus Vendee Drive, for the promoters of Phase 2 to respond to in their own Master Plan and Regulating Plan. This is designed to provide for the optimisation of accessibility, notably to the Park & Ride, but it is for Phase 2 to provide these connections in line with whatever development programme emerges for Phase 2 – because there is nowhere to go to until Phase 2 is developed. Figure 12 is extracted and shown in **Appendix A** to this note.
- 2.26. Finally, OCC point to the proposed short footbridge to the north west of the proposed Phase 1b development. This bridge is proposed in order to create a link over a deep ditch that runs along the site boundary to the north west, and avoid making changes to the existing culvert under Vendee Drive Link. Such a bridge would be delivered according to relevant standards and OCC's response indicates that 'OCC would not object to the bridge being provided'.

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3. Parking Proposals

- 3.1. OCC comments on parking suggest that OCC has a good understanding of the type of proposal put forward and the concept associated with it. However, OCC raise a number of points related to the management of car parking at the site. OCC state that parking management at the proposed development is essential to supporting the vision. We would refer OCC to Section 6.6 of the Transport Assessment submitted in support of the revised Phase 1b application. This section details a practical and effective vehicular parking strategy that supports the 'innovation community' concept for the development with a low dependency on car use.
- 3.2. OCC in their comments query whether the site lends itself well to a car-free lifestyle. We would reiterate that the proposed development site benefits from excellent accessibility by non car modes of transport with direct and convenient access to frequent and direct bus services to key destinations across the Oxfordshire knowledge spine, as well as access to good pedestrian and cycle facilities linking to a vast range of local facilities, including two railway stations. The main pedestrian and cycle connection to from the development is an off carriageway, segregated route along the A41 which is direct and convenient and will be used for functional trips (commuting, shopping, links to rail). Tesco, for example, is walkable. Furthermore, the proposals include a range of on-site facilities aimed at reducing the need to travel in the first place (café and Hub). The site is therefore in an excellent location to promote car-free or less car dependant lifestyles and the proposals make the most of this opportunity. In any event, the new development proposals have only suggested 33 car free units above the B1(a) space. These could easily be key worker or business-related.
- 3.3. OCC comment on the proposed 33 car-free units on site and suggest that residents for these units may still own a car and seek to park it on local roads. In practice, the likelihood of this issue materialising is extremely low:
- The proposed development aims at offering more than simply residential amenities but aims at achieving buy-in into a lifestyle from future residents. It is unlikely that any prospective purchaser of a car-free unit would be interested if they had the need for parking a car on site. It is more likely that a car-free unit will be attractive to purchasers who do not own a car and use (or are about to switch to using) shared mobility provision to cater for their mobility needs. This is why the proposals promote car-club facilities on site.
 - The local road network does not lend itself to parking 'on-street' and it is considered unlikely that anyone would see parking their vehicle on Wendlebury Road or on the road to Chesterton as a long term and regular practical solution.
- 3.4. Therefore, from a practical and common sense point of view, it is considered extremely unlikely that the revised development proposals on the Phase 1b site would lead to overspill parking on local roads. OCC also mentions potential overspill onto the nearby P&R site. The P&R site has its own enforcement measures to deter from regular long-term parking and therefore the P&R site does not form a realistic parking location for a future resident of the Phase 1b site.
- 3.5. OCC request a robust car parking management to be agreed and consider this a reason for objection. It is considered that Section 6.6 provides sufficient reassurance that a parking management strategy can be devised that fits with the vision for the development. This was discussed pre-application.

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4. Traffic Impact Assessment

- 4.1. OCC's comments list the key transport infrastructure improvements agreed as part of the extant consent on the Phase 1b site, including:
- Improvements at the A41/Vendee Drive roundabout
 - The provision of a mini-roundabout junction at the Wendlebury Rd / Vendee Drive Link junction
 - The provision of a 3m shared footway/cycleway along the A41 frontage of the Phase 1b plot.
- 4.2. The transport assessment submitted in support of the revised Phase 1b development demonstrates that the revised proposals would have a much lower traffic generation than the consented scheme (-42.5% in the AM peak and -40.7% in the PM peak), and as such the highway improvements required to support the consented development would not be necessary nor justified to support the revised development scheme.
- 4.3. OCC object to this and query in particular the trip generation calculations presented in the Transport Assessment. The points raised by OCC on this topic are rebutted below.

Trip Generation and Distribution

- 4.4. OCC query whether the residential trip generation rates used in the Transport Assessment are appropriate. The Transport Assessment uses residential trip generation rates provided by OCC by email dated 13th September 2019 (from Rashid Bbosa). The use of these OCC specified trip rates was further discussed and agreed at a subsequent scoping meeting with OCC on 19th September 2019 (attended by Joy White and Rashid Bbosa). The Transport Assessment therefore uses trip generation rates specifically identified by OCC and agreed as suitable by all at scoping. The OCC objection on that ground is therefore not valid, and the assessment carried out in the Transport Assessment is appropriate.
- 4.5. The Transport Assessment, in its calculations, does not account for any vehicular trip generation for the 33 proposed car-free residential flats on site. OCC query the robustness of this approach. Our view is that the risks of any traffic impact associated with the car-free units will be minimal as detailed in Section 3 above, and therefore it does not make sense to assume any traffic generation from these units.
- 4.6. Notwithstanding the above, if the agreed residential trip rates were applied to the 33 car-free flats, in order to generate a higher predicted trip generation from the development, this would lead to an additional 9 two-way vehicular trips in both the AM and PM peaks. The additional trip generation derived here would represent a negligible (and certainly not 'severe') increase in trips on the local road network and would not affect the outcome of the Transport Assessment:
- The revised development proposals would still generate significantly less traffic than the extant consent would.
 - The revised development proposals would not have a severe detrimental impact on the operation of the local road network.
- 4.7. OCC confirmed agreement to the assessed development trip distribution and assignment and to the baseline for the purpose of assessment (the extant consent).

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Junction capacity assessment

- 4.8. OCC consider that the assessment of the operation of the A41/Vendee Drive roundabout presented in the Transport Assessment shows a junction predicted to operate over capacity in the 'with development' case and consider that mitigation should be provided at the junction. As no mitigation is proposed, OCC consider this as a reason for objection.
- 4.9. The Transport Assessment in Tables 8.4 and 8.5 presents an assessment of the impact of the revised Phase 1b development on the operation of the A41/Vendee Drive roundabout. It shows that, in the reference case, the junction operates close to capacity in the AM peak with a maximum RFC of 0.83 on the Vendee Drive approach to the junction. The junction operates within capacity in the PM peak.
- 4.10. In the 'with development' test, the junction is predicted to operate within capacity in the PM peak. In the AM peak, the maximum predicted RFC is 0.88 on the Vendee Drive approach to the junction. Because this RFC exceeds the recommended 0.85 threshold, OCC estimate that the junction operates over capacity.
- 4.11. However, the impact assessment presented in the TA shows that the proposed development will have a negligible impact on the operation of the junction with only minimal changes to queues and delays at the junction. On the Vendee Drive approach to the junction in particular, queues and delays are predicted to increase by 1.8 pcus and 6.92 sec/pcu. This represents a negligible impact on the operation of the junction.
- 4.12. The NPPF test, when it comes to the requirement for mitigation, is clear and mitigation is only justified when the impact of development on the operation of a junction is considered severe. This is not the case here and therefore it is correct not to put forward mitigation proposals for this junction.
- 4.13. Therefore, OCC's objection does not stand the NPPF test and is therefore not valid.

SEPR contribution

- 4.14. OCC's response outlines the importance and requirement for local developments to contribute financially to the delivery of the South East Perimeter Road (SEPR), a formula for the calculation of the relevant contribution being provided. Bloombridge would like to engage into further discussions on this and understand better the basis for the calculations proposed.

Accident Appraisal

- 4.15. OCC recognise the safety issue identified in the Transport Assessment at paragraph 3.6.8 in relation to a recent fatal collision at the A41/Vendee Drive roundabout. This was discussed at the scoping stage and Bloombridge have offered to cooperate with OCC in the identification and delivery of a solution. To be effective, this would also require engagement from the promoters of Phase 2.

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5. Access Junctions

- 5.1. Each point raised by OCC in relation to the proposed site access junctions is considered in turn below.

Extension of the 40mph speed limit

- 5.2. The proposed access junctions for the revised Phase 1b development are of the same type (priority junctions) and placed in the same locations as the consented access junctions into the consented Phase 1b development. The junctions require a lowering of the speed limit on Wendlebury Rd along the frontage of the Phase 1b plot to 40mph, proposed to take effect just north of the junction with the road to Chesterton, which, again, replicates exactly the consented Phase 1b arrangement, as agreed with OCC.
- 5.3. OCC are now requesting for the change to 40mph to occur about 150m further south along Wendlebury Road. The reasons for this change in OCC's approach are not justified in OCC's response, which acknowledges that the visibility to the right provided at each of the proposed site access junction is 'adequate for speeds within a 40mph zone'. Unless OCC can provide a suitable justification for this change in approach, there are no reasons for the proposals to be changed.

Vehicle tracking at proposed site access junctions

- 5.4. Vehicle tracking at the proposed site access junctions is presented on Drawing 46463/5501/SK002A in **Appendix B** to this note.

Capacity assessment for site access junctions and interaction with adjacent junction

- 5.5. OCC raise a query in relation to the operation of the proposed site access junctions onto Wendlebury Rd and how they would interact with the operation of the Wendlebury Rd/Vendee Drive Link junction. The principle of the two site access junctions was accepted at the extant consent stage and given that the revised development proposals for Phase 1b would lead to a significantly lower development vehicular trip generation, it is considered that the proposed access would remain valid.
- 5.6. However, OCC queried the operation of the junctions as a reason for objection. The operation of the two access junctions has been tested in Picady in the 2026 Test Case ('with development'). The outcome of this capacity analysis provided below and the outputs from the tests carried out shown in **Appendix C**.

Table 2: Northern site access – 2026 Test Case

	AM			PM		
	Queue	Delay	RFC	Queue	Delay	RFC
Site Access Left	0.4	7.49	0.29	0.2	6.65	0.14
Site Access Right	0.0	9.31	0.00	0.0	8.67	0.01
Wendlebury Rd	0.3	5.23	0.16	0.0	5.70	0.03

Table 3: Southern site access – 2026 Test Case

	AM			PM		
	Queue	Delay	RFC	Queue	Delay	RFC
Site Access Left	0.1	5.78	0.08	0.0	5.99	0.04
Site Access Right	0.0	7.78	0.00	0.0	8.07	0.00
Wendlebury Rd	0.0	4.90	0.03	0.1	6.58	0.09

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- 5.7. The tests carried out as reported above show that the two proposed site access junctions would operate well within capacity without any significant queueing or delay. In particular, the operation of the site access junctions would not interact with the operation of the Wendlebury Rd/Vendee Drive Link junction. The tests carried out show that the queues on Wendlebury Rd would be negligible and would not queue back to the Vendee Drive Link.
- 5.8. It is considered that the analysis shown above satisfactorily addresses OCC objection on this point.

6. Travel Plan

- 6.1. OCC make a number of comments on the Framework Travel Plan submitted with the outline planning application. These comments have been reviewed and incorporated in a separate revised Framework Travel Plan submitted to OCC for consideration.
- 6.2. The points raised relate mainly to points of clarification. However, the following three key considerations are worth flagging in this note:
- The mode share targets set in the Framework Travel Plan can only be provisional at this stage as the site occupiers are not known. The provisional targets set in the FTP submitted reflect the ambition of the proposed development and in particular its alternative lifestyle offer. The reduction in car driver mode share to/from the development is reflected by a significant increase in the proportion of residents that would be expected to work from home making use of the proposed Hub facility on site. This forms part and parcel of the vision for the development and is therefore consistent. Of course, actual baseline mode splits will only be established once the initial travel survey is undertaken, at which point targets can also be set.
 - OCC raise doubt on the viability of a car club offer at the site. Car club facilities are directly in line with the vision for the development. It is expected that with a 'captured' ridership a car club would be viable at the development.
 - OCC understand that the proposals would include 4 EV charging points in total on site and request for this provision to be revised upwards. Paragraph 5.2.23 of the Framework Travel Plan clarifies that the proposals would be for a total of 8 EV charging points, 4 EV charging points serving the employment element of the scheme and 4 additional EV charging points serving the residential element of the development. The FTP further indicates that the proposed development would be delivered in a way that allows an increase to EV charging provision if required to meet demand on site. However, in addition, the FTP points out the relative uncertainty around EV charging provision. As such the proposals outlined in paragraph 5.2.23 are considered adequate and flexible enough to adapt to a rapidly evolving technology, with the exact details to be agreed in line with relevant Policy at the time of future Reserved Matters Applications.

7. Conclusion

- 7.1. This Technical Note (TN) provides our response to comments raised by Oxfordshire County Council (OCC) on the transport and highway material submitted in support of an outline planning application for the redevelopment of the Bicester Gateway Phase 1b site in Bicester (Cherwell District Council's reference: 20/00293/OUT). The OCC comments are set out in a document dated 23rd March 2020.

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7.2. The comments raised by OCC are addressed as follows:

- Pedestrian and cycle access proposals – OCC requests that the Phase 1b development should deliver pedestrian and cycle improvements along Wendlebury Rd. This request represents a significant change to the agreed pedestrian and cycle access strategy agreed with OCC in support of the extant consent for the Phase 1 development. Part of this agreed strategy is being delivered by the Phase 1a plot. Changing approach would:
 - Lead to a disjointed provision, not reflecting the actually committed improvements in the immediate vicinity of the Phase 1b plot,
 - Not deliver any further improvements, as the A41 route proposed would be as direct as any route delivered along Wendlebury Road. Furthermore, the proposed route on the A41, consistent with the Phase 1a improvements, would provide an improvement to the cycle route on Wendlebury Road.

The new proposals for Phase 1b are directly in line with the development planning context, and meet the requirements of the Bicester 10 policy in the Local Plan.

- Parking – The Transport Assessment at section 6.6 outlines a parking strategy supporting the vision for the development. OCC raises the risk of overspill parking on adjacent roads and at the P&R site. Stantec's view is that this risk would be extremely low in practical terms.
- Traffic impact assessment – OCC criticise the trip generation assumptions used in the traffic impact assessment of the proposed development, when these assumptions have been set by and agreed with OCC. The assessment is considered appropriate and agreed with OCC therefore. The assessment concludes that the new development proposals will lead to a significantly lower trip generation from the Phase 1b plots, and will not have a severe impact on the operation of the local road network. As such, and in line with NPPF, no highway mitigations at the A41/Vendee Drive roundabout or the Wendlebury Road/Vendee Drive Link junction are required to support the new development proposals for Phase 1b. This Note shows that the proposed access junction will operate with sufficient capacity.
- Travel Plan – The comments raised by OCC on the Framework Travel Plan can be addressed in a revised Plan submitted separately. Of particular relevance:
 - OCC query the provisional mode split mentioned in the Travel Plan. These are set to reflect the vision for the development, but more importantly, they are provisional. Actual baseline and target mode split for the development will be set after the initial travel surveys are carried out.
 - OCC query the viability of a car club on the site. Car club provision is part and parcel with the vision for the development and is considered available offer.
 - OCC misunderstood the proposals in terms of EV charging provision. The proposals would deliver a total of 8 EV charging points as well as the flexibility to react to a rapidly evolving technology, with details to be agreed at Reserved Matters stage.

7.3. This note concludes that points raised by OCC can be addressed, that no objection has been raised to the sustainability of the development, and that the development proposals would not lead to a severe impact on the road network. Therefore the points raised by OCC do not form a reason for refusing the grant of planning permission for the Bicester Gateway Phase 1b proposals.

TECHNICAL NOTE

DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
46463/5504/TN006	-	29.04.2020	FC	FC	FC	NT

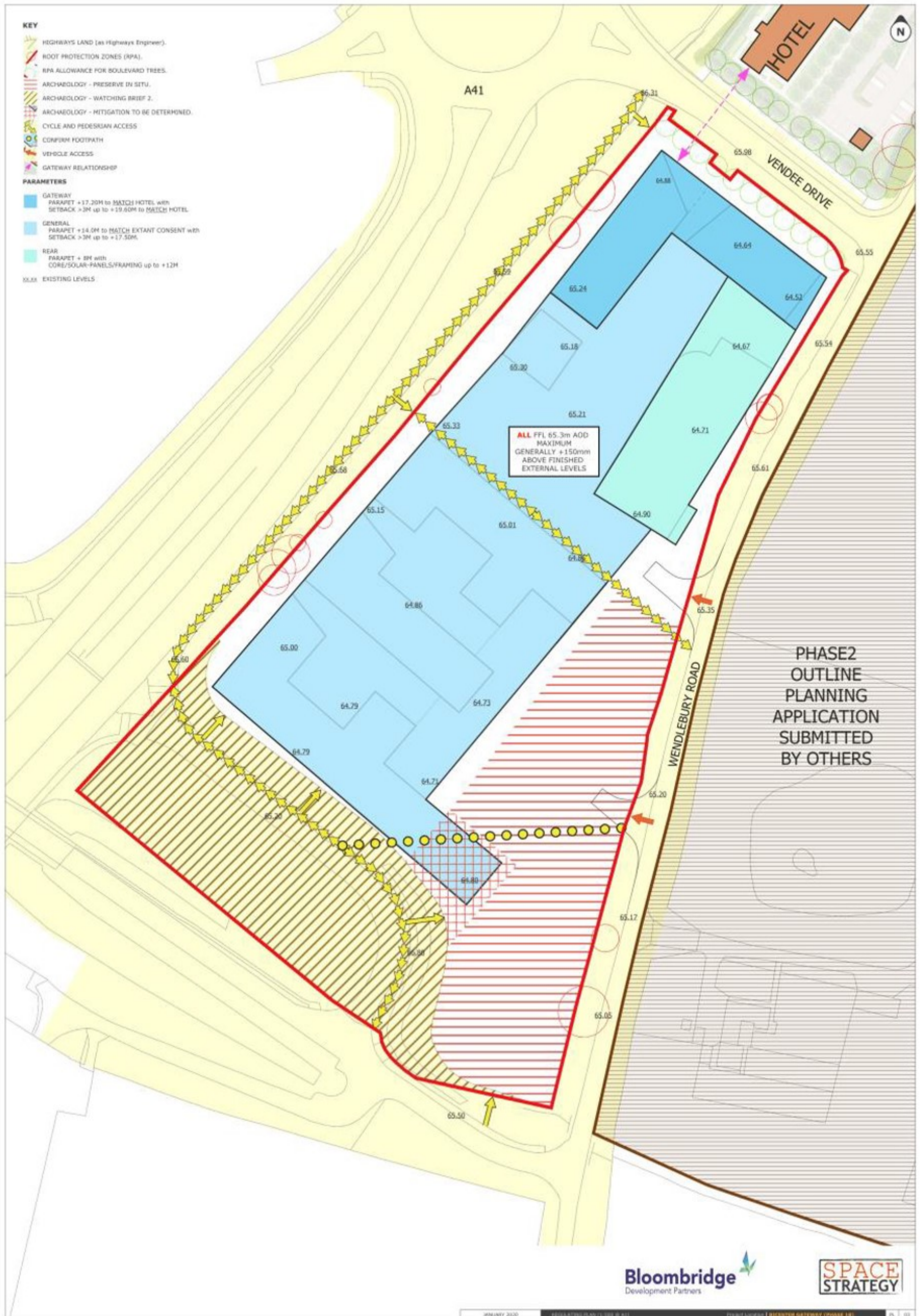
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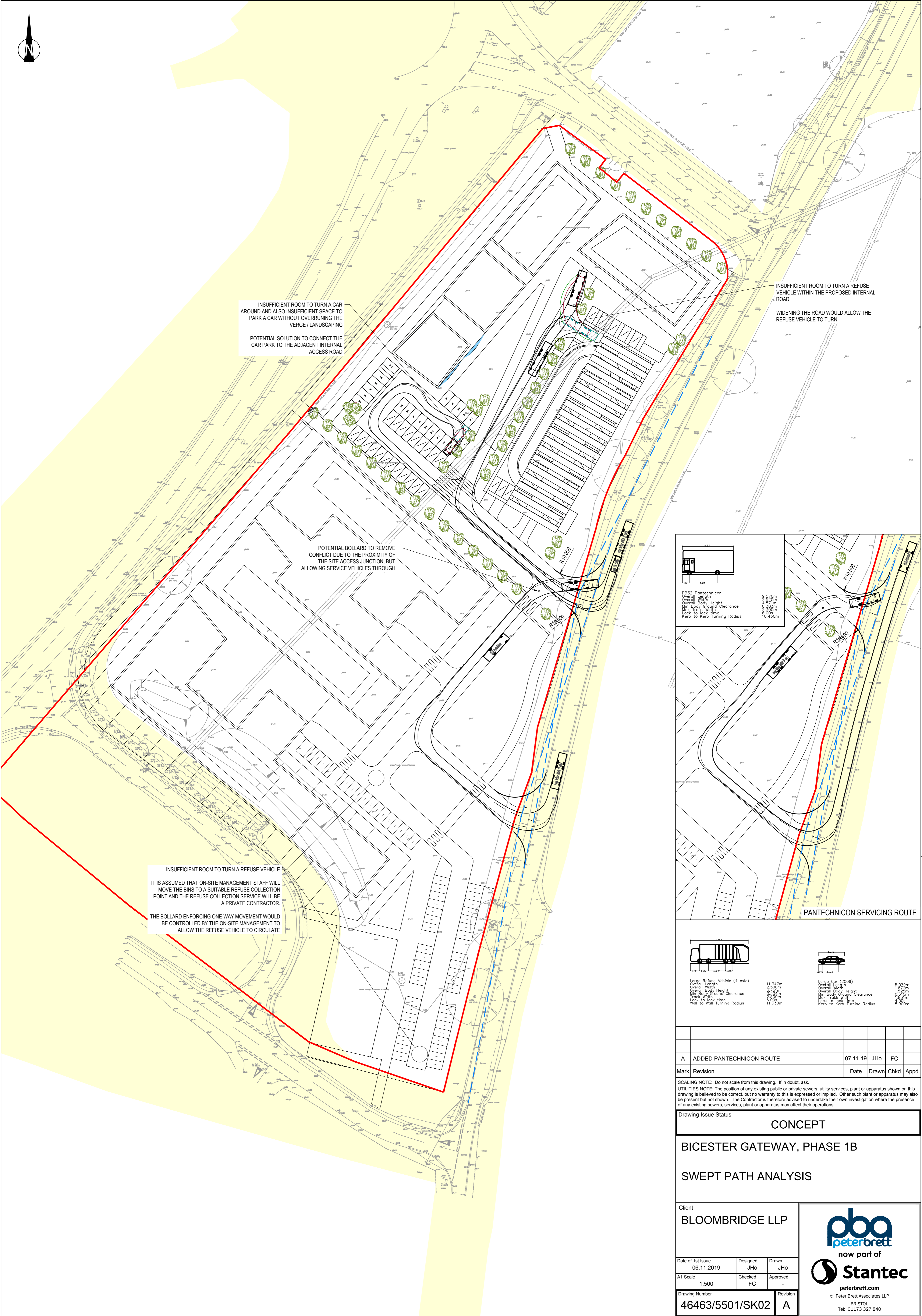
TECHNICAL NOTE

Appendix A – Figure 12 from DAS – Regulation Plan



TECHNICAL NOTE

Appendix B – Tracking Drawing



INSUFFICIENT ROOM TO TURN A CAR AROUND AND ALSO INSUFFICIENT SPACE TO PARK A CAR WITHOUT OVERRUNNING THE VERGE / LANDSCAPING

POTENTIAL SOLUTION TO CONNECT THE CAR PARK TO THE ADJACENT INTERNAL ACCESS ROAD

POTENTIAL BOLLARD TO REMOVE CONFLICT DUE TO THE PROXIMITY OF THE SITE ACCESS JUNCTION, BUT ALLOWING SERVICE VEHICLES THROUGH

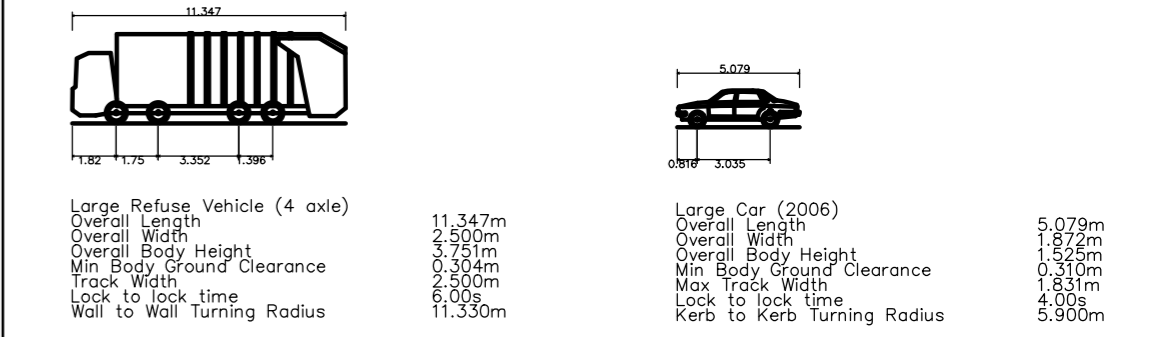
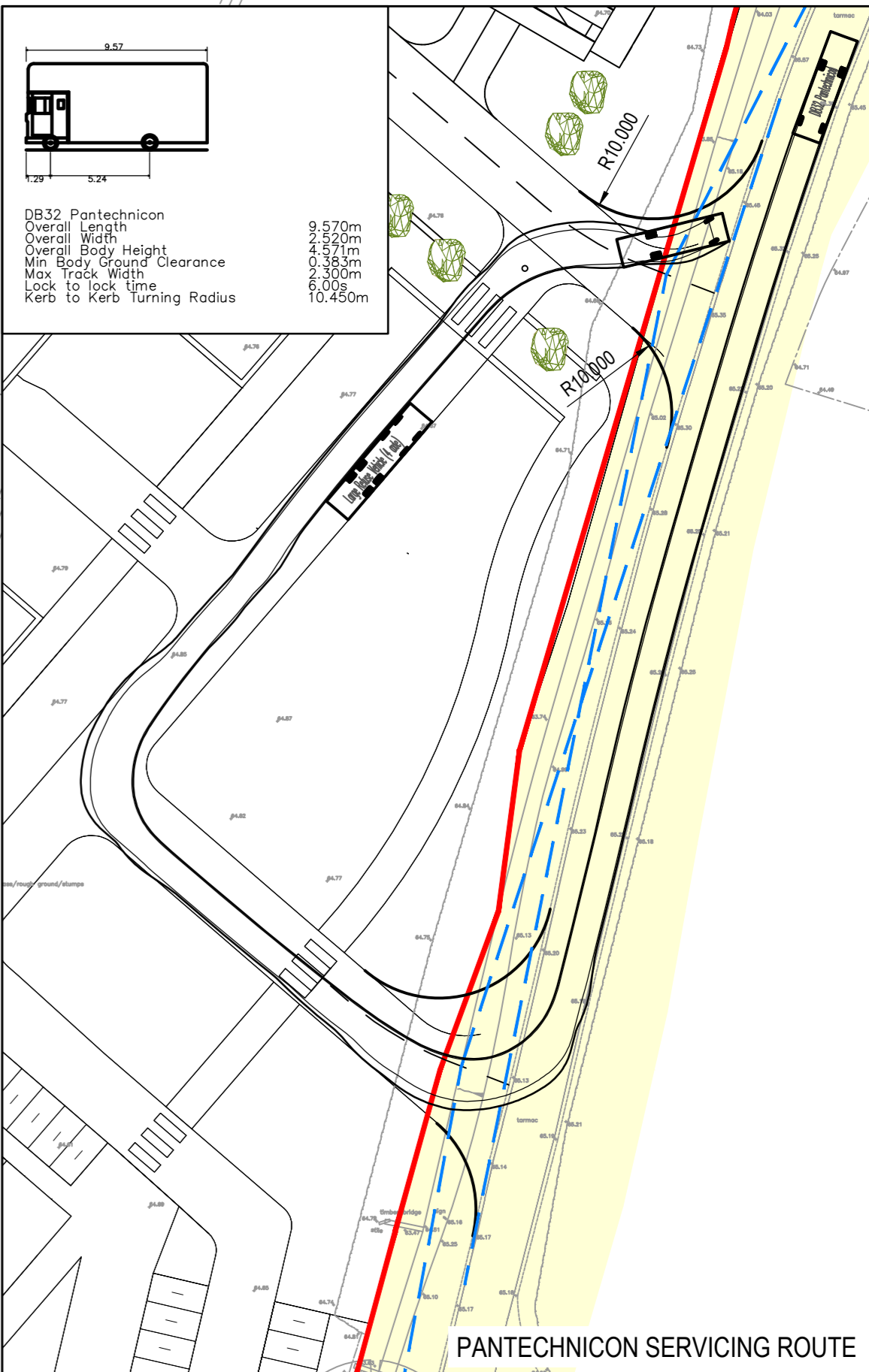
INSUFFICIENT ROOM TO TURN A REFUSE VEHICLE WITHIN THE PROPOSED INTERNAL ROAD.

WIDENING THE ROAD WOULD ALLOW THE REFUSE VEHICLE TO TURN

INSUFFICIENT ROOM TO TURN A REFUSE VEHICLE

IT IS ASSUMED THAT ON-SITE MANAGEMENT STAFF WILL MOVE THE BINS TO A SUITABLE REFUSE COLLECTION POINT AND THE REFUSE COLLECTION SERVICE WILL BE A PRIVATE CONTRACTOR.

THE BOLLARD ENFORCING ONE-WAY MOVEMENT WOULD BE CONTROLLED BY THE ON-SITE MANAGEMENT TO ALLOW THE REFUSE VEHICLE TO CIRCULATE



Mark	Revision	Date	Drawn	Chkd	Appd
A	ADDED PANTECHNICON ROUTE	07.11.19	JHo	FC	

SCALING NOTE: Do not scale from this drawing. If in doubt, ask.

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

CONCEPT

BICESTER GATEWAY, PHASE 1B

SWEPT PATH ANALYSIS

Client

BLOOMBRIDGE LLP

Date of 1st Issue

06.11.2019

Designed

JHo

Drawn

JHo

A1 Scale

1:500

Checked

FC

Approved

-

Drawing Number

46463/5501/SK02

Revision

A

now part of

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TECHNICAL NOTE

Appendix C – Access Junction Capacity Tests

Junctions 9									
PICADY 9 - Priority Intersection Module									
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Filename: Northern Site Access.j9

Path: J:\46463 Bicester Gateway Phase 1b Residential\Technical\Transport\Junction Assessments\PICADY

Report generation date: 30/04/2020 11:32:59

«2020, PM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2020									
Stream B-C	D1	0.4	7.49	0.29	A	D2	0.2	6.65	0.14	A
Stream B-A		0.0	9.31	0.00	A		0.0	8.67	0.01	A
Stream C-AB		0.3	5.23	0.16	A		0.0	5.70	0.03	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	24/04/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\japrice
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2020	PM	ONE HOUR	17:00	18:30	15

2020, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Wendlebury Rd N - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Wendlebury Road S		Major
B	Site Access		Minor
C	Wendlebury Rd N		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Wendlebury Rd N	5.00			182.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane plus flare	10.00	6.08	3.89	3.08	3.00		1.00	40	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	525	0.100	0.252	0.159	0.360
B-C	731	0.117	0.296	-	-
C-B	679	0.275	0.275	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wendlebury Road S		✓	305	100.000
B - Site Access		✓	84	100.000
C - Wendlebury Rd N		✓	104	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Wendlebury Road S	B - Site Access	C - Wendlebury Rd N
	A - Wendlebury Road S	0	2	303
	B - Site Access	2	0	82
	C - Wendlebury Rd N	88	16	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Wendlebury Road S	B - Site Access	C - Wendlebury Rd N
	A - Wendlebury Road S	0	0	0
	B - Site Access	0	0	0
	C - Wendlebury Rd N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.14	6.65	0.2	A
B-A	0.01	8.67	0.0	A
C-AB	0.03	5.70	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	663	0.093	61	0.1	5.980	A
B-A	2	452	0.003	1	0.0	7.993	A
C-AB	13	660	0.020	13	0.0	5.568	A
C-A	65			65			
A-B	2			2			
A-C	228			228			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	650	0.113	74	0.1	6.250	A
B-A	2	437	0.004	2	0.0	8.262	A
C-AB	16	657	0.025	16	0.0	5.622	A
C-A	77			77			
A-B	2			2			
A-C	272			272			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	631	0.143	90	0.2	6.650	A
B-A	2	417	0.005	2	0.0	8.669	A
C-AB	21	652	0.032	21	0.0	5.698	A
C-A	94			94			
A-B	2			2			
A-C	334			334			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	631	0.143	90	0.2	6.653	A
B-A	2	417	0.005	2	0.0	8.669	A
C-AB	21	652	0.032	21	0.0	5.698	A
C-A	94			94			
A-B	2			2			
A-C	334			334			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	650	0.113	74	0.1	6.255	A
B-A	2	437	0.004	2	0.0	8.264	A
C-AB	16	657	0.025	16	0.0	5.623	A
C-A	77			77			
A-B	2			2			
A-C	272			272			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	663	0.093	62	0.1	5.990	A
B-A	2	452	0.003	2	0.0	7.995	A
C-AB	13	660	0.020	13	0.0	5.568	A
C-A	65			65			
A-B	2			2			
A-C	228			228			

Junctions 9									
PICADY 9 - Priority Intersection Module									
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Filename: Southern Site Access.j9

Path: J:\46463 Bicester Gateway Phase 1b Residential\Technical\Transport\Junction Assessments\PICADY

Report generation date: 30/04/2020 11:34:35

«2020, PM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2020									
Stream B-C	D1	0.1	5.78	0.08	A	D2	0.0	5.99	0.04	A
Stream B-A		0.0	7.78	0.00	A		0.0	8.07	0.00	A
Stream C-AB		0.0	4.90	0.03	A		0.1	6.58	0.09	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	24/04/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\japrice
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2020	PM	ONE HOUR	17:00	18:30	15

2020, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Wendlebury Rd N - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Wendlebury Road S		Major
B	Site Access		Minor
C	Wendlebury Rd N		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Wendlebury Rd N	5.00			125.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane plus flare	10.00	7.20	3.96	2.81	2.81	✓	1.00	70	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	557	0.106	0.267	0.168	0.382
B-C	716	0.114	0.289	-	-
C-B	646	0.261	0.261	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wendlebury Road S		✓	281	100.000
B - Site Access		✓	24	100.000
C - Wendlebury Rd N		✓	90	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Wendlebury Road S	B - Site Access	C - Wendlebury Rd N
	From			
	A - Wendlebury Road S	0	1	280
	B - Site Access	1	0	23
	C - Wendlebury Rd N	46	44	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Wendlebury Road S	B - Site Access	C - Wendlebury Rd N
	From			
	A - Wendlebury Road S	0	0	0
	B - Site Access	0	0	0
	C - Wendlebury Rd N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.04	5.99	0.0	A
B-A	0.00	8.07	0.0	A
C-AB	0.09	6.58	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	654	0.026	17	0.0	5.651	A
B-A	0.75	482	0.002	0.75	0.0	7.483	A
C-AB	35	614	0.057	35	0.1	6.209	A
C-A	33			33			
A-B	0.75			0.75			
A-C	211			211			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	642	0.032	21	0.0	5.790	A
B-A	0.90	467	0.002	0.90	0.0	7.722	A
C-AB	42	608	0.070	42	0.1	6.360	A
C-A	38			38			
A-B	0.90			0.90			
A-C	252			252			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	626	0.040	25	0.0	5.994	A
B-A	1	447	0.002	1	0.0	8.074	A
C-AB	53	600	0.088	53	0.1	6.576	A
C-A	46			46			
A-B	1			1			
A-C	308			308			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	626	0.040	25	0.0	5.994	A
B-A	1	447	0.002	1	0.0	8.075	A
C-AB	53	600	0.088	53	0.1	6.577	A
C-A	46			46			
A-B	1			1			
A-C	308			308			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	642	0.032	21	0.0	5.791	A
B-A	0.90	467	0.002	0.90	0.0	7.724	A
C-AB	42	608	0.070	43	0.1	6.365	A
C-A	38			38			
A-B	0.90			0.90			
A-C	252			252			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	654	0.026	17	0.0	5.654	A
B-A	0.75	482	0.002	0.75	0.0	7.488	A
C-AB	35	614	0.057	35	0.1	6.218	A
C-A	33			33			
A-B	0.75			0.75			
A-C	211			211			