

BASSETLAW LOCAL PLAN

EXAMINATION OF THE BASSETLAW LOCAL PLAN 2020 – 2038

Response to Matters, Issues and Questions for the Examination

Submitted on behalf of Caddick Developments Ltd

MATTER 13

TRANSPORT AND CONNECTIVITY

POLICIES ST54-55

Introduction

- 1.1 This submission is made on behalf of Caddick Developments Ltd. Caddick is promoting land at Apleyhead Junction (site SEM001) for approximately 4.7m sqft of employment uses (predominantly B8, with elements of B2, and ancillary offices), which is identified as a strategic allocation in the draft plan. Caddick has made representations at all stages of the plan, and this MIQ response should be read in conjunction with those representations.
- 1.2 A signed Statement of Common Ground between Caddick and the Council is available in the Examination Library.

ISSUE 13 – DOES THE PLAN SET OUT A POSITIVELY PREPARED STRATEGY AND POLICIES FOR TRANSPORT AND CONNECTIVITY WHICH IS JUSTIFIED, EFFECTIVE AND CONSISTENT WITH NATIONAL POLICY?

13.1 a) Is there robust evidence to demonstrate that the likely significant impacts on the road network arising from the development proposed in the Plan have been adequately assessed. Is there robust evidence that these can be effectively mitigated to an acceptable degree and that, if required, such mitigation can be delivered?

- 1.3 The draft plan is supported by several evidence documents including the Bassetlaw Transport Assessment Update (May 2022) (document TI-017), which Caddick consider takes an overly robust and worse-case approach to assessing the highways impact of development. The relevance of this overly robust approach (which is not uncommon for local plan transport studies) is set out below, and is discussed in detail in the appended highways note by Fore.
- 1.4 The response on 13.1(a) therefore covers 4 main interlinked matters:
- Assessment of trip generation and the need for mitigation (comparing local plan level work with site specific level work).
 - The proposed mitigation at Apleyhead.
 - Relevance of link capacity on the A57, and the A57 Improvement Plan.
 - Relevance of ST54 and the IDP to Apleyhead (Policy 9).
 - Clarifications on ST54.

Assessment of trip generation and the need for mitigation

- 1.5 A highways note (prepared by Fore) is appended to this Matter 13 response. The Fore note sets out that as a starting point TI-017 does indeed take an overly robust approach to highways impact, principally as it significantly overestimates the level of traffic generated by the development then applies somewhat broader trip distribution rates for the A57 east and west

of the development. The Fore note explains why and how the site-specific highways work for Apleyhead differs from the strategic work in TI-017, and that a strategic approach for local plan transport assessments is entirely commonplace. The effect is the proposed development at Apleyhead will have significantly lower impacts on the A57 and associated junctions than is currently envisaged in the local plan, and as such the locations for necessary mitigation are far more restrained (as accepted in Policy 9).

- 1.6 Table 5 of the appended Fore note compares the broader based local plan transport assessment assumed trip generation with the site-specific and detailed assessment based trip generation, and shows the significantly lower trip generation. Table 4 shows the refined trip distribution for the site-specific assessment work, and how this is more refined than the broader (and overly robust) assessment in the local plan transport work. Section 6 of the Note then provides further detail on the reasons for and outcome of this refined site specific approach.

Source	A57 East of Old Coach Road to Apleyhead Site Access i.e. west of Site access	A57 East of Apleyhead Site access to A1(T) Apleyhead Interchange i.e. east of Site access	Total
BTS Table 30	2,260	752	3,012
Fore Technical Work	1,112	979	2,091

(Table 5 taken from the Fore Note)

- 1.7 The Note goes on to explain that as part of the site-specific assessment work (which will inform a planning application at the site) the overall approach to assessing impact and then establishing a package of works to mitigate impact has been agreed with Nottinghamshire County Council ('NCC') as the local highways authority and National Highways.

Proposed mitigation works for Apleyhead

- 1.8 The works focus on the A57/A1/A614 junction to the east and the A57/B6040 junction to the west. This reflects the current draft wording of Policy 9 and particularly part H(ii), in referring to improvements to 2 junctions (A57/B6040 roundabout, and A614/A57/A1 roundabout).
- 1.9 With this in mind Caddick agree with the Council's position (as detailed in the appended Fore note) that works will be required to mitigated impacts on the local road network and strategic road network, with the intention that the final package of measures will be secured through a s106 agreement and s278 agreement. The appended Note confirms that only works to the A57/A1/A614 roundabout and A57/B6040 roundabout, are required to mitigate the impact of the Apleyhead site. The necessary mitigation is entirely deliverable.

- 1.10 Other mitigation will be used in the form of travel management and use of sustainable transport, which would be set out within a development specific Travel Plan.

Link capacity on the A57 / dualling of the A57, and the A57 Improvement Plan

- 1.11 The Bassetlaw Transport Assessment Update (May 2022) (document TI-017) refers to a range of potential 'link capacity' upgrades later in the plan period to mitigate the impact of traffic as a whole (i.e. not simply from new development or indeed from Apleyhead), and considers the potential widening of the A57 between the B6040 and A614/A1 roundabouts. However, paragraphs 11.6.13 to 11.6.19 of the same document go on to explain the approach taken in the assessment is highly robust and that actual flows are likely to be lower due to a range of factors (including those raised at 11.6.13).
- 1.12 Therefore, TI-017 takes an overly robust approach to trip generation (in Table 32) and whilst in theory it is right to be aware of link capacity, in reality a range of typical traffic management options (promotion of sustainable travel, flexible/shift working, and travel management) will mean actual trip generation lower with peak periods spread (as set out in the appended note by Fore) meaning link capacity issues are unlikely to arise. Furthermore, 11.6.25 and 11.6.26 of TI-017 confirm link capacity would form part of the wider Improvement Plan designed to address issues unrelated to local plan led development and this could include cross-boundary and wider strategic travel along the A57 as a route which carries a range of traffic including that passing through the District and therefore not specifically or solely traffic as a result of development identified in the local plan.
- 1.13 The package of highways works referred to in Policy 9 are considered to be appropriate, reasonable, and deliverable, and are based on robust evidence for the development of Apleyhead. Link capacity upgrades are not required as a result of development at Apleyhead, as confirmed in the appended Fore note.
- 1.14 We note the references to an A57 Improvement Plan (see TI-017 and BDC-02) and conclude, as the Council has in BDC-02 and TI-017 (notably paragraph 11.6.26), the A57 Improvement Plan is a wider cross-boundary study which could deliver benefits above and beyond those works already proposed in the emerging local plan. Therefore the works proposed in the emerging local plan are sufficient to mitigate impacts of the plan, and the Improvement Plan nor link capacity work, is required to support the local plan.

Relevance of ST54 and the IDP in the context of Apleyhead

- 1.15 The highways mitigation included in Policy 9 is reasonable and sound, and has been arrived at following consultation with neighbours and relevant organisations. Policy 9 should therefore be the basis for assessing any proposals at the Apleyhead site and is the starting point in policy

terms for considering any required mitigation. Therefore, Policy ST54 should (in cross referencing the IDP) not inadvertently suggest potential additional mitigation measures for the development of Apleyhead and which are not required in planning terms.

- 1.16 It is correct for ST54 to address highways infrastructure, but it is important to distinguish between mitigation works needed to make development acceptable in planning terms (i.e., the mitigation envisaged in Policy 9) and the wider, longer-term infrastructure aims of the Council in conjunction with others. The IDP seems to fail to present this distinction by somewhat crudely apportioning, to various allocation sites, a wider set of improvements than is needed for their development.
- 1.17 In considering the objectives of Policy 9, the IDP, and Plan-wide Transport Assessment, it is relevant to follow the changes to Policy 9 (previously policy ST10) wording in relation to highways works as the plan has progressed. Previous versions of the draft plan, and particularly the Regulation 18 version plan (November 2020), included a far more extensive package of highway interventions in relation to the site, yet the various Regulation 19 consultation plans (Publication (August 2021), Publication Addendum 1 (January 2022), and Publication Addendum 2 (May 2022) which formed the Regulation 22 Submission now refer to only those works as set out in Policy 9, part H(ii).
- 1.18 The latest policy wording is entirely correct and is informed by site specific assessments as set out in the appended Note.

Scope and purpose of ST54

- 1.19 Related to the above, Caddick point out by way of clarification, the scope and extent of Policy ST54 and the associated supporting text in that ST54 is a broad infrastructure delivery policy (as per Part 1 of the policy) and not a quasi-development management policy, despite criteria within Parts 2 to 4 of ST54. This should be clarified for certainty.
- 1.20 Paragraph 11.1.12 of the plan refers to financial contributions from relevant developments being used to support the A57 Improvement Plan, with this approach to contributions being taken forward in Part 3 of ST54. This is inconsistent and causes confusion. The Council's case in BDC-02 appears to be that the A57 Improvement Plan is a longer-term project, addressing more strategic needs, in part created by traffic flows originating on a sub-regional level, which effectively sits outside of the plan process and is not required to make the plan sound.

13.1 b) Are the modifications suggested by the Council to the Policy ST54 and the supporting text necessary for soundness?

- 1.21 Caddick has no particular comments on this matter but reserves the option to comment following MIQ responses by the Council and others.

13.2 a) Are the requirements for major developments in ST55(2) justified?

- 1.22 Part 2 of Policy ST55 is currently unjustified (and unsound). Part 2(a) of the policy could be read in such a way that a single major development should assist all communities in Bassetlaw with opportunities for non-car travel. It is unreasonable to expect a single major development would assist all communities in Bassetlaw, therefore, and on that basis, we anticipate the intention of the policy is that a particular major development should support non-car travel where relevant to the development.
- 1.23 Therefore, a simple modification is needed to clarify the matter, and Caddick is willing to collaborate with the Council as needed.

13.2 b) Does the Policy provide effective framework to achieve sustainable transport and active travel?

- 1.24 Caddick has no comments on this matter but reserves the option to make further comments following MIQ responses by the Council and others.

13.2 c) Are the modifications suggested by the Council to the Policy and the supporting text necessary for soundness?

- 1.25 Caddick consider that further changes to ST54 are required, for the reasons detailed in the response to matter 13.3, particularly in the context of seeking clarification on the purpose of ST54.

13.3 Are the Policies justified and consistent with national policy? Are the requirements of the Policies clear, and would they be effective?

- 1.26 For the reasons detailed in the 13.1(a) response, clarification on the role and purpose of ST54 is needed.
- 1.27 We also welcome clarification on the scope and intent of ST55. The policy is seemingly addressing public transport and non-car modes, and that the access to development should

give priority to pedestrians and cyclists in a way which does not compromise the flow of traffic, and Caddick support this objective. However, the policy could also be inferred as a development management type policy which seeks to address highways impacts.

- 1.28 If the policy is intended as a development management type policy then we consider it is inconsistent with national policy as it could be inferred that any developments which *'compromise the free flow of traffic on the public highway'* (ST55 (Part 2(b)(i)) or *'exacerbate traffic congestion on the existing highway network'* (ST55 (Part 2(b)(ii)) could be refused planning permission. This is at odds with national policy which is clear (at NPPF Paragraph 111) that... *'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe'*.
- 1.29 If the policy is deemed to be a development management type policy then modifications are required to ensure consistency with national policy.

13.4 Are there any omissions from the Policies? Are they appropriately flexible

- 1.30 Caddick has no comments on this matter, noting the above requirements for revisions or clarification on ST54 and ST55.

APPENDIX 1

Briefing Note - A57 Junction and Link Capacity Assessments

4 November 2022
Version 3.0
Issue



1 Introduction

This Briefing Note has been prepared on behalf of Caddick Developments Ltd (Caddick). Caddick is promoting land at Apleyhead Junction (site SEM001) for approximately 4.7m sqft of employment uses (predominantly B8, with elements of B2, and ancillary offices), which is identified as a strategic allocation in the draft plan.

This Briefing Note accompanies the Barton Willmore ‘Response to Matters, Issues and Questions for the Examination’, Matter 3.3b and Matter 13.1a.

2 Background

Fore Consulting Limited (Fore) has been engaged by Caddick to provide technical work relating to transport and highways matters for the delivery of land at Apleyhead Junction, Worksop, for a strategic employment development comprising approximately 4.7m sqft of employment uses (predominantly B8, with elements of B2, and ancillary offices). Fore has engaged in technical discussions with both Nottinghamshire County Council (NCC) Highways and National Highways (NH) regarding the scope and extent of the transport assessment work that is necessary to determine the acceptability of the proposal, any mitigation required and to accompany a future planning application for the proposals.

The technical work undertaken to date has identified the transportation implications of the proposed development on both the local and strategic highway networks, based on the approach agreed with both NCC Highways and NH. The work has identified an appropriate roundabout access solution from the A57 to gain access to the Site. It has also included detailed traffic impact analysis to identify whether any off-site transport works would be necessary to facilitate the proposed development. In assessing the traffic impacts of the development proposals, consideration has been given to the anticipated completion year of early phases of the development alongside the full development build out year (anticipated to be 2030) and end of Local Plan period.

3 Site Access Strategy

It is proposed to serve the Site from a new three-arm roundabout onto the A57. The access junction will provide the necessary highways infrastructure to satisfactorily accommodate

the traffic demand associated with the proposed development, including widening of the A57 to two lanes on the approach to the roundabout which will provide increased capacity on approach to the access roundabout itself from the east and west.

The preliminary design of the access roundabout onto the A57 has been agreed with NCC Highways, who have prepared a Stage 1 Road Safety Audit for the proposals, the recommendations of which have been fully incorporated into the proposed roundabout layout. The new roundabout and access road, as well as the internal layout of the Site, will be able to satisfactorily accommodate public transport services.

The proposed access will also be accompanied by a new cycleway and footway that will directly link the Site to the adjacent infrastructure that currently terminates at Roebuck Way to the west of the Site. This will ensure that the Site is directly connected to the existing walking and cycling infrastructure such that journeys to the Site can be safely made.

In line with Policy 9 part H(i) and H(iv), it is therefore clear that the proposed vehicular access solution will provide a safe and satisfactory access to the Site from the A57 for vehicles, public transport, cyclists and pedestrians.

The proposed Site access drawings are included at Appendix A and the Stage 1 Road Safety Audit is included at Appendix B.

4 Extent of Junction and Link Capacity Testing

In order to assess the likely impacts of the development proposals, detailed Weekday AM and Weekday PM peak hour junction capacity testing exercises have been undertaken at 9 No. junctions forming the study network, including the A1 Apleyhead Junction to the east of the Site and the A57/B6040 junction to the west of the Site. The junctions where detailed capacity assessments have been undertaken are listed below:

- Junction 1: A57 / Proposed New Site Access Roundabout.
- Junction 2: A1 / A57 / A614 Blyth Road (Apleyhead Western Junction).
- Junction 3: A1 / B6420 Mansfield Road Roundabout (Apleyhead Eastern Junction).
- Junction 4: A57 / Roebuck Way Junction.
- Junction 5: A57 / DHL Site Access Junction.
- Junction 6: A57 / Wilkos Distribution Centre Junction.

- Junction 7: A57 / B6040 Roundabout.
- Junction 8: A57 / B6034 / Netherton Road Roundabout.
- Junction 9: High Hoe Road / Retford Road Junction.

The traffic impact of the proposed development has been quantified at a further 3 No. junctions and link capacity assessments have been undertaken along the A57 at points to the east and west of the proposed Site access. This work therefore provides a clear overview of the transport impacts of the proposals ahead of a forthcoming planning application for the development.

5 Baseline Traffic Survey Data

In agreement with NCC Highways and Bassetlaw District Council (BDC), where available, baseline traffic survey data was obtained from the Bassetlaw Local Plan Junction Assessments Report (BLPJAR) and the Bassetlaw Transport Study (BTS). Further baseline traffic survey data was obtained from supporting documents prepared for nearby planning applications whilst traffic flows along the A1 mainline (for use in the A1 merge and diverge assessments) were identified from WebTRIS Traffic Monitoring Unit (TMU) Sites.

Traffic associated with committed development and Local Plan allocation sites has been included, in agreement with NCC Highways.

To ensure that the junction models were calibrated against the observed baseline operating conditions, Fore undertook a detailed review of the traffic survey video footage at each junction (where available and as supplied by the authors of the BLPJAR), recording the average queues at thirty second spot surveys across each of the identified peak hours. This included survey footage at the A1 Apleyhead junction and the A57 / B6040 junction. In addition, at the A1 Apleyhead junction, the thirty second spot survey queues were cross referenced against the queues identified in the Transport Assessment submitted as part of the outline planning application for Land at Manton, Worksop (planning application reference 15/00192/OUT). This process has ensured that the baseline models are reflective of the observed baseline traffic conditions.

6 Vehicle Trip Generation and Distribution

The predicted vehicle trip rates associated with the proposed development have been agreed with both NCC Highways and National Highways (NH). Separate trip rates have been identified for car / LGV and HGV movements and, at the request of NCC Highways, HGV trips have been converted to Passenger Car Unit (PCU) values using a factor of 2.0. The resulting estimated vehicle trip generations are presented in Table 1 below.

Table 1: PCU Trip Generation

Vehicle Type	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Arr.	Dep.	Total	Arr.	Dep.	Total
Car/LGV	690	182	872	89	570	658
HGV	220	158	379	70	113	183
Total	910	341	1,251	159	682	841

Table 1 shows that the proposed development is predicted to generate a total of 1,251 and 841 two-way PCU trips during the Weekday AM and Weekday PM peak hours, respectively.

In agreement with NCC Highways and NH, the predicted car / LGV distribution and HGV trip distribution have been assessed separately. The car / LGV trip distribution has been assessed using the Census dataset, “WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)” for people who work in Bassetlaw 014 Middle Layer Super Output Area (MSOA), this being the area in which the Site is located. The methodology is likely to provide a realistic estimate of the trip distribution since the MSOA includes the adjacent Wilko and B&Q distribution centres which are likely to have similar travel to work characteristics as the proposed development Site. The resulting trip distribution is shown in Table 2 below.

Table 2: Car / LGV Trip Distribution

Ref.	Route	Vehicle Trip Distribution
1	A1 (North)	15.6%
2	B6420 Mansfield Road	3.7%
3	A1 (South)	7.9%
4	A614 Blyth Road	15.0%
5	B6034 Netherton Road	2.0%
6	A57	19.5%
7	Netherton Road	12.1%
8	Retford Road	5.9%
9	High Hoe Road	18.4%
Total		100.0%

The trip distribution for HGV movements at the Site has been determined by reviewing the surveyed HGV turning movements at the A57 / B6040 roundabout. This has established the percentage split of eastbound and westbound HGV movements along the A57 within the immediate vicinity of the Site and consequently has been used to assign HGV movements

turning to and from the Site's proposed new access onto the A57. The HGV movements have been split at the A1 Apleyhead Junction based on the percentage of surveyed HGV movements to and from the A1 (north), A1 (south) and the A614 Blyth Road.

The resulting HGV trip distribution for the proposed development is summarised in Table 3 below.

Table 3: HGV Trip Distribution

Ref.	Route	Vehicle Trip Distribution
1	A1 (North)	18.2%
3	A1 (South)	38.0%
4	A614 Blyth Road (South)	3.3%
6	A57	40.4%
Total		100.0%

Table 4 below summarises the combined car / LGV and HGV development trip distribution onto the A57, east and west of the proposed Site access roundabout.

Table 4: Development Trip Distribution along A57

Ref.	Percentage
A57, East of Site Access	47%
A57, West of Site Access	53%

Table 4 shows that 47% of traffic associated with the proposed development is predicted to be distributed along the A57, east of the proposed Site access i.e. to / from the A1 Apleyhead junction with 53% predicted to be distributed along the A57, west of the proposed Site access i.e. to / from the A57 / B6040 junction. It should be noted that this is in contrast to the Flow Bundle plots presented at Section 11.6 of the BTS which show a much heavier weighting of the proposed development traffic to / from the west. Table 5 below compares the predicted Apleyhead development traffic along sections of the A57 as presented in Table 30 of the BTS against those determined from the Fore technical work.

Table 5: Comparison of Predicted Apleyhead Development Traffic along A57 Links (Sum of AM/PM as per BTS)

Source	A57 East of Old Coach Road to Apleyhead Site Access i.e. west of Site access	A57 East of Apleyhead Site access to A1(T) Apleyhead Interchange i.e. east of Site access	Total
BTS Table 30	2,260	752	3,012
Fore Technical Work	1,112	979	2,091

Table 5 shows that the BTS has estimated that the proposed development is predicted to generate a total of 3,012 two-way vehicle movements (sum of AM/PM peak hour traffic) onto the A57, compared to 2,091 two-way vehicle movements estimated in Fore’s technical work. Further, as a result of the differences in determining the distribution of the proposed development traffic, the BTS is considered to have significantly overestimated the impact of the development traffic along the A57, west of the proposed Site access.

In this respect, it is important to recognise that the BTS acknowledges at Section 2.1.3 that *“This strategic assessment update is the first stage of the Transport Assessment process, and it will be necessary for more detailed analysis to be undertaken as individual development sites are progressed. This will include more detailed assessments of the transport implications of all development sites, undertaken either as studies to guide the preparation of Development Plan Documents, or as part of the evidence submitted in support of planning applications”*.

Further, in terms of the link capacity assessments undertaken in the BTS, the report acknowledges at Section 9.5.5 that the assessments *“represent the ‘worst case’ in terms of highway traffic impacts because the methodology used to derive them:*

- *assumes all committed development will be complete by 2038.*
- *applies TRICS trip generation rates appropriate for the purposes of a District wide Local Plan transport study.*
- *applies observed (2011 Census) modal splits.*
- *makes no allowance for peak spreading or route reassignment.*
- *makes no allowance for measures to reduce the need to travel (e.g. homeworking etc.).*
- *makes no allowance for expanding the supply and availability of sustainable travel alternatives.*
- *takes no account of the potential benefits of future technology such as autonomous vehicles etc”*.

It can be seen therefore that the BTS is likely to have overestimated the proposed development’s impact on the link capacity of the A57.

7 Junction Modelling Results

The junction models undertaken in the Fore technical work demonstrate that for each of the 9 No. junctions where detailed capacity testing has been undertaken (including the A1 Apleyhead junction and A57 / B6040 junction, all 9 No. junctions are predicted to operate within their design capacity, accounting for traffic associated with the full build out of the proposed development.

With the inclusion of the Local Plan allocation site traffic, 8 of the 9 junctions assessed are predicted to remain within their design capacity. At the A1 Apleyhead junction, future improvements to the junction may be required which could involve minor upgrades to the A1 northbound off-slip, A57 western approach and introduction of traffic signal infrastructure.

Any mitigation that is necessary at the A1 Apleyhead junction is likely to be required later in the development phasing, and our view is that the early phases of development should not require mitigation at this location. If mitigation is required, several options are available that can be delivered within the existing highway and land ownership extents. Therefore the precise solution and threshold for any mitigation will be determined in the normal way through the future planning application for the Site, which is fully within the control of the respective highway authorities. It is concluded that there is no reason why the site cannot be allocated for development on this basis.

8 A57 Link Capacity Testing

An assessment has been undertaken of the A57 link capacity, east and west of the proposed new Site access roundabout.

The maximum two-way link capacity of the A57 in the vicinity the Site is 2,760 vph.

Table 6 below provides a summary of the link capacity assessments undertaken on the A57 to the east and west of the proposed Site access.

Table 6: A57 Two-Way Link Flows (vehicles per hour)

End of Local Plan Period (With Proposed Development and Local Plan Traffic)	Two-Way Link Flows (vph)	
	Weekday AM Peak Hour	Weekday PM Peak Hour
A57, East of Proposed Site Access	2,577 (incl. 593 (23%) proposed development)	2,614 (incl. 386 (15%) proposed development)
A57, West of Proposed Site Access	2,677 (incl. 667 (25%) proposed development)	2,699 (incl. 455 (17%) proposed development)

The assessments have demonstrated that at points to the east and west of the proposed Site access, the A57 is predicted to operate within its link capacity during both peak hours, with the proposed development in place and accounting for Local Plan traffic.

Whilst it is noted that Table 28 of the BTS suggests that the A57 between B6040 and the A1 Apleyhead junction is predicted to be operating above capacity (CRF 107%) at the end of the Local Plan period, we would again emphasise that the report acknowledges that the presented link assessments are likely to be a worse case, for the reasons outlined in Section 6 of this Briefing Note. Thus, it is reasonable to consider that when these factors are taken into account, it is likely that the A57 will continue to operate within its link capacity, as concluded by Fore.

Section 11.6.26 of the BTS considers that *“It is therefore recommended that the Council work with relevant partners to agree an ‘Improvement Plan’ for the A57 corridor which considers planned growth as well as other likely sites that may come forward through the lifetime of the Local Plan. The Improvement Plan should identify a credible mechanism for mitigation and the delivery of any improvements required to the highway”*.

It is therefore concluded that the dualling of the A57 is not required as a result of the Site, as there is no future link capacity issue.

9 Conclusion

This Briefing Note addresses questions raised in the local plan examination ‘Matters, Issues and Questions for the Examination’, and particularly Matters 3.3b and Matter 13.1a.

Matter 3.3b

“3.3 In relation to strategic employment needs:

b) What factors led to its allocation? Is it based on up-to-date evidence?”

Matter 13.1a

“13.1 a) Is there robust evidence to demonstrate that the likely significant impacts on the road network arising from the development proposed in the Plan have been adequately assessed. Is there robust evidence that these can be effectively mitigated to an acceptable degree and that, if required, such mitigation can be delivered?”

Response

The technical work undertaken by Fore uses robust evidence to identify the transportation implications of the proposed development on both the local and strategic highway networks. The work confirms that the traffic impacts of the proposed development can be effectively mitigated through the delivery of future highway improvement schemes which reflects the current draft working of Policy 9 and particularly part H(ii) in the context of highway mitigation. In particular:

- An appropriate access solution can be delivered which will provide the necessary highways infrastructure to satisfactorily accommodate the traffic demand associated with the proposed development, including widening of the A57 to two lanes to provide capacity improvements on approach to the access roundabout itself from the east and west.
- In line with Policy 9 part H(i) and H(iv) the proposed vehicular access solution will provide safe access to the site from the A57 for vehicles, public transport, cyclists and pedestrians. The preliminary design of the access roundabout has been agreed with NCC Highways and a Stage 1 Road Safety Audit has been undertaken.
- The proposed development will not fundamentally alter the operation of the junctions on the local and strategic road networks.
- All 9 No. junctions assessed for capacity, including the A1 Apleyhead junction and the A57/B6040 junction, are predicted to operate within capacity accounting for the development traffic associated with the proposed Site.
- With the addition of the Local Plan allocation site traffic, improvements to the A1 Apleyhead junction may be required later in the development programme.
- The precise solution and threshold will be determined in the normal way through the future planning application for the Site and the proposed mitigation for Apleyhead can be delivered within the existing highway / land ownership extents.
- This could involve minor upgrades to the A1 northbound off-slip, A57 western approach and introduction of traffic signal infrastructure.
- Whilst the Fore technical work has demonstrated that improvements to the A57/B6040 junction are not required, should these works be required later in the development programme, then these can be determined in the normal way through the future planning application for the site.
- The BTS is likely to have overestimated the impacts of the proposed development on the A57. In particular, the BTS is likely to have overestimated the proportion of the

proposed development traffic at points west of the proposed Site access. Further, the BTS acknowledges that the presented link assessments are likely to be a worse case for a variety of reasons and that more detailed analysis will be required as individual development sites are progressed.

- Even accounting for this robust approach, the BTS confirms that if dualling of the A57 is required, this is unlikely to be within the first eight to 10 years of the plan period.
- Notwithstanding, the detailed assessments undertaken by Fore have confirmed that the A57 is predicted to remain within its link capacity accounting for the development traffic associated with the Site
- Therefore dualling of the A57 is not required as a result of the Site, as there is no future link capacity issue.
- The A57 Improvement Plan and desire to address sub-regional transport matters is noted. However, the Improvement Plan is not needed for delivery of this plan and the allocations.

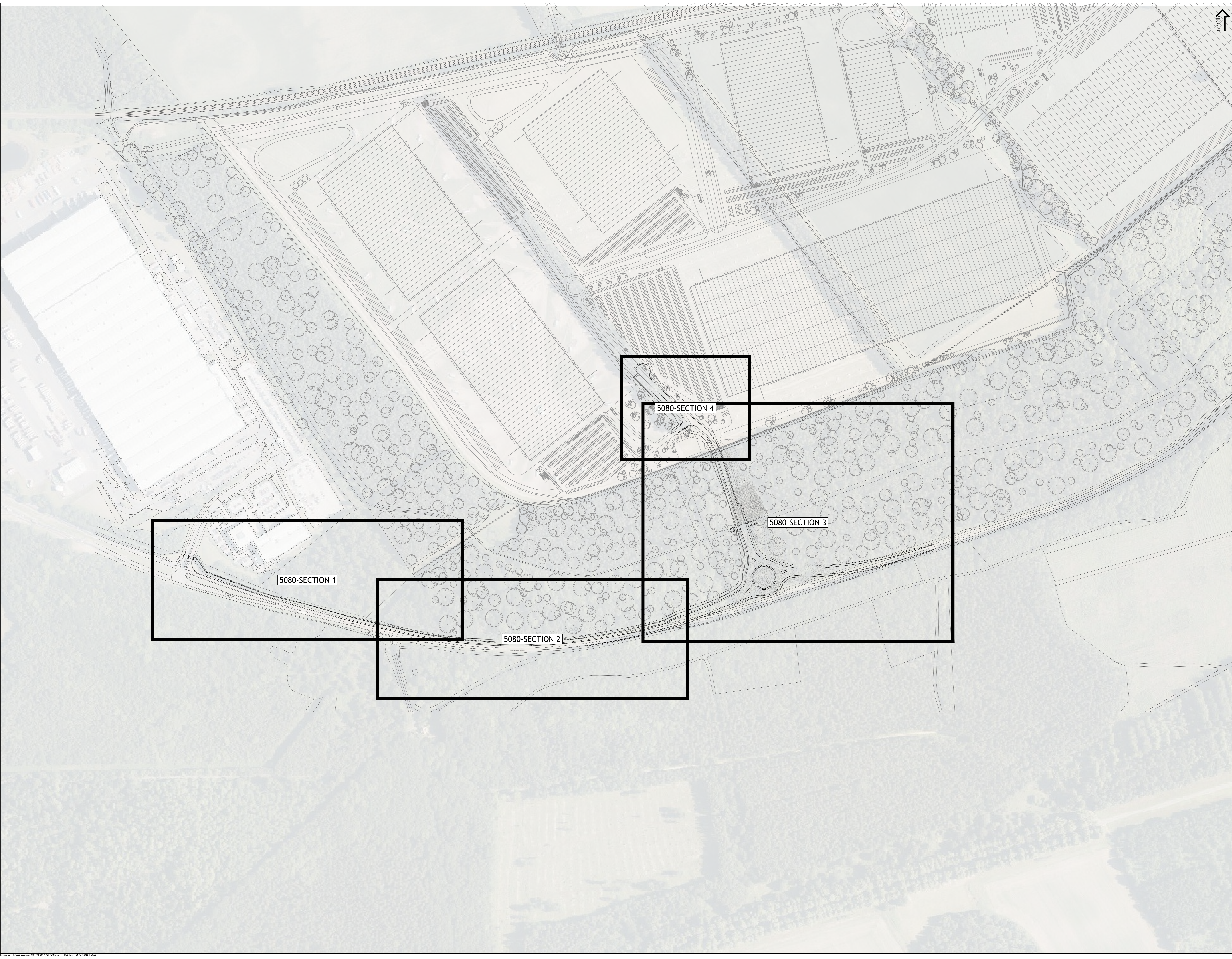
These conclusions reflect the current draft working of Policy 9 and particularly part H(ii) in the context of highway mitigation.

Appendix A

Proposed Site Access Drawings

GENERAL NOTES
 1. THE TOPOGRAPHICAL SURVEY IS BASED ON INFORMATION PRODUCED BY BWS, DRG, OSR, BWS, CO, 22, A5, G-001, REV. F2, DATED 3 DECEMBER 2017. THE INFORMATION USED IN PREPARATION OF THIS AND ALL OTHER FORE CONSULTING DESIGNS AND DRAWINGS IS NOT WARRANTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SURVEY INFORMATION PROVIDED AND REPORT ANY ANOMALIES TO FORE CONSULTING.

DESIGN NOTES
 1. ALL DESIGN AND WORKS TO COMPLY WITH CURRENT VERSION OF THE FOLLOWING DOCUMENTS:
 - DESIGN MANUAL FOR ROADS AND BRIDGES (DMRB);
 - SPECIFICATION FOR HIGHWAY WORKS (SHW);
 - MANUAL FOR STREETS (MFS); AND
 - NOTTINGHAMSHIRE COUNTY COUNCIL (NCC) DESIGN GUIDE AND SPECIFICATION.



REV	DESCRIPTION	DATE	BY
A	ROAD LAYOUT UPDATED	28.03.22	ML

Client:
CADDICK DEVELOPMENTS

Project:
**A57 ROUNDABOUT
 OSBERTON
 WORKSOP**

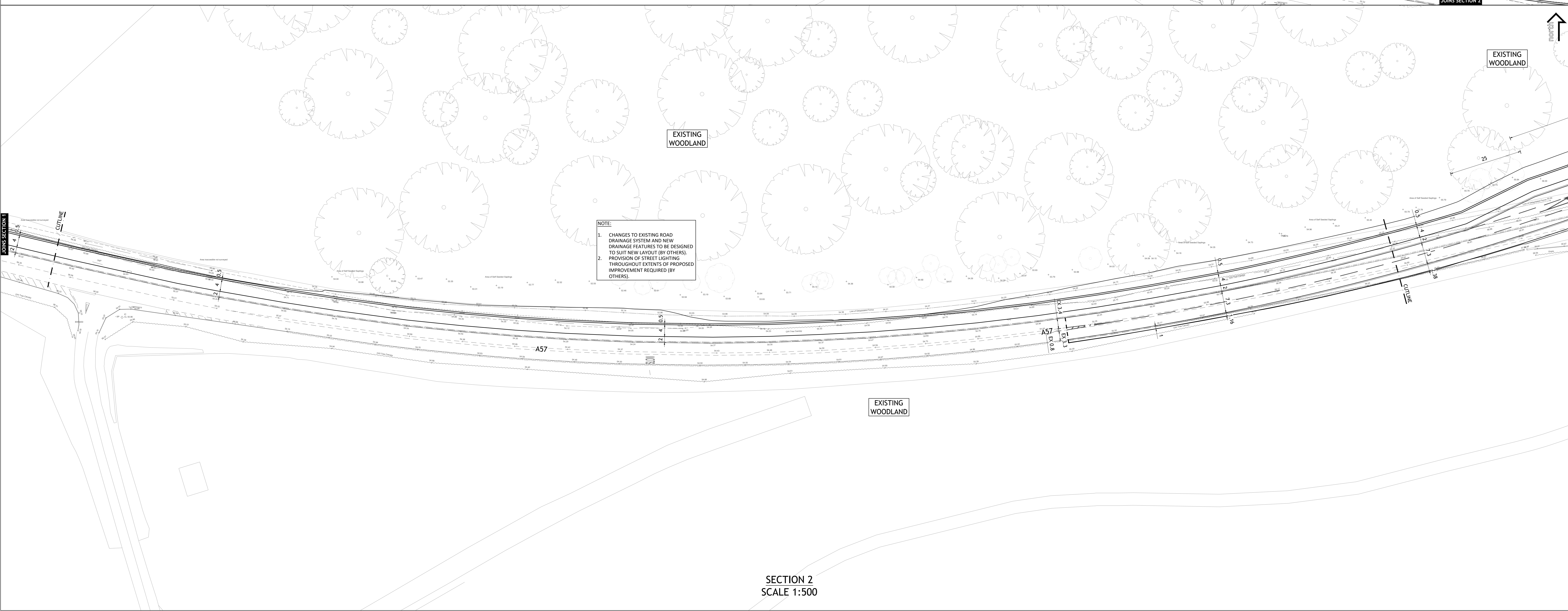
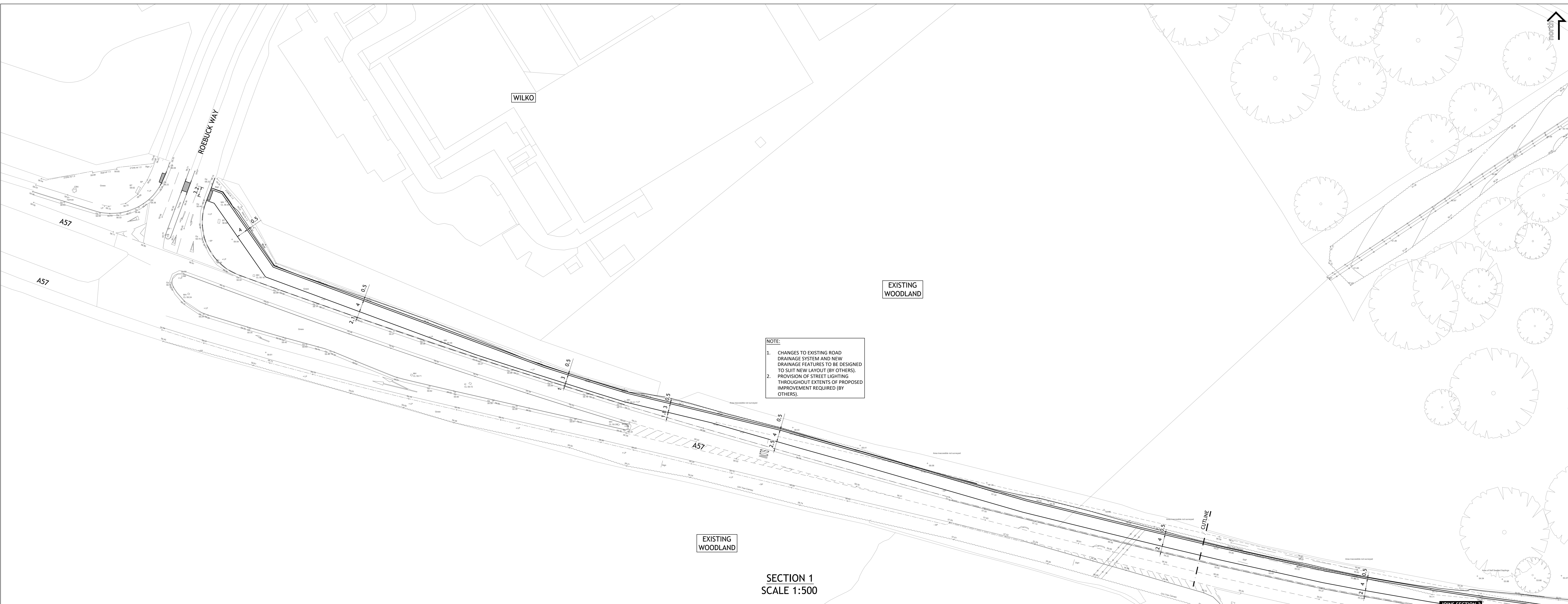
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KEY PLAN

PRELIMINARY

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 Leeds
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 0113 2460204
 enquiries@foreconsulting.co.uk
 www.foreconsulting.co.uk

Drawing No:	5080	Project No:	100-P-001	Scale:	1:2000	Revision:	A
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- GENERAL NOTES
- THE TOPOGRAPHICAL SURVEY IS BASED ON INFORMATION PRODUCED BY BWS, DRG, OSB, RWB, GZ, W & G, DOT, REV. 7, DATED 3 DECEMBER 2011. THE INFORMATION USED IN PREPARATION OF THIS AND ALL OTHER DRAWINGS IS NOT GUARANTEED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SURVEY INFORMATION PROVIDED AND REPORT ANY ANOMALIES TO FORE CONSULTING.
- DESIGN NOTES
- ALL DESIGN AND WORKS TO COMPLY WITH CURRENT VERSION OF THE FOLLOWING DOCUMENTS:
 - DESIGN MANUAL FOR ROADS AND BRIDGES (DMRB);
 - SPECIFICATION FOR HIGHWAY WORKS (SHW);
 - MANUAL FOR STREETS (MFS); AND
 - NOTTINGHAMSHIRE COUNTY COUNCIL (NCC) DESIGN GUIDE AND SPECIFICATION.
 - FOOTPATH GRADIENT AT TACTILE PAVING TO BE A MAXIMUM OF 1:12.
 - EXISTING FENCES, VERGES/SHUBBERY AND OTHER PHYSICAL FEATURES TO BE REMOVED WITHIN THE AREA OF WORKS.
 - ALL KERBS TO BE HB WITH 125mm KERB CHECK.
 - ALL FENCING TO BE TAKEN UP AND REMOVED FROM SITE SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATION FOR HIGHWAY WORKS CLAUSE 201.9 AND SUITABLY DISPOSED.
 - ALL IRONWORK WITHIN EXTENT OF WORKS TO BE LOWERED / RAISED AS REQUIRED.
 - ALL PROPOSED ROAD MARKINGS TO BE IN ACCORDANCE WITH THE FOLLOWING:
 - TRAFFIC SIGNS REGULATIONS AND GENERAL TRAFFIC SIGNS (TSG) (ENGLAND)
 - TRAFFIC SIGNS MANUALS CHAPTER 5 - ROAD MARKINGS.
 - DESIGN SPEED FOR A57: 60mph
DESIGN SPEED FOR PROPOSED ACCESS ROAD: 30mph
 - EARTHWORKS SLOPES TO BE MAXIMUM 1:3.



REV	DESCRIPTION	DATE	BY
A	ROAD LAYOUT UPDATED	28.03.22	ML

Client:
CADDICK DEVELOPMENTS

Project:
A57 ROUNDABOUT
OSBERTON
WORKSOP

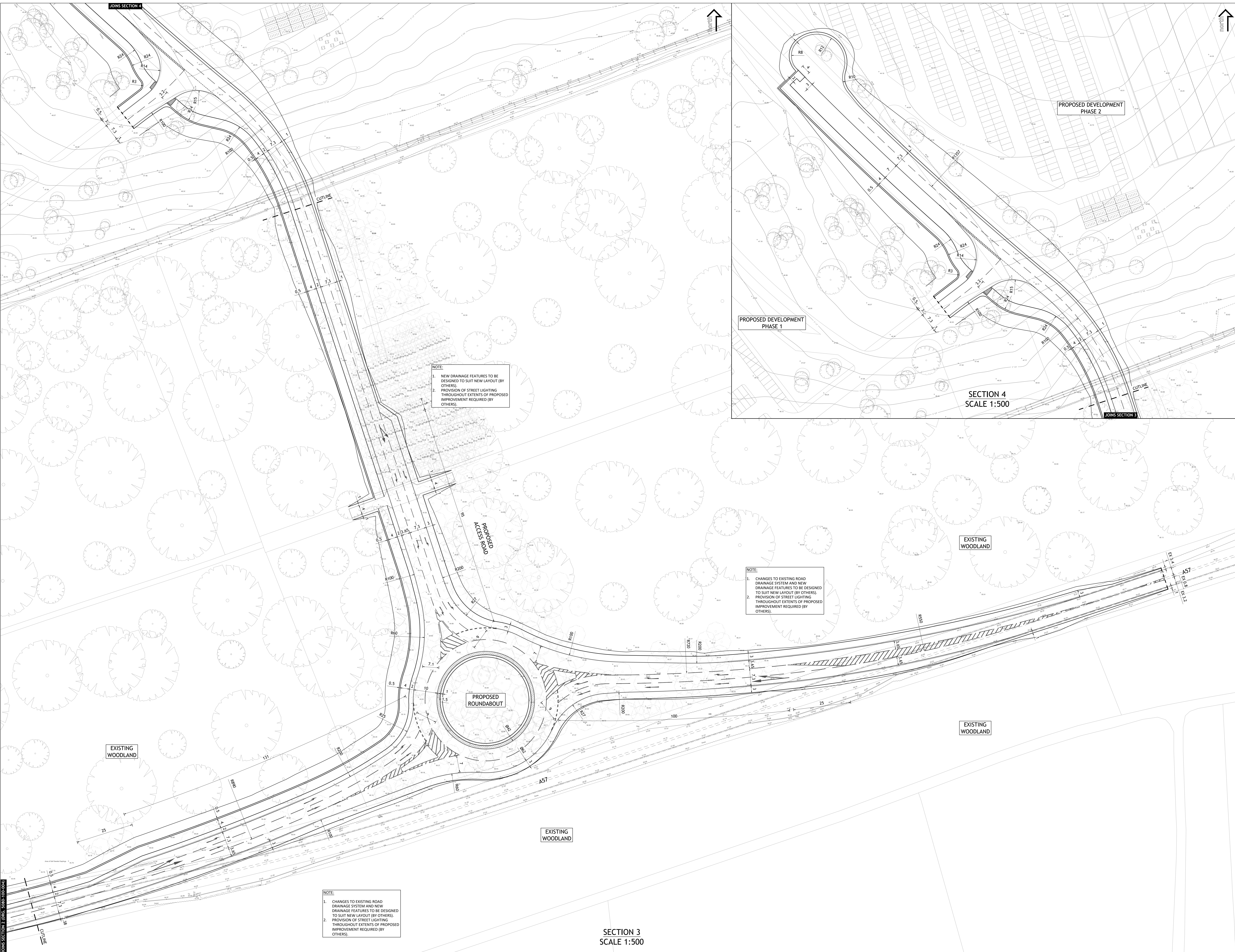
Drawing Title:
ENGINEERING LAYOUT
SHEET 1 OF 2

PRELIMINARY

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Rev No	Rev Description	Date	Scale	Rev
ML	PI	22.12.2021	1:500	A0
5080	100-P-004			A

- GENERAL NOTES
- THE TOPOGRAPHICAL SURVEY IS BASED ON INFORMATION PRODUCED BY BWS, DRG, OSB, BWS, OS, JLS AND G-DOI, REV. P2, DATED 3 DECEMBER 2017. THE INFORMATION USED IN PREPARATION OF THIS AND ALL OTHER FORE CONSULTING DESIGNS AND DRAWINGS IS NOT WARRANTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SURVEY INFORMATION PROVIDED AND REPORT ANY ANOMALIES TO FORE CONSULTING.
- DESIGN NOTES
- ALL DESIGN AND WORKS TO COMPLY WITH CURRENT VERSION OF THE FOLLOWING DOCUMENTS:
 - DESIGN MANUAL FOR ROADS AND BRIDGES (DMRB);
 - SPECIFICATION FOR HIGHWAY WORKS (SHW);
 - MANUAL FOR STREETS (MFS); AND
 - NOTTINGHAMSHIRE COUNTY COUNCIL (NCC) DESIGN GUIDE AND SPECIFICATION.
 - FOOTPATH GRADIENT AT TACTILE PAVING TO BE A MAXIMUM OF 1:12.
 - EXISTING FENCES, VERGES/SHUBBERY AND OTHER PHYSICAL FEATURES TO BE REMOVED WITHIN THE AREA OF WORKS.
 - ALL KERBS TO BE HB WITH 125mm KERB CHECK.
 - ALL FENCING TO BE TAKEN UP AND REMOVED FROM SITE SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATION FOR HIGHWAY WORKS CLAUSE 201.5 AND SUITABLY WORKED.
 - ALL IRONWORK WITHIN EXTENT OF WORKS TO BE LOWERED / RAISED AS REQUIRED.
 - ALL PROPOSED ROAD MARKINGS TO BE IN ACCORDANCE WITH THE FOLLOWING:
 - TRAFFIC SIGNS REGULATIONS AND GENERAL DIRECTIONS (TSGRD);
 - TRAFFIC SIGNS MANUALS CHAPTER 5 - ROAD MARKINGS.
 - DESIGN SPEED FOR A57: 60mph
 DESIGN SPEED FOR PROPOSED ACCESS ROAD: 30mph
 - EARTHWORKS SLOPES TO BE MAXIMUM 1:3.



NOTE:
 1. NEW DRAINAGE FEATURES TO BE DESIGNED TO SUIT NEW LAYOUT (BY OTHERS).
 2. PROVISION OF STREET LIGHTING THROUGHOUT EXTENTS OF PROPOSED IMPROVEMENT REQUIRED (BY OTHERS).

NOTE:
 1. CHANGES TO EXISTING ROAD DRAINAGE SYSTEM AND NEW DRAINAGE FEATURES TO BE DESIGNED TO SUIT NEW LAYOUT (BY OTHERS).
 2. PROVISION OF STREET LIGHTING THROUGHOUT EXTENTS OF PROPOSED IMPROVEMENT REQUIRED (BY OTHERS).

NOTE:
 1. CHANGES TO EXISTING ROAD DRAINAGE SYSTEM AND NEW DRAINAGE FEATURES TO BE DESIGNED TO SUIT NEW LAYOUT (BY OTHERS).
 2. PROVISION OF STREET LIGHTING THROUGHOUT EXTENTS OF PROPOSED IMPROVEMENT REQUIRED (BY OTHERS).

SECTION 3
 SCALE 1:500

SECTION 4
 SCALE 1:500

REV	DESCRIPTION	DATE	BY
B	ROAD LAYOUT UPDATED	28.03.22	ML
A	CHANGES FOLLOWING COMMENTS	20.01.22	ML

Client:
CADDICK DEVELOPMENTS

Project:
**A57 ROUNDABOUT
 OSBERTON
 WORKSOP**

Drawing Title:
**ENGINEERING LAYOUT
 SHEET 2 OF 2**

PRELIMINARY

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Project No:	5080	Drawn by:	ML	Scale:	1:500	Sheet:	A0
Date:	22.12.2021	Checked by:	ML				
File Name:	100-P-005	Project Name:	B				

Appendix B

Stage 1 Road Safety Audit



A57 Worksop Bypass, Osberton – Proposed Roundabout Approximately 1.2km West of Apleyhead

**Road Safety Audit
Stage 1 - Completion of Preliminary Design**

in partnership with



SA2429A
February 2021

A57 Worksop Bypass, Osberton – Proposed Roundabout Approximately 1.2km West of Apleyhead

Stage 1 Road Safety Audit

Prepared for:

Martin Green of Nottinghamshire County Council Development Control

Via East Midlands Ltd
Bilsthorpe Business Park, Eakring Road, Bilsthorpe, Nottinghamshire, NG22 8ST

Registered Office: Bilsthorpe Highways Depot, Bilsthorpe Business Park, Eakring Road, Bilsthorpe, Newark NG22 8ST

1. Introduction

- 1.1** This report results from a Stage 1 Road Safety Audit carried out on a proposed three arm roundabout on the A57, approximately 1.2km west of Apleyhead at Osberton, Worksop in Nottinghamshire. The design drawings are by Fore Consulting Ltd for their Client Caddick Developments. The proposed roundabout will allow what appears to be very large industrial units to be built. It is noted that a separate pedestrian/cycle access is proposed which avoids the need for facilities adjacent the A57.
- 1.2** The Road Safety Audit has been carried out following a request received from Martin Green of Nottinghamshire County Council Development Control on 1st February 2021.
- 1.3** The Road Safety Audit Team membership approved by Kendrick Hourd, Service Manager (Safer Highways) at Via East Midlands, consisted of:
- Phil Gow - Audit Team Leader, Via East Midlands
Gareth Coles - Audit Team Member, Via East Midlands
- 1.4** The Audit Team Leader and Audit Team Member personally hold an internationally recognised Certificate of Competency in Road Safety Audit (Highways England Approved).
- 1.5** The Road Safety Audit comprised an examination of the following documents provided:
- 5080-100-SK-020 (unrev) GENERAL ARRANGEMENT OPTION 3
5080-100-SK-021 (unrev) ENGINEERING LAYOUT OPTION 3
5080-100-SK-022 (unrev) SWEPT PATH ANALYSIS OPTION 3
DRAFT 1018 SITE PLAN OPTION 8
- 1.6** The Road Safety Audit took place at private locations away from Trent Bridge House, the Via East Midlands Ltd offices in West Bridgford, Nottingham on February 2nd 2021. The Audit Team visited the site of the proposed three arm roundabout on Tuesday 2nd February 2021 at around 2pm. During the site visit the weather was a little misty and the road surface was damp. Traffic flows appeared relatively normal despite being during the third Covid lockdown. High percentages of HGVs were notable.
- 1.7** Site visits were undertaken in accordance with Via Highways Risk Assessment VRA-047 “Site Visits for Crash Site Investigations and Road Safety Audits”.
- 1.8** The audit has been carried out in accordance with Nottinghamshire County Council’s Road Safety Audit Policy, following the principles of DMRB GG 119. The audit has been carried out with the sole purpose of identifying features of the scheme which could, in our view, lead to road safety problems. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

- 1.9** Road Safety Audit is only concerned with road safety matters. It does not consider structural safety nor health and safety issues connected with construction, maintenance and operation. At Stage 3, Road Safety Audit is not a check that the scheme has been constructed in accordance with the design.

- 1.10** All comments and recommendations are referenced to the design drawings and the locations are indicated on a plan within this report.

2. Items raised in previous road safety audit(s)

- 2.1** The Audit Team is not aware of any other Road Safety Audits having been carried out on this proposal.

3. Items raised at this Stage 1 Audit

3.1 Problem

Location: A57 Eastbound approach (towards A1T) to the proposed roundabout

Summary: Vehicle occupant injuries in sideswipe collisions as ahead vehicles move from the nearside lane into the offside lane.

Most of the A57 eastbound (towards A1T) vehicles will be travelling ahead, requiring the offside lane, at the proposed roundabout. The design very sensibly 'defaults' the vehicles into the offside ahead lane by developing the taper, of the lane line, from the kerb line. However, the two approach lanes are very long. This could lead to the ahead vehicles 'drifting' into the nearside left turn lane. Sideswipe collisions could occur as the ahead vehicle tries to re-enter the offside lane. The side swipe collision could also occur on the roundabout circulatory. Vehicle occupants will be injured in these collisions.

Recommendation

If capacity/turning manoeuvres allow the left turn lane could be shortened.

Alternatively/additionally more 'ahead' and 'left' arrows should be added. The lane dividing line could also be changed to a 1m line 1m gap (assuming the regulations permit this) which is a stronger line used where traffic flows split to go in different directions. Lay an area of hatching, on the roundabout circulatory, in front of the nosing of side road splitter island to confirm that the nearside left turn lane cannot be used to go ahead on the roundabout. (see 3.4)

3.2 Problem

Location: A57 Westbound (towards Worksop) approach to the proposed roundabout

Summary: Vehicle occupant injuries in sideswipe collisions as ahead vehicles move from the offside lane into the nearside lane.

Most of the A57 Worksop bound vehicles will be travelling ahead, requiring the nearside lane, at the proposed roundabout. However, all the Worksop bound traffic has been defaulted to enter the offside lane which goes right into the new development. This means vehicles, wishing to go ahead, will have to move back into the nearside lane. Sideswipe collisions could occur with vehicles already in the nearside lane. Vehicle occupants will be injured in these collisions.

Recommendation

Swap the side of the taper, to develop from the centreline, on the Worksop bound approach to the proposed roundabout. This will default all the traffic into the more appropriate nearside ahead lane.

3.3 Problem

Location: A57 westbound (towards Worksop) approach to the proposed roundabout

Summary: Vehicle occupant injuries in sideswipe collisions as ahead vehicles move from the offside lane into the nearside lane.

Most of the A57 westbound (towards Worksop) vehicles will be travelling ahead, requiring the offside lane, at the proposed roundabout. The design should be amended as per recommendation 3.2 above defaulting traffic to the nearside ahead lane. However, the two approach lanes are very long. This could lead to the ahead vehicles 'drifting' into offside right turn lane or using it to overtake slower moving ahead vehicles. Sideswipe collisions could occur as the ahead vehicle tries to re-enter the nearside lane. Vehicle occupants will be injured in these collisions.

Recommendation

If capacity/turning manoeuvres allow the two approach lanes could be shortened.

Alternatively/additionally more 'ahead' and 'right' arrows should be added.

3.4 Problem

Location: Roundabout circulatory.

Summary: Vehicle occupant injuries in sideswipe collisions due to vehicles mistakenly circulating in pairs.

The proposed layout shows two lanes on the roundabout circulatory. This gives the impression the outer most (nearside) lane can be used to circulate when turning right or U-turning. However, this is not the case as all the right or U turns would use the inner most (offside) lane. The two circulating lanes give the impression areas are available to vehicles encouraging inappropriate lane use. This could result in sideswipe collisions, injuring vehicle occupants, where vehicles mistakenly use the outer lane to turn right.

Recommendation

Lay an area of hatching, on the roundabout circulatory outer lane, directly in front of the nosing of all three splitter islands. This will clarify the operation of the roundabout by showing these areas are unavailable to traffic.

3.5 Problem

Location: Throughout the extents of the improvement

Summary: Vehicle occupant injuries in sideswipe collisions due to poor junction and lane definition during the hours of darkness.

The roundabout layout and lane destination will not be clearly visible during the hours of darkness. Drivers will be unclear how the junction operates and where the lanes are destined for as the lane markings will be hard to see. Numerous collision scenarios will occur injuring vehicle occupants.

Additionally, two wheelers on the roundabout will be less conspicuous at night and more susceptible to being hit by vehicles.

Recommendation

Provide street lighting throughout the extents of the improvement.

5. Audit Team Statement

We certify that this Road Safety Audit has been carried out in accordance with Nottinghamshire County Council policy.

Road Safety Audit Team Leader

A handwritten signature in blue ink that reads 'Phil Gow'.

Phil Gow
Crash Site Investigator / Safety Auditor
Via East Midlands Ltd
Bilsthorpe Business Park
Eakring Road
Bilsthorpe
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NG22 8ST

Road Safety Audit Team Member

A handwritten signature in black ink that reads 'Gareth Coles'.

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