

LAND OFF OWL LANE, DEWSBURY

TECHNICAL NOTE: RESPONSE ON

TTHC Ltd – the Traffic, Transport & Highway Consultancy

Manchester
St James' Building
79 Oxford Street
Manchester
M1 6EJ
(0161 235 8600)

London
Mayfair Point
34 South Molton
Street
London
W1K 5RG

www.TTHC.co.uk / WWW.TTHC.com

TTHC Ref: M19110-01 TN01
Date: October 2019

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1.0 INTRODUCTION AND BACKGROUND

- 1.1 This Note has been prepared by TTHC Ltd. on behalf of (CAG) in relation to a planning application for a Site off Owl Lane, Dewsbury, hereinafter referred to as “the Site”.
- 1.2 The application is for the erection of 252 dwellings on vacant greenfield land (Planning Reference: 2019/62/92787/E). Given that the Site is currently undeveloped land, all impacts that would be generated by the development would be new impacts and would be new to the area.
- 1.3 The above application is closely linked to two other separate developments, which we understand are due to become live planning applications imminently; these proposed applications are adjacent to the Site. We understand that one of the applications (Site A) will be for 1,354 homes and 35 Hectares of employment use. We understand that the other application (Site B) will be for a residential development of 181 units. As far as we are aware, the planning applications for Site A and Site B are yet to be submitted.
- 1.4 The location and scale of these two forthcoming applications, and in particular Site A, would have significant cumulative impacts on the local area if one or both of the applications were permitted along with the Site. This Note considers the implications of the Site, but also makes reference to the two forthcoming planning applications given the significance of the impact they would have on the local area within a similar timescale as the Site.
- 1.5 The Site’s application doesn’t include any reference to the forthcoming applications, or undertake any cumulative impact testing. This Note therefore reviews the information submitted by the Site’s Planning Application, but it is our opinion that further testing on a cumulative basis is needed in order to understand the implications of the total potentially developed Site area.
- 1.6 This is particularly the case given that the Site’s road network, if permitted, would provide a means of access to the other development. We would

welcome the opportunity to review that additional analysis once available as part of the consideration of the Site's impact.

- 1.7 The below reviews the elements of the TA where further information is required before the impacts of the application can be fully understood. The below provides a summary of the issues that have been identified working within the time and budget available. Please note that the following does not provide an exhaustive list of the issues / additional information that is needed before this application can be properly considered.

2.0 APPROACH TO ASSESSMENT

Potential Future Year Developments

- 2.1 The TA submitted for the application at Owl Lane makes partial reference to Site A, but does not include Site B within any of the assessment work. The rationale behind this is not clear. Neither Site has planning permission (so does not constitute Committed Development) or is subject to a live planning application.
- 2.2 The TA does not undertake any assessment where Site A isn't incorporated within the 'Base' case. The TA does not therefore provide any assessment results where the impacts of the development being applied for can be understood.

Base Scenario Content

- 2.3 It is noted that the testing of the Site junction is different to the other junction tests in the TA. The Site access junction is assessed assuming 100% Site A has been built out in the Base traffic scenario, whilst all other junction testing assumes only 40% of Site A has been built out. The TA does not provide any explanation as to why this approach has been taken.
- 2.4 It is considered that there should be a consistent approach to Base traffic scenarios (to avoid any potential obfuscation of the impacts of the development). The inclusion of additional development trips affects the 'Base' position which is used to determine the NET development impacts (i.e. Base vs. Base + Development).
- 2.5 Similarly, as discussed above, it is unclear why Site A but not Site B has been included within the Base scenario. A full explanation of the TA's approach Base traffic scenarios should be provided.

- 2.6 Inflation of the Base position can obscure the true impact of the proposed development. The junctions that include 40% of Site A development in their modelling return results showing the junction to be exceeding its capacity in its Base position.
- 2.7 No scenario testing has been provided that shows the implication of the proposed development without Site A. This information should be provided, such that the implications of the proposed development can be understood. The cumulative position, whereby testing including Site A and any other appropriate additional development, should also be provided. However, the application for the proposed development needs to set out the proposed development's impacts in isolation, such that a suitable mitigation strategy can be developed.
- 2.8 It cannot be assumed that junction issues will be resolved at a later date by other potential future developments; those developments are not being applied for by the application, and they may not even reach application stage.
- 2.9 If Site B were to be included within the assessment of the Site access roundabout, then clearly this would exceed capacity given that the TA results already show the junction to be operating at 0.84 RFC.

3.0 TRAFFIC DISTRIBUTION REVIEW

Distribution Calculations

- 3.1 The visual quality of the census distribution information included within the TA (Appendix D of the TA) is poor and is, in parts, illegible. It is, therefore, hard to interpret anything meaningful from the graphics provided as justification for the decisions implemented within the census data distribution process.
- 3.2 That information therefore needs to be re-issued in suitable quality in order to allow third parties the opportunity to review and understand the basis of that TA process. Given the poor quality reproduction of the information submitted within the TA, it is also unclear how Kirklees Metropolitan Council (KMC) will be able to review and understand the information.
- 3.3 It should also be noted that not all of the application was available online. Appendices E-G were not available, CAG had to contact KMC to obtain that information in order for it to be considered as part of this review.
- 3.4 In advance of clearer information being provided, we have reviewed the legible information from TA Appendix D in order to undertake an initial high-level review of the census distribution information.
- 3.5 This review has identified that certain census data has been omitted from the traffic distribution calculations; only seven MSOAs in Kirklees (out of 59) were accounted for and just three MSOAs (out of 112) in Leeds were accounted for.
- 3.6 It is unclear why that information has been excluded from the traffic distribution process; no explanation or justification is provided within the TA.
- 3.7 The missing MSOAs represent potential employment destinations for the proposed development and should therefore be included within the traffic distribution calculations. This work therefore needs to be completed before it is possible to conclude on the suitability of the TA's traffic distribution works.

3.8 It is acknowledged that, in certain circumstances, MSOAs can be omitted from distribution analysis calculations when they represent a very low number of trips. However, that is not the case in this instance. For example, the below summarises the proportion of the MSOA excluded from the traffic distribution process:

- **Kirklees:** approximately **44%** of the MSOA population has been excluded from the calculations; and
- **Leeds:** approximately **70%** of the MSOA population has been excluded from the calculations.

3.9 The excluded data therefore represents a significant proportion of the MSOA information, which should be incorporated within the TA traffic distribution calculations.

3.10 It is therefore not possible to conclude on the impacts of the proposed development until the traffic distribution calculations have been updated. It follows that conclusions cannot be drawn on any subsequent analysis that is dependent on this information; the traffic modelling work will likely have to be updated in due course.

Routeing Inconsistencies

3.11 Further, there are some inconsistencies between the distribution of the proposed development traffic and the distribution of the Committed Development traffic in terms of routeing choices.

3.12 For example, the Committed Development flows in Figure 10 make no use of the left turn from Leeds Road (East) on to Owl Lane, instead routeing via the left turn on to John Ormsby V C Way. This movement is illogical given that it is shorter and faster to travel via Owl Lane.

- 3.13 Also, the distribution outbound traffic at the Site access roundabout differs greatly when comparing the Committed Development traffic with the Proposed Development traffic.

Table 1: Comparison of Committed Development and Proposed Development Traffic Distribution		
	Left out of Site Access Roundabout	Right out of Site Access Roundabout
Development Traffic: AM Distribution	42%	58%
Committed Development Traffic: AM Distribution	7%	93%
Development Traffic: PM Distribution	42%	58%
Committed Development Traffic: PM Distribution	15%	85%

- 3.14 It is noted that the Committed Development does not contain exclusively residential trips, however, the differences observed in **Table 1** are stark.
- 3.15 It should also be noted that the indicative site layout for Site A (i.e. the Committed Development) shows that the residential component of the site has been identified as being located to the south west of the site, i.e. close to the Site roundabout. Accordingly, it is expected that Site A trips using the Site roundabout would primarily comprise residential trips. Given the above, it would be expected that Proposed Development and Committed Development trips would both have very similar traffic distribution patterns at this location. The above table shows this not to be the case.
- 3.16 The above must therefore be clarified before the any conclusions can be drawn on the impacts of the proposed development. Following a review of any justification, it may also be that the trip distribution information requires updating. Given the significant size of the Committed Development (1,354 homes and 35 Hectares of employment use), it is essential that the application considers suitably representative traffic information.

4.0 SITE ACCESS JUNCTION REVIEW

- 4.1 We have undertaken a review of the TA junction model produced for the Site access roundabout, this includes a review of the model inputs and output. It should be noted that the below would need to be reviewed once the above distribution and 'approach to assessment' issues have been resolved, as further issues may be apparent.
- 4.2 The TA provides models for further junctions, however, given the limited time and resources available to CAG, it is not possible to review all junctions. We have therefore focussed on the Site access junction given its strategic importance and relevance to the adjacent Site A. However, the findings of the below may have similar implications for the other junction models in the TA.
- 4.3 As discussed above, the TA appendices that provide the modelling output reports were not immediately available on the application website. The output reports contain critical information on the modelling process and are necessary for any third party to understand whether robust and proper junction modelling has been undertaken.
- 4.4 The below considers this modelling information, including reference to the Site access layout drawing provided within Appendix C of the TA.

Geometric Measurements

- 4.5 A review of the junction measurement raises a query regarding the data input for Owl Lane South. The entry width for this arm has been input as 7.5m, comparison to 7.0m for both the Site access arm and Owl Lane North. Our measurements find no material difference in the entry widths of the three arms; we therefore question whether the entry width of Owl Lane South has been measured or input correctly. It appears that the model assumes a greater road width than would actually be the case.

- 4.6 Ratio Flow to Capacity (RFC) values between 0.00 and 0.85 are generally accepted as representing stable operating conditions. However, values greater than 0.85 can lead to unstable operating conditions, with comparably small increases in traffic having significant impacts when a junction is operating at such a level.
- 4.7 Owl Lane South is the 'critical arm' of the junction in the AM peak; the TA shows that the approach is operating at theoretical capacity, with an RFC of 0.84. If the geometric data input for this approach are incorrect in the junction model, and provide greater junction capacity than would actually be the case, the junction would therefore operate with a lower capacity than shown in the TA. The Owl Lane South approach would likely be 'exceeding capacity' in that instance.
- 4.8 The Applicant should therefore make the source CAD drawing available for measurements to be taken, or alternatively, they could provide an annotated drawing that identifies the measurements they input to the junction model.

Lane Starvation

- 4.9 A review of the model output has identified that 'lane starvation' could occur at the Site access roundabout in reality. The model results for the Evening Peak, show that the Owl Lane North approach would have a queue of over three vehicles. A review of the TA site layout plan shows the space available would accommodate approximately three vehicles, before the arrival of a fourth vehicle would cause it to block the ahead movement, affecting traffic flows through the junction.
- 4.10 Once the trip distribution work required (as detailed above) has been undertaken, there is the potential for additional development trips to enter the Site from the north. This would therefore increase the potential for lane starvation and should be reviewed carefully once the updated flow work and subsequent re-modelling has been undertaken.

5.0 ACCIDENT DATA ANALYSIS

- 5.1 A review of the TA accident data has been undertaken.
- 5.2 The area of analysis appears to cover an inadequate area. We suggest that the assessment needs to also include the area to the south beyond The Royal Oak Pub, particularly given that the Site's traffic distribution information shows over 40% of the development traffic routeing in that direction.
- 5.3 A review of CrashMap (an online accident data website) reveals that there have been a significant number of accidents within the last five years at the roundabout where Owl Lane connects with Chancery Road and Leeds Road.
- 5.4 Indeed, there have been four severe accidents on the approach to the roundabout within the last five years. In addition to this, there have been a further 10 slight accidents. A full assessment of the incidents in this area should therefore be undertaken.
- 5.5 We note that that TA 'anticipates' the 40mph speed limit along the site frontage to be amended to 30mph up to the administrative boundary. The change in speed limit is beyond the control of the Application. Clarification needs to be provided as to whether the TA has been produced assuming that this speed limit change will have definitely taken place. Further, clarification needs to be provided as to whether any part of the TA relies on this speed limit change, such as the design of the access junction for example.

6.0 SUMMARY AND CONCLUSION

- 6.1 This Note has been prepared by TTHC on behalf of _____ in relation to a planning application for a Site off Owl Lane, Dewsbury.
- 6.2 The application is for the erection of 252 dwellings on vacant greenfield land (Planning Reference: 2019/62/92787/E). Given that the Site is currently undeveloped land, all impacts that would be generated by the development would be new impacts and would be new to the area.
- 6.3 The above application is closely linked to two other separate developments, which we understand are due to become live planning applications imminently; these proposed applications are adjacent to the Site. We understand that one of the applications (Site A) will be for 1,354 homes and 35 Hectares of employment use. We understand that the other application (Site B) will be for a residential development of 181 units. As far as we are aware, the planning applications for Site A and Site B are yet to be submitted.
- 6.4 The above Note identifies several areas where additional information is required, these relates to:
- The approach to traffic assessment;
 - The distribution and routeing of development traffic;
 - Junction modelling inputs;
 - Base scenario traffic assumptions; and
 - Accident data review.
- 6.5 Additional information needs to be provided, with subsequent updated analysis work undertaken, before it is possible to fully consider the impacts and implications of the proposed development.

- 6.6 Accordingly, it is not possible to conclude on the Transport implications of the application with the information currently submitted.