

Land off Lindley Moor Road – Transport Assessment Addendum – JSJV Review

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Date:	18 th January 2024
Case Reference:	DevWY0079
Document Reference:	TM003
Reviewed/approved by:	Gavin Nicholson

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Overview

The Jacobs Systra Joint Venture [JSJV] has been tasked to review a Transport Assessment Addendum [TAA] produced by Paragon Highways [Paragon] in support of a mixed-use development at land off Lindley Moor Road, Lindley, Huddersfield, planning application reference 2022/91477.

In July 2022, JSJV reviewed a Transport Assessment [TA] and Travel Plan [TP] produced in support of the development proposals – JSJV reference AA.22.14.04 DevWY0079 TM001.

It was stated in the TA that the proposals are for the erection of a multi-disciplinary development consisting of warehousing, offices, general industry, a small supermarket and restaurant / café type uses.

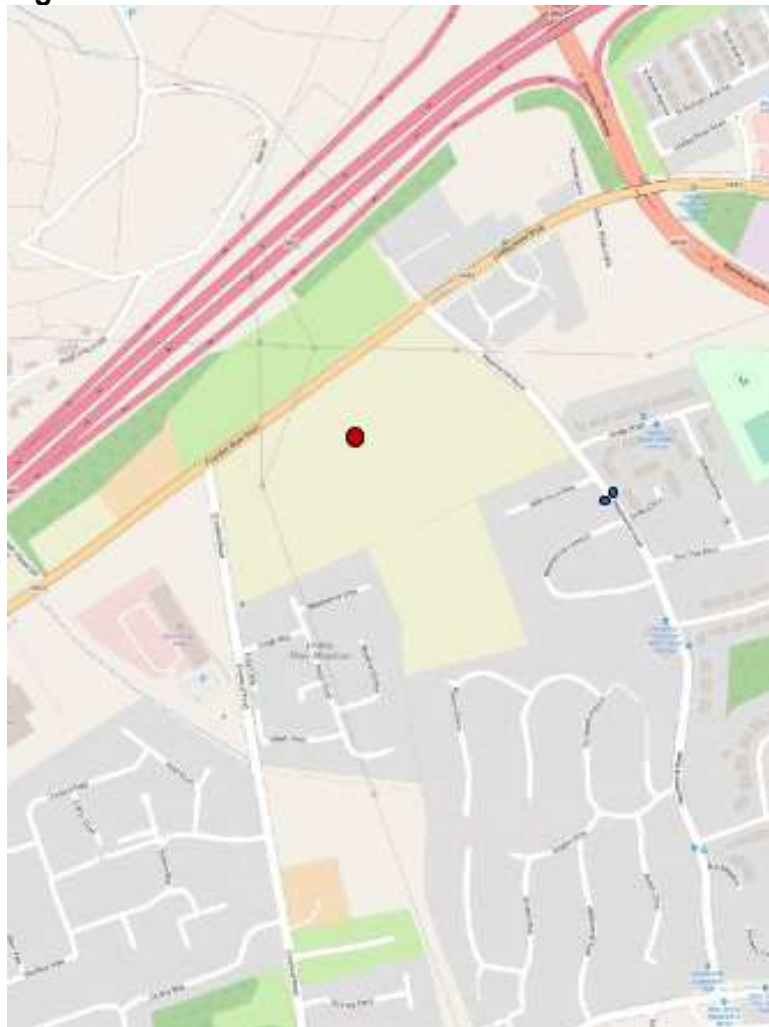
However, the TAA states that the development proposals have been changed to include trade counters, industrial use, warehouse use, supermarket/ convenience store, and restaurant use.

As such, the proposed floorspace is as follows:

- Supermarket – 377m²;
- Restaurant – 908m²;
- Café / Takeaway – 916m²;
- Warehousing – 8,346m²;
- Office – 1,453m²; and
- Industrial – 4,996m².

The development proposals are located approximately 0.5 miles from M62 Junction 24, known as Ainley Top. The M62 forms part of the Strategic Road Network [SRN] hence the need for the review of the development proposals. The site location can be seen at **Figure 1**.

Figure 1 – Site Location



Source – Appendix A, TA

JSJV’s Technical Memorandum [TM] concluded that a number of transport issues remained unagreed or required further work.

Subsequently in January 2023, Paragon provided additional information for JSJV and National Highways to consider, which was reviewed by JSJV in TM002a.

As such, this TM reviews the TAA produced by Paragon, with a summary and conclusion provided at the end of this document.

Transport Assessment Addendum Review

It is stated that the TAA provides further information as a result of Kirklees Council's [the Council] highway consultation response dated 23rd February 2022 and the consultation responses from National Highways dated 28th July 2022 and additional comments dated 27th January 2023. This is welcomed by JSJV as it builds on the discussions held to date.

In addition, it is stated by Paragon that the TAA takes into consideration the requirements of DfT Circular 01/2022 and provides further information in terms of road traffic accidents at the SRN and junction performance assessments at Ainley Top Roundabout for current and future year scenarios to address concerns raised by National Highways and the Council's Highway Development Management. This approach is welcomed by JSJV.

Furthermore, it is stated that alterations to the TRICS output have been made to reflect the latest proposals to provide a robust output, and these have been agreed with the Council's Highways Officer. However, it will be one of the purposes of this TM for JSJV to agree the proposed trip rates and subsequent trip generation.

In addition to the above, it is stated that the Council has requested that a pedestrian phase be added to the Crosland Road / Lindley Moor Road signalised junction; and the TA states that it provides the amended junction performance calculations so that the impact of the introduction of the pedestrian phase can be measured. This is noted by JSJV, albeit recognising that this junction forms part of the local road network.

Road Safety Record

The TAA states that the consultation response from National Highways dated 27th January 2023 requested that the road accident study to include the local network and its connection with the SRN, namely M62 Junction 24. This is accepted by JSJV as being the case.

This section of the TAA states that the collision study includes the five-year period between January 2015 and December 2019; and the additional study area includes the roads leading to the SRN and include Lindley Moor Road between Crosland Road and Ainley Top roundabout, Ainley Top Roundabout, and Blackley New Road inclusive of its junction with M62 Junction 24.

The TAA states that within the study area there have been a total of 29 collisions, with three classified as serious and 26 classified as slight.

Furthermore, it is stated that 20 of the collisions occurred during the day at differing times of the day; during the hours of darkness there were nine collisions, with a single collision along Blackley New Road, Halifax Road arm of Ainley Top and the Huddersfield Road arm of Ainley Top.

In addition, it is stated that there was a total of six collisions during the hours of darkness along Lindley Moor Road between the site and the Ainley Top roundabout junction. All but one of the above collisions occurred during dry road surface conditions.

It is stated that it can be seen that during daylight hours there were:

- Five collisions that occurred at the Lindley Moor Road / M62 Junction 24 roundabout;
- One collision that occurred on the Lindley Moor Road arm with Ainley Top roundabout;

- Two collisions on the north side circulating area of Ainley Top roundabout;
- Two collisions on the Blackley New Road arm of Ainley Top roundabout;
- Nine collisions on Lindley Moor Road; and
- One collision on Blackley Moor Road.

Paragon conclude that the for the majority of the collisions these are located at separate locations with no patterns or trends of any significance; however, the collision data shows that there were six collisions at the Lindley Moor Road / Crosland Road junction, which is considered by JSJV to be a matter for the Council to satisfy themselves with.

Overall, it is stated by Paragon that it is considered that the amended collision data from the SRN to the site, does not identify any common causations or trends of any significance that would be a cause for concern given the proposed increase in traffic as a result of the development proposals. Having reviewed the information provided in the TAA, it is considered by JSJV that the study area does not have a safety issue at the SRN which the development proposals would exacerbate.

DfT Circular 01/2022

It is stated in the TAA that DfT Circular 01/2022 advises that a TA must consider the existing and forecast levels of traffic on the SRN, alongside any additional trips from committed developments that would impact the same section (link or junction) as the proposed development.

In addition, the TAA states that an opening year assessment to include trips generated by the proposed development, forecasted growth and committed development shall be carried out to establish the residual transport impacts of the proposed development. This is accepted by JSJV.

Furthermore, it is stated that the information provided in the TAA complies with the requirements of DfT Circular 01/2022, with assessments carried out during the current and future year scenarios for the SRN signalised junction at Ainley Top. This is welcomed by JSJV and the remainder of the TAA is reviewed within this TM subsequently.

Traffic Generation

The TAA states that the proposals have been changed to include trade counters, industrial use, warehouse use, supermarket / convenience store, and restaurant use. Furthermore, it is stated that in order to provide a robust assessment Units F and G have been considered as parcel distribution centres, as requested by National Highways. This amendment is welcomed by JSJV.

In addition, it is stated that the TRICS database has been interrogated to provide the generations associated with the proposed uses for the network peak hours (08:00 – 09:00 and 17:00 – 18:00).

JSJV appreciates that the TRICS analysis is presented within Appendix B, but for transparency and completeness, it would be preferable for the trip rates to be presented within this section of the TAA, rather than simply the presentation of trip generations.

Notwithstanding, JSJV has reviewed the trip rates and trip generation presented within the TAA, and find them to be acceptable, with a total of 234 two-way trips generated in the Morning Peak and 240 two-way trips generated in the Evening Peak.

Furthermore, the trip distribution has been provided in Appendix C, which shows that 150 two-way trips pass through the Ainley Top roundabout in the Morning Peak and 154 two-way trips in the Evening Peak. As part of the distribution presented, 44 two-way trips access / egress the M62 mainline in the Morning Peak and 45 two-way trips in the Evening Peak.

JSJV has reviewed the trip distribution presented, and find it acceptable for use.

The TAA states that National Highways has requested that a 'first principles' approach be adopted in determining the traffic generation for the site; and this is not possible as there is no end user for the proposed units. JSJV welcomes the clarification on this issue, with no end user being known at this time.

In addition, it is stated that the TAA considers the performance of the Ainley Top roundabout between 07:00 and 08:00 and 16:00 and 17:00, as agreed with the Council. This is welcomed by JSJV as this will provide additional peak hours for assessment, and it is noted that this assessment periods have a slightly smaller trip generation than those presented above.

Parking Provision

It is stated in the TAA that the TA provided information on car parking justification for Unit P and provided a maximum parking accumulation of 51 spaces; and that a first principles approach for Unit P is not possible as there is no (known) end user.

As such, the TAA states that the development of Unit P proposes a total of 72 car parking spaces including four disabled spaces and seven EV charging spaces. Therefore, Paragon conclude that the parking provision proposed should easily cater for the demand based on TRICS accumulations.

Given the distance of the development proposals from the SRN, it is not considered that displaced parking as a consequence of the operation of the development proposals and the proposed parking provision would impact upon the efficient operation of the SRN, and as such, the proposed parking provision is considered an issue for the Council to satisfy themselves with.

Ainley Top Roundabout

The TAA states that the consultation response from National Highways and the Council required an assessment of junction performance at the Ainley Top signalised roundabout. This is accepted by JSJV as being the case.

Furthermore, it is stated that to assist the modelling of the junction, the Council has provided LinSig files of previous assessments at the junction, but due to the quality of the assessments carried out, the Council has advised that the data and assessment parameters be validated. This is noted by JSJV, and furthermore, it is noted that the modelling files have not been presented with the TAA for verification purposes. Notwithstanding, JSJV has reviewed the information which has been provided.

As part of the information provided by the Council, it is stated that a traffic survey for Ainley Top has been provided, which is a classified count carried out in March 2022; and that the survey data has been converted to PCU values and is included at Appendix H. The survey data has been reviewed by JSJV and it is noted that no queue length data appears to have been collected, and as such, JSJV are not in a position to state that the model has been validated.

The TAA goes on to state that the Council has provided information on how the existing junction operates including fixed time UTC control and the signal timings; and that an

initial appraisal of the existing LinSig model produced on behalf of National Highways has been provided by the Council to enable scrutiny of the model to enable validation.

It is stated that Paragon has modelled the junction during the early Morning Peak (07:00 – 08:00), Morning Peak (08:00 – 09:00), early Evening Peak (16:00 – 17:00) and Evening Peak (17:00 – 18:00). Therefore, the modelling includes the following scenarios:

- Scenario 1 2022 Early Morning Peak (07:00 – 08:00);
- Scenario 2 2022 Early Morning Peak (07:00 – 08:00) with development traffic;
- Scenario 3 2032 Early Morning Peak (07:00 – 08:00);
- Scenario 4 2032 Early Morning Peak (07:00 – 08:00) with development traffic;
- Scenario 5 2022 Morning Peak Base (08:00 – 09:00);
- Scenario 6 2022 Morning Peak Base (08:00 – 09:00) with development traffic;
- Scenario 7 2032 Morning Peak (08:00 – 09:00);
- Scenario 8 2032 Morning Peak (08:00 – 09:00) with development traffic;
- Scenario 9 2022 Early Evening Peak (16:00 – 17:00);
- Scenario 10 2022 Early Evening Peak (16:00 – 17:00) with development traffic;
- Scenario 11 2032 Early Evening Peak (16:00 – 17:00);
- Scenario 12 2032 Early Evening Peak (16:00 – 17:00) with development traffic;
- Scenario 13 2022 Evening Peak Base (17:00 – 18:00);
- Scenario 14 2022 Evening Peak Base (17:00 – 18:00) with development traffic;
- Scenario 15 2032 Evening Peak (17:00 – 18:00); and
- Scenario 16 2032 Evening Peak (17:00 – 18:00) with development traffic.

JSJV has reviewed the stated scenarios and consider them to be comprehensive, paying due cognisance to the fact that the model has not been validated.

Paragon state that the modelling initially included the current signal timings provided by the Council, which resulted in the Lindley Moor Road approach to the roundabout struggling to cope with the traffic demand in the future years, and as such, small alterations to the signal timings have shown that improvements can be made to the efficiency of the Lindley Moor Road approach to increase green time by one second with no detrimental effect upon the operation of the upstream circulatory traffic.

This approach is noted by JSJV, and the approach taken to try and achieve optimum junction performance within the parameters of the existing layout is welcomed by JSJV.

Furthermore, it is stated that the modelling presented from Table 20 onwards in the TAA includes the adjusted signal timings that have been agreed by the Council to optimise the junction and mitigate against future development traffic.

Paying due cognisance to National Highways interests in regards the interaction between the local road network and the SRN, it is noted that the A629 Blackley New Road shows increased queuing and then operates over its theoretical capacity in the Early Morning Peak scenarios, and a similar trend is noted in the Morning Peak scenarios, albeit with a slightly lower DofS. It is considered by JSJV that this has the potential to impact upon the operation of M62 Junction 24, although it is again noted

that no queue length data has been provided within the TAA in order to validate the model.

When considering the scenarios for the Evening Peak, paying due cognisance to National Highways interests in regards the interaction between the local road network and the SRN, it is noted that the A629 Blackley New Road shows increased queuing and then operates over its theoretical capacity in the Early Evening Peak scenarios, and a similar trend is noted in the Evening Peak scenarios, albeit with a slightly lower DofS but within theoretical capacity. It is considered by JSJV that this has the potential to impact upon the operation of M62 Junction 24, although it is again noted that no queue length data has been provided within the TAA in order to validate the model.

It is stated by Paragon that it can be seen that the future year traffic growth has the largest impact on the operation of the Ainley Top junction and that the introduction of development traffic has less of an impact. This is noted by JSJV.

In addition, the TAA states that further to the outputs presented in the TA, the impact as a result of the one second variation in timing for the Lindley Moor Road approach is presented in Table 24 of the TAA, and the impact of a further change of four seconds as a comparison that improves the efficiency of the junction further. This is noted by JSJV, and it is stated in the TAA that it has been agreed with the Council that further investigations to improve the efficiency of the junction can be made post-planning and secured through normal procedures which is considered by Paragon to provide suitable mitigation as a result of the development proposals.

It is considered by JSJV that any measures to improve the operation of the Ainley Top roundabout – given the interaction between the local road network and the SRN – should be supported by National Highways. However, given this interaction, it is recommended that any such measures need to be agreed and in place before planning consent is granted and should also be agreed with National Highways' operations team, as it is considered that it would be difficult to achieve the appropriate wording for a planning condition to be acceptable to all parties.

However, before this can be achieved, the model will need to be validated in order for modelling outputs to be agreed, before any variation to the signal timings can be agreed by National Highways.

Travel Plan

It is noted by JSJV that no revised TP has been produced in support of the development proposals, despite the change in development quantum proposed. Given that JSJV has previously accepted the TP, it is not considered prudent for a revised TP to be produced, although ultimately the TP is considered by JSJV to be a matter for the Council to satisfy themselves with.

Summary and Conclusions

The Jacobs Systra Joint Venture has been tasked to review a Transport Assessment Addendum produced by Paragon Highways in support of a mixed-use development at land off Lindley Moor Road, Lindley, Huddersfield, planning application reference 2022/91477.

In July 2022, JSJV reviewed a Transport Assessment and Travel Plan produced in support of the development proposals – JSJV reference AA.22.14.04 DevWY0079 TM001.

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As such, the proposed floorspace is as follows:

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JSJV's Technical Memorandum [TM] concluded that a number of transport issues remained unagreed or required further work.

Subsequently in January 2023, Paragon provided additional information for JSJV and National Highways to consider, which was reviewed by JSJV in TM002a. As such, this TM has reviewed the TAA produced by Paragon.

On the basis of this review, the recommendation to National Highways in relation to this development proposals is:

Holding Recommendation – further information required (as identified below)

This review has highlighted the need for further information as follows:

- 1) It is stated in the TA that it has been agreed with the Council that further investigations to improve the efficiency of the junction – increasing the one second variation in the timing for Lindley Moor Road arm to four seconds – can be made post-planning and secured through normal procedures which is considered by Paragon to provide suitable mitigation as a result of the development proposals.

It is considered by JSJV that any measures to improve the operation of the Ainley Top roundabout – given the interaction between the local road network and the SRN – should be supported by National Highways. However, given this interaction, it is recommended that any such measures need to be agreed and in place before planning consent is granted and should also be agreed with National Highways' operations team, as it is considered that it would be difficult to achieve the appropriate wording for a planning condition to be acceptable to all parties.

However, before this can be achieved, the model will need to be validated in order for modelling outputs to be agreed, before any variation to the signal timings can be agreed by National Highways.