Section 56(2) Planning Act 2008

Application by National Highways Limited for an Order Granting Development Consent

for

Lower Thames Crossing

Planning Inspectorate Reference: TR010032

PORT OF TILBURY LONDON LIMITED – RESPONSE TO DEADLINE 3 SUBMISSIONS – ASDA ROUNDABOUT MODELLING

Deadline 4: 19 September 2023

1.1 The Applicant provided, at Deadline 3, construction and operational modelling of the impacts of the LTC Scheme on the ASDA roundabout.

1.2 Port of Tilbury London Limited (PoTLL) understands that the Applicant will be submitting, at Deadline 4, a document providing further detail as to the methodology used for the construction modelling. The ExA has requested, via Action Point 5 from ISH5, clarification from the Applicant as to how construction worker movements have been taken into consideration. The Applicant has also shared the underlying VISSIM data with PoTLL on 13 September. PoTLL is currently reviewing this data.

1.3 As such, PoTLL wishes to comment on the Deadline 3 documents, without prejudice to any further submissions that it may make following a detailed review of the modelling data and a review of the Applicant's further submissions.

2. MODELLING APPROACH – 9.15 LOCALISED TRAFFIC MODELLING APPENDIX I – ASDA ROUNDABOUT VISSIM LMVR [REP3-128]

2.1 The Applicant's modelling relies on a traffic survey undertaken on 16 and 17 May 2018 to ascertain the baseline traffic flows. Table 5.1 sets out the traffic flows recorded for each hour on these days; the detail for the identified peak hours is then set out in respect of each arm of the ASDA roundabout in Appendix A – Flow Diagrams.

2.2 PoTLL is concerned that the flows recorded by the Applicant differ significantly from traffic flows recorded by PoTLL on 13 March 2018. The difference in recorded flows for the A1089 Dock Road (North) arm are set out in the following table, with the difference noted in brackets:

Hour	LTC Northbound	PoTLL Northbound	LTC Southbound	PoTLL Southbound
07:00 to 08:00	709	820 (+111)	1246	1411 (+165)
08:00 to 09:00	735	885 (+150)	1077	1308 (+231)
17:00 to 18:00	1233	1436 (+203)	878	1277 (+399)

2.3 This is a significant difference, and one that is also reflected in Table 5.1, where the difference in flows for the same hour between 16 and 17 May 2018 ranges from 6 vehicles to 400 vehicles. Most notably, the model uses traffic flow data from 17 May 2018, which is lower than the comparable figure for 16 May 2018, for each of the three peak hours modelled. The Applicant may therefore be underestimating the baseline traffic flow through the roundabout, resulting in reduced impacts in the future year modelling.

3. CONSTRUCTION IMPACTS – 9.15 LOCALISED TRAFFIC MODELLING APPENDIX M – ASDA ROUNDABOUT VISSIM CONSTRUCTION ASSESSMENT REPORT [REP3-132]

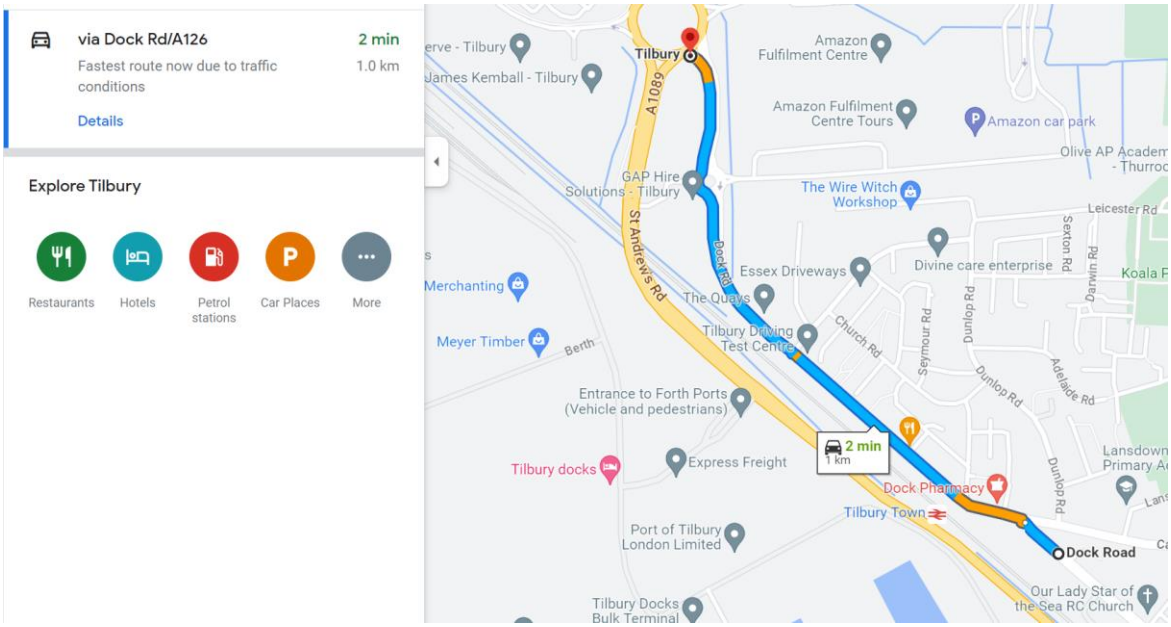
Construction Phase 1 Assessment

3.1 The Applicant has chosen to assess Construction Phase 1 on the basis that the construction traffic management measures provide the greatest impact during this Phase. The measures in question are the contraflow measures on Marshfoot Road and Brentwood Road that would see traffic moved onto the A1089, increasing the volume of traffic through the ASDA roundabout. The Applicant concludes that, during Phase 1, overall delays and queueing increases, in particular on the A126 Dock Road.

3.2 The assessment is incomplete. Phase 2 includes contraflow measures on Brentwood Road through Chadwell St Mary, and Phases 3 and 4 include contraflow measures on Muckingford and Linford Roads. The LTAM has identified this as a major route for LTC construction workers. PoTLL considers that these traffic management measures are likely to have the same impact as for Phase 1, with traffic moving to the A1089 and, accordingly, the ASDA roundabout. Taken together, these phases last for 22 months – nearly two years.

3.3 The mean maximum queue on the A126 Dock Road during Phase 1 is identified as over 1km in length – some 912m more than in the Do Minimum scenario. This queue would stretch past Tilbury Town railway station, passing two mini roundabouts connecting to further local roads in Tilbury. The impacts of this queueing have not been considered, despite the clear potential for there to be impacts on air quality, noise and vibration, and severance given the queue length outside the railway station.

Figure 1 – Approximate length of mean maximum queue on the A126 Dock Road during Phase 1



3.4 The impacts on traffic of the extensive congestion on Dock Road have also not been considered. PoTLL considers that, faced with significant delays and queues to enter the ASDA roundabout from the A126 Dock Road, traffic from the Tilbury area, including LTC construction workers, will instead route via the A1089 St Andrews Road (South). This diversion would be along Fort Road via the entrances to both Tilbury2 and the Port of Tilbury. This additional volume of traffic on the A1089 St Andrews Road (South) has the potential to affect access to the Port of Tilbury, the main entrance of which is only some 500m south of the ASDA roundabout. The impact of traffic seeking to avoid the queue on the A126 Dock Road must therefore be considered in order to fully understand the impact of the LTC Scheme during construction.

3.5 The LTC Scheme does not, at present, include any requirement for construction workers to travel via specific routes between the site compounds and the strategic road network (SRN). The Applicant's Transport Assessment and LTAM includes construction workers travelling via Station Road, Church Road, Coopers Shaw Lane and Gun Hill to access the wider highway network through Chadwell St Mary. This route is not appropriate for significant numbers of construction workers. PoTLL anticipates that workers will, instead, utilise the A1089 (via Fort Road), and constitute additional traffic volumes on the ASDA roundabout. As such, in PoTLL's view, the impacts identified by the Applicant for Construction Phase 1 are likely to reflect the traffic conditions present throughout all construction phases.

Construction Phase 6 Assessment

3.6 The Applicant has also assessed Construction Phase 6, on the basis that, as detailed in Plate 2.5, this phase generates the highest volume of construction traffic – some 200 Passenger Car Units (PCUs) per hour will travel through the ASDA roundabout.

3.7 The primary route for construction HGVs, as detailed in the Applicant's Transport Assessment, is north and south along the A1089, through the ASDA roundabout. A secondary construction route is provided for via Fort Road, however this is unsuitable for HGV traffic and is not intended to present an alternative to the main construction route via the A1089.

3.8 Notwithstanding that Construction Phase 6 generates the highest volume of LTC construction traffic, Table 4.1 shows that, during 07:00 to 08:00, vehicle movements on the A1089 Dock Road (North) *decrease* by 32 vehicles as compared to the Do Minimum scenario. The increase in the 08:00 to 09:00 hour is only one vehicle movement (Table 4.2), and a further decrease of 9 vehicles is reported in Table 4.3 for the 17:00 to 18:00 hour.

3.9 The VISSIM model does not include another route to and from the north for traffic. The decrease in traffic flows is therefore unexpected. In contrast, traffic flows to the A1089 St Andrew's Road (South) increase as expected: by 38 vehicles in 07:00 to 08:00; by 29 vehicles in 08:00 to 09:00; and by 41 vehicles in 17:00 to 18:00. This unexpected behaviour (on the A1089 Dock Road) is also seen, to a lesser extent, for Construction Phase 1. The increase in traffic flows is lower than anticipated, given the increases on the other arms of the ASDA roundabout.

3.10 Plate 2.3 shows an increased Volume/Capacity (V/C) percentage on the A1089 northern approach for both Phase 1 and Phase 6, as compared to the Do Minimum scenario, yet this is not reflected in the traffic flows for the A1089 Dock Road (North). This appears to indicate that the impacts to this connection are not being correctly assessed.

Other Construction Impacts

3.11 Plate 2.4 shows that, during the Do Minimum scenario, V/C on the A1089 southern approach is around 90% at most. However, Construction Phases 1, 3, 5, 6, 7 and 9 all lead to a V/C of over 100% during the AM peak. These phases cover a total of 32 months. As above, the true impacts on the ASDA roundabout are likely to be greater, affecting more – potentially all – construction phases.

3.12 In PoTLL's view, further modelling of Construction Phases is required in order to fully understand the impacts of the construction traffic. Notwithstanding the concerns about the model potentially under-estimating the volume of traffic seeking to use the ASDA roundabout, the VISSIM modelling shows clearly that there are adverse impacts to the ASDA roundabout during the construction of the LTC Scheme. These impacts should be mitigated at this stage. It is not sufficient to defer to contractors to develop more detailed construction plans where the reasonable worst-case scenario has identified such significant adverse impacts.

3.13 Finally, PoTLL is concerned that, in the absence of secured routes to be taken by construction workers, they will use the A1089 and the ASDA roundabout. This has not been assessed, except where traffic management measures render the Applicant's intended, though unsecured, route impossible. This represents a further way in which the junction modelling may be underestimating the impacts.

Mitigation Proposals

3.14 Notwithstanding the concerns that the modelling is underestimating the impacts, these are indicated by the Applicant's modelling to be severe and significant and will have a large impact on the local road network, residents and port traffic. As such, whilst PoTLL is seeking for improved and more comprehensive modelling to be undertaken, it is also concerned to ensure that appropriate mitigation is secured within the DCO. The relevant actions in respect of this have been captured by the ExA.

3.15 In response to the ExA's Action Point ISH7-8, PoTLL has provided a plan at Appendix 1 detailing the extent of the land that it considers should form part of the Order Limits in order to facilitate the Applicant providing such physical and other mitigation that may be required to avoid and minimise these impacts.

3.16 For the avoidance of doubt, this plan constitutes indicative requirements based on PoTLL's understanding of the expected impacts on the ASDA roundabout, as well as its own assessments of operation and the design of possible improvements. PoTLL hopes that this, combined with the Applicant's response to ISH7-8, will enable positive discussion to take place, and help the Applicant to identify urgently the design improvements and additional land required to be added to the Order in order to facilitate the required mitigation.

3.17 In addition to this plan, and in response to the ExA's Action Point ISH7-5, PoTLL has provided draft wording for a new DCO Requirement, intended to secure mitigation, such as that envisaged by the plan at Appendix 1, and ensure that the mitigation is in place prior to the commencement of construction works and the associated impacts. This draft wording is provided separately in PoTLL's Deadline 4 submission: DCO Drafting Proposals.

4. OPERATIONAL IMPACTS – 9.15 LOCALISED TRAFFIC MODELLING APPENDIX J – ASDA ROUNDABOUT VISSIM FORECASTING REPORT [REP3-129]

4.1 PoTLL has fewer concerns about the operation of the ASDA roundabout during the operational phase as the proposals result in lower increases in traffic flows than during construction. However, the modelling nevertheless shows an increase in the volume of traffic that will be using the ASDA roundabout, over and above the Do Minimum scenario, for all arms of the roundabout. It is noted that the modelling shows increases in queues and delay on the A126 Dock Road and A1089 St Andrew's Road (South) arms in the 08:00 to 09:00 and 17:00 to 18:00 hours for both 2030 and 2045, with similar impacts as stated for construction.

4.2 PoTLL considers that, provided appropriate mitigation is put in place to manage the additional volume of traffic generated by the Applicant during construction, it is unlikely that any separate or additional mitigation will be required to manage the operational impacts.

4.3 Notwithstanding this, PoTLL is concerned that Table 4.1 and Table 4.2 show traffic flows on the A1089 St Andrews Road (South) that are lower in the 2045 Do Minimum and Do Something years, than the respective 2030 volumes. This is unexpected as it is anticipated that traffic flows will increase. Without an explanation for the decrease in traffic, it appears that the operational impacts have not been correctly assessed, with reduced impacts being identified as a result.

APPENDIX 1

INDICATIVE PLAN OF LAND REQUIRED TO ENABLE MITIGATION OF CONSTRUCTION IMPACTS TO THE ASDA ROUNDABOUT

PoTLL has provided this plan in order to assist the ExA and the Applicant to understand the land take that would potentially be required in order to mitigate for the construction impacts of the LTC Scheme, as set out in 9.15 Localised Traffic Modelling Appendix M – ASDA roundabout VISSIM Construction Assessment Report [REP3-132].

It remains for the Applicant to assess the impacts of the LTC Scheme proposals properly, and to identify the design improvements to this junction, or elsewhere on the road network, to mitigate the identified impacts. The precise quantity of land and proposed Order limits will depend on the physical mitigation proposed by the Applicant. However, PoTLL hopes that this plan will assist all parties to understand that adding the ASDA roundabout to the Order limits is achievable within the Examination timetable, with only a limited number of affected landowners required to be consulted under the Compulsory Acquisition Regulations.

Tanks

ypermarket

Filling Station

1.4m+

THURROCK PARK WAY

A1089

El Sub Sta

Und

1.8m

1.3m

Ditch

Little Thurrock Marshes

Jura House

ESS

Drains

WINDRUSH ROAD

1

KEY

HIGHWAY BOUNDARY

POTENTIAL ORDER LIMITS

AREA OUTSIDE OF HIGHWAY BOUNDARY

SCALE BAR @ 1:1000

0 10 25 50 100

DRAWING ISSUED FOR FEASIBILITY CONSIDERATION AND PLANNING PURPOSES ONLY. DRAWING NOT TO BE USED FOR CONSTRUCTION. I-TRANSPORT LLP ACCEPT NO RESPONSIBILITY FOR ERRORS MADE BY OTHERS IN SCALING FROM THIS DRAWING. MEASUREMENTS SHOULD BE TAKEN FROM FIGURED DIMENSIONS ONLY. CDM REQUIREMENTS CONSIDERED AT FEASIBILITY STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.

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CLIENT: PORT OF TILBURY

TITLE: POTENTIAL LAND TO INCLUDE WITHIN ORDER LIMIT (RESPONSE TO ExA'S ACTION POINT ISH7-8)

PROJECT: LOWER THAMES CROSSING

REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS: FOR INFORMATION

DRAWN:	CHECKED:	APPROVED:
SH/JMc	PR	PH
PROJECT No:	**SCALE @ A2:**	**DATE:**
ITL16303	1:1000	19.09.23
DRAWING No:		**REV:**
ITL16303-GA-005		

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