



Appendix A

Outline Traffic Management Plan for Construction	(electronic pg. 2)
Framework Construction Travel Plan	(electronic pg. 33)
Wider Network Impacts Management and Monitoring Plan	(electronic pg. 54)

Appendix AA

Traffic Modelling Issues	(electronic pg. 67)
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Appendix B

Outline Site Waste Management Plan	(electronic pg. 82)
Outline Materials Handling Plan	(electronic pg. 95)



Lower Thames Crossing

Review of Outline Traffic Management Plan for Construction

On behalf of **Thurrock Council**



Document Control Sheet

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For and on behalf of Stantec UK Limited				

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Contents

1 Introduction1
1.1 Overview1
1.2 Key Themes1
2 Review of Outline Traffic Management Plan for Construction (updated July 2021 version 2)3
2.1 Comments3
2.2 Summary and Recommendations26

Tables

Table 2.1: The Council's Comments on the Outline Traffic Management Plan for Construction (oTMPfc) 3

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1 Introduction

1.1 Overview

- 1.1.1 As part of its technical engagement relating to the proposed Lower Thames Crossing (LTC) Development Consent Order (DCO) application, Highways England (HE) has issued Thurrock Council (the Council) with an updated version (0.2) Outline Traffic Management Plan for Construction (oTMPfc) as part of the Community Impacts Consultation process from 14 July to 08 September.
- 1.1.2 This document sets out the Council's comments on the updated oTMPfc and indicates if, in the Council's opinion, there are any suitable opportunities to improve the project proposals or infrastructure provision. This review is specific to the construction stages covered by the oTMPfc. A working draft version of the oTMPfc was provided to the Council for initial feedback and comment during May 2021. The Council provided its comments and has engaged with HE across a series of meetings.
- 1.1.3 Table 2.1 of this document sets out the Council's comments and indicates in the final column of the table where the comments from the earlier version remain unchanged; are updated or are new.
- 1.1.4 The document follows the same structure of other reviews carried out by the Council and references within the tables of this document align to the referencing within the oTMPfc. The document responds only to the sections relating to the north of the river.
- 1.1.5 The Council has engaged with HE on 19 April 2021 to start to discuss the Council's review of the oTMPfc. Feedback was provided at that meeting and at subsequent meetings on 26 April 2021 and 04 May 2021. During those meetings all the Council's comments were reviewed and discussed in detail to assist in the process of updating the oTMPfc. Following those discussions, a second version of the oTMPfc was issued by HE to the Council on 28 June 2021.

1.2 Key Themes

- 1.2.1 The key general points of concern are set out in detail in section 2 below. The Council still believes that the oTMPfc does not provide sufficient detail, certainty or commitment and a clear governance process to give comfort that the temporary traffic management measures and plans will be acceptably controlled and managed or that impacts on the operation of the Local Road Network (LRN) and local communities within Thurrock will be suitably mitigated. The drafted oTMPfc document does not provide currently a suitably robust framework from which subsequent detailed TMPs can be developed by the appointed Contractors.
- 1.2.2 The council's headline concerns (also summarised in 'summary and conclusions') are:
- i. The lack of a clear set of traffic management principles, objectives and commitments set by the scheme promoter to clearly direct the contractor in the production and implementation of TMPs and associated schemes across all phases of work. The suite of TMPs must be co-ordinated, current and relevant.
 - ii. The proposed disapplication of the council's network management powers, including the current street works permitting systems and the consenting on temporary Traffic Regulation Orders, to which Thurrock Council is not able to agree. The changes would impact on the Council's ability to manage effectively the LRN including works being carried out as part of the delivery of the Project and also works carried out by other major projects and day to day operations on the LRN.

- iii. The need for a clear commitment in this document by the promoter and all contractors (and their sub-contractors and suppliers) to exemplary levels of best practice in safety, efficiency and environmental protection in relation to construction logistics management and fleet operation. There should be a requirement for contractors to operate to the Construction Logistics and Community Safety Standard (CLOCS) and Fleet Operator Recognition System (FORS) Silver Standard with progression to Gold.
 - iv. The lack of emphasis in the document on the importance of managing construction traffic and traffic management scheme interfaces with, and impacts on, pedestrians, cyclists and other vulnerable road users.
 - v. The need for further information on proposed monitoring, reporting and enforcement arrangements that will be put in place across all construction phases – particularly in relation the scope of monitoring proposed and KPIs that will be regularly reported. Effective enforcement mechanisms also need to be clearly set out in the document.
 - vi. The need for further definition of the management and governance procedures that will be required and put in place during the construction phases;
 - vii. The lack of information on the management and reporting processes of incidents and emergencies which affect the operation of the travel networks – which should include contingency planning and defined contingency routes and the reporting processes of the incidents;
 - viii. The lack of details on the commitments that will be required of the contractors prior to and during the construction works and in the decommissioning and hand-over phases;
 - ix. The need for recognition and inclusion within the strategic and local Transport Planning modelling of the significant movements of LGV construction related traffic as well as the HGVs;
 - x. The need for a promoter led requirements on the co-ordination of the contractors to provide detailed appraisal of the effects on the road network of the delivery stages of the Project, in particular the delivery of the A13 interchange and the impacts on the operations of the network.
 - xi. Further detail on the designated access routes that would be managed/ enforced and the consequences of non-compliance; and
 - xii. Further information on the management and co-ordination of protections to the affected local road network and how that would be set out within and operating agreement.
- 1.2.3 Overall, it is also the Council's opinion that it should be the approving body for construction period management plans including the contractors' CTMPs. If it is determined that this is not to be the case then the governance of those TMPs and the process for agreeing them, prior to approval by the SoS, needs to be set out in the oTMPfc. This would give direction and clarity to the appointed contractors and the Council. HE refers to reporting to the SoS that consultation with local authorities has been undertaken, however, the evidence to the SoS must include a report as to what feedback was received and how it has been addressed. This is fundamental if the local authority is not to be the approving body. The local authority must have the right to respond to the report and a system of conflict resolution identified.

2 Review of Outline Traffic Management Plan for Construction (updated July 2021 version 2)

2.1 Comments

Table 2.1: The Council's Comments on the Outline Traffic Management Plan for Construction (oTMPfc)

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
Chapter 1: Executive Summary			
1.1.1	"traffic management and logistics"	<p>a. The CoCP indicates that Construction Logistics Plans (CLPs) and Site Specific Travel Plans (SSTP) (for each compound site) will be prepared by the contractors. The Council has not had sight of the framework for the CLP and so reserves the right to comment on this document.</p> <p>b. A framework construction travel plan (FCTP) has been presented by HE as part of the non-statutory consultation process and is being reviewed by the Council and comments on that document will be provided separately. It is noted, however, that the CLP, FCTP and SSTP documents are not within the DCO as Certified/Control Documents. The frameworks for these documents should be tested through the DCO examination and be Certified/Control Documents.</p> <p>c. The oTMPfc does not cross reference the CLPs, or SSTP and yet these documents must be aligned to maximise their effectiveness. The cross linking should be shown within the documents.</p> <p>d. Each of these framework documents will require detailed documents to be prepared by the appointed Main Contractors for the various project contracts. The document must indicate how these will be phased, co-ordinated, monitored, managed and maintained. In all cases the Council will need to be engaged in the approval of those documents.</p>	<p>Updated</p> <p>No change</p> <p>No change</p>
1.1.2	Background	<p>a. The oTMPfc should clearly include all works associated with the enabling, site establishment and decommissioning phases. There are references at points through the document to early works, such as temporary "supplies" i.e. statutory undertakers' connections etc, however the oTMPfc and the subsequent detailed TMPs need to recognise and capture fully the works associated with these phases and the linkages back to the CoCP and EMP. Those enabling and early works and decommissioning can be significant in terms of their impacts and may require</p>	Updated

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
		<p>significant procedures which require the commitments and protections that should be observed and secured through the finalised TMPs e.g. network management procedures; temporary traffic regulation orders, non-motorised user facilities management, bookings management, etc.</p> <p>b. The text refers to outline concepts and principles, this is not representative in the text, with no leading principles or objectives outlined. These leading principles for traffic management plans and schemes should be clearly defined for contractors to adopt, including road user safety, worker safety, minimising community impacts, design change to reduce construction time and TM impact, direct and suitable diversion routes for all traffic; clear and concise traffic signing; etc.</p>	Updated
Chapter 2: Introduction			
2.1	Purpose and Objectives	The oTMPfc and the subsequent finalised TMP need to align, cross link and complement the CoCP and EMPs. The commitments that will need to be made through the CoCP/EMP must co-ordinate and supplement the TMP. The CoCP and EMP will need to capture the proactive and management measures associated with initiatives around such matters as vehicle safety and standards, workforce training, working hours, etc. These would complement the processes that would be set out in the TMP and the linking must be recognised within the TMP (and vice versa).	No Change
2.1.2	"inform the Traffic Management Plan for Construction"	The oTMPfc needs to stipulate the mechanism for controlling the co-ordination of Contractors' TMPs. There will be a range of TMPs developed at differing phases and by different Contractors and not a single and static document. The alignment and co-ordination of the TMPs will need management and governance by an overseeing group which includes the Council and is empowered to govern the implementation of the TMPs. The powers of that governing group are especially important where the cumulative effect on the local road network (LRN) could be partly out of the control of the Local Highway Authority (LHA), if the proposals for such processes as Permitting are consented as set out within the draft DCO. For example, it is proposed that the LHA will only be a consultee to a TMP. If phased TMPs are developed by different contractors, there is no mechanism or control by which the Council would be able to co-ordinate between the tunnelling contract and the road delivery contract. It should be a function of the LTC Client team to ensure co-ordination across the works and the construction processes. Cumulative impacts across the contracts and contractors should be assessed and established by the Client team and reported to the LHA at the proposed Traffic Management Forum for the forum to review and determine corrective action where objectives and compliance is not met. The Council recognises the proposed appointment of a Traffic Manager (oTMPfc Table 2.2 refers); however, the Traffic Management Forum must be constituted to allow the parties to impose sanctions on	Updated

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
		<p>the contractors as required as a consequence of the review process and not be left for the powers of sanction to be at the decision of the Traffic Manager, or through some form of protracted conflict resolution process involving the Secretary of State (SoS). The establishment of a Joint Operations Forum (JOF) indicated in the Code of Construction Practice (CoCP) is noted, however the LHA is not party to that forum. For example, the alignment of major phases of tunnelling works, which could generate high numbers of road movements, should not be aligned to major works at the A13 / A1089 remodelling. The outline Materials Handling Plan (oMHP) has been included within this consultation material and the Council is providing a separate response on that document. The Council is, however, raising substantive concerns about the lack of detail and robustness of the oMHP and that from that document there can be no understanding of the prediction of type and volume of movements associated with the movement of materials, plant and equipment for each contract and each phase. Those predictions must be provided and set the upper limits to which the contractors work. That detail must then be developed through the detailed MHPs and the CLPs that will be developed by the contractors prior to undertaking the works. The Council would wish to see proposals for network co-ordination which accompany those plans and which should consist of monthly update meetings.</p>	
2.1.2	“before commencing the relevant part of the Project”	<p>This is vague. The oTMPfc should make a commitment to the production of a TMP by the contractor in advance of all works associated with the scheme (including enabling, site establishment and decommissioning phases.). Enabling, site establishment and decommissioning works can be significant in terms of their impacts on the highway network. The undertaking within the oTMPfc must link to the stages of the works across the separate contracts. Due to the length of the works, it will be anticipated that the contractors will need to prepare a series of TMPs which are relevant to subsets of their contracted works. The framework must reflect this and ensure that the TMPs are kept current and relevant.</p>	New comment
2.1.2	“relevant highway authorities”	<p>The referencing to authorities through the document needs to be checked to ensure they are appropriate and consistent at each point. There are a range of references to relevant authorities; highway authorities; relevant highway authorities; authorities; local authorities; relevant Highway Authority; and Local Highway Authority. In each instance it must be clear whether the reference is to the Local Planning Authority, the Local Highway Authority or Local Traffic Authority</p>	No change

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
2.1.2	"engagement with.... businesses"	<p>a. Who has HE engaged with? For example, does this include the Thurrock Business Board, the Port of Tilbury, Amazon and Thames Gateway port? This should be clearly stated.</p> <p>b. Table 2.1 now indicates that HE and its contractors must engage and consult with a number of business on the TMP which is welcomed.</p> <p>c. There should also be commitment to ongoing engagement with local businesses and developers during the construction period and how the finalised TMP will be co-ordinated with other major developments, such as Tilbury 3, London Resort, Thurrock Flexible Generation Plant and the emerging Freeport? Where this is set out in other plans and documents, wayfinding to those points should be added – such as the Engagement Management Plan.</p> <p>d. Feedback and responses from those organisations engaged should be set out as an Appendix to the oTMPfc to indicate the points made and resolved.</p>	<p>No change</p> <p>New</p> <p>Updated</p> <p>No change</p>
2.1.2 & 2.1.3	"The TMP"	<p>a. The oTMPfc now rightly recognises at 2.3.1 that there will be a series of TMPs for different project stages or areas by a number of authors / contractors, however, 2.1.2 and 2.1.3 do not align with that paragraph as they are currently written.</p> <p>b. Since there are to be a series of concurrent TMPs covering different contracts and different phases, the oTMPfc must set the mechanisms for co-ordination and governance. This co-ordination and governance must be carried out in collaboration with the Council to ensure that the cumulative effects are managed and communicated, including co-ordination across other non-LTC contracts and works. See comments on proposed Traffic Management Forum.</p>	<p>Updated</p> <p>No change</p>
2.1.3	"TMP must be approved by the Secretary of State,	<p>a. The document includes a commitment to consultation with the local planning and highway authorities on the TMP prior to its submission to the SoS at 2.3.3 but this should be worded to align with the DCO, currently "planning authority". The Council proposes that "... in consultation with the planning authority" or similar should be added. The Council has made representations to HE to express that the Council should be the approving authority of the documents rather than a consultee. If it is determined that the local authority will not be the approving body then the evidence to the SoS must include a report as to what feedback was received and how it has been addressed. This is fundamental if the local authority is not to be the approving body. The local authority must have the right to respond to the report and a system of conflict resolution identified.</p> <p>b. A mechanism needs to be set out in the oTMPfc by which the TMPs are kept current and relevant. (See comments on Traffic Management Forum later) The construction programme and</p>	<p>Updated</p> <p>Updated</p>

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
		<p>processes will change during the life of the project and the initial TMPs will need to be refreshed to reflect those changes. Contractors will not propose updates to documents unless there is a contractual requirement to provide them. HE should consider a mechanism for reporting adjustments and updates to the Council. That could include fora and quarterly update reviews. Where large changes in impact are expected, an update to the TMPs, CLPs and / or CWTPs should be triggered. The oTMPfc framework should set those trigger criteria and provide an approach where the Council can approve changes.</p> <p>c. The oTMPfc must indicate how the TMPs will corelate with the CoCP and the subsequent EMP and CLP, which in turn will include the CWTPs.</p>	No change
2.1.4	The oTMPfc will also outline measure available to the Contractor..."	<p>a. Why "will" the oTMPfc outline measures? It should be a Certified/Control Document within the DCO and therefore should be fixed in nature and give the absolute framework for the TMPs, secured through Requirement 10 of the DCO. There will be no iterations of the oTMPfc following consent of the DCO and so the Council must be content that the framework is sufficiently refined to inform the contractors to the commitments they will undertake.</p> <p>b. The oTMPfc should make commitments to which the Contractors shall conform and not suggestions that might be "available to the Contractor".</p>	No change No change
2.2.10 2.3.1 Plate 2.2	Project documents and control plan	<p>a. A list of related project documents has been added at 2.2.10 and a document control plan provided at Plate 2.2. This helps in showing how all the documents (CoCP, oTMPfc, FCTP) relate to each other and makes reference to the relevant DCO requirement to produce TMP.</p> <p>b. Plate 2.2 should also show that CLPs, TMPs, SSTPs will also need to be produced prior to construction and how those documents interrelate with the other documents.</p> <p>c. Plate 2.2 - Where a document is related to a specific DCO Requirement it should be noted under that document name e.g. TMP (DCO Requirement 10)</p> <p>d. The outline Traffic Management Plan for Construction must be a robust Certified/Control Document in the DCO. It forms the framework for the TMP secured by Requirement 10 of the DCO and as such provides the regulatory framework to which contractors must comply when preparing their TMPs against which the Client and stakeholders will govern the processes.</p> <p>e. There should be consistency in the DCO and associated document to the referencing of TMP and CTMP. Typically, these documents, including the oTMPfc, refer to TMP and not <u>CTMP</u>.</p>	New comment New comment New comment Updated No change

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
2.3.1 to 2.3.4	TMP Consultation and Approval	The document now clearly commits the contractor to the preparation of TMP/TMPs for approval. It also includes a commitment to consultation with "the relevant authorities" (which should be defined) on the TMP/TMPs prior to submission to the SoS at 2.3.3. The Council has made representations to HE, however, to express that the Council should be the approving authority of the document rather than a consultee. The Council has no certainty that it will be listened to, or commitments actioned, and sanctions taken if it is not the approving body. HE refers to reporting to the SoS that consultation with Local Authorities has been undertaken, however, the evidence to the SoS must include a report as to what feedback was received and how it has been addressed. This is fundamental if the local authority is not to be the approving body. The local authority must have the right to respond to the report and a system of conflict resolution identified.	New
Plate 2.3		<ul style="list-style-type: none"> a. This diagram is very generic and it is unclear if this relates to the operational scheme design or to temporary traffic management scheme design b. It is unclear how this process has fed into the development of oTMPfc or the assessment of construction impacts included in the Transport Assessment. As a flow diagram there is no output of the final scheme. c. Following consent of the DCO there will be no further Traffic Assessments, as the impacts should have been tested and appraised through the Examination and the design would be fixed with the exception of non-substantial changes. The diagram therefore needs to indicate that a fixed design has been achieved by the time of consent. 	New
2.4 (formerly 2.3.1)	Challenges and Consideration	In the preliminary version of the oTMPfc provided to the Council, there was an acknowledgement about a considerable amount of Construction traffic and (point 2.3.1(f) ' <i>initial routes are not ideal and would not be able to cope with significant traffic volumes.</i> ' By HE's own admission the oTMPfc supports the needs for the routes that HE was proposing to be strengthened and future proofed before the issues develop. That point has been removed from the latest document and the Council would like to understand how it has been resolved?	Updated
2.4.7	"Overarching considerations which would be considered"	The oTMPfc sets the base from which the TMPs would be developed. It is insufficiently robust not to set measures that the contractors must achieve and incorporate. The points raised within Table 2.3 should be the minimum standard that the contractors must adopt and employ and not a series of initiatives that can be readily dismissed at the whim of the contractors.	New

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
2.4.9	Monitoring	<p>a. A means to monitor compliance with vehicle routeing has been proposed which is welcomed. This will inform a monthly "monitoring report" reported at a monthly Traffic Management Forum (TMF).</p> <p>b. The full scope and key indicators to be reported in the monthly monitoring report should be outlined in the oTMPfc.</p> <p>c. There should be a commitment to effective CLOCS/FORS implementation monitoring mechanisms to allow CLOCS/FORS compliance performance data to be produced and included in the monitoring reports (see comments on CLOCS/FORS more generally under safety later).</p> <p>d. This should include collecting review information on all collisions resulting in harm (and near miss incidents) that occur on journeys associated with the project.</p> <p>e. Effective enforcement mechanisms need to be set out in the document e.g. HE should set out what the consequences would be to contractors, sub-contractors and their hauliers for non-compliance – e.g. three strikes and out.</p>	<p>Updated</p> <p>New</p> <p>No change</p> <p>New</p> <p>New</p>
Table 2.2 - Thurrock Council	Issue column	<p>a. The reported issues in this Table are generic and neglect many of the specific issues raised by Thurrock Council, such as the impact of construction traffic on Chadwell St Mary, the impact of construction traffic on the safe and efficient operation of the LRN for non-motorised users, motor traffic and public transport; concerns about the diminution of control over the management of the local network during construction; the management and repair of damage to the LRN due to the construction operations; and the residual impacts the disruption during the construction period will have on active travel and how that will be addressed by HE.</p> <p>b. HE should take its lead from the proactive approach adopted by the Dutch in their Minder Hinder approach (including the 7 Pillars that were adopted).</p> <p>c. Key themes identified relate to Impacts on Access Routes and Local Roads - The document must specify routes that are to be used for site establishment, early works and demobilisation as these are noted not to be limited to the routes indicated to be access to compounds.</p> <p>d. A means to monitor compliance with vehicle routeing should be proposed, which could include check data on routes such as GPS or ANPR systems. HE should set out what the consequences would be to contractors, sub-contractors and their hauliers for non-compliance – e.g. three strikes and out</p>	<p>No change</p> <p>No change</p>

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
Table 2.3 – Van, car drivers and motorcyclists (pg7)	How would the TMP take these into account?	<p>a. The oTMPfc should recognise the importance of incident management on driver safety and network management. The incident management processes should include contingency routeing for road users and for construction traffic. The use of these contingency routes must be agreed and communicated to the Council to align with their co-ordination processes. Those routes could then be used for the duration of the incident in agreement with the Council, with the period for returning to the prescribed routes set out between the Council and HE/Contractor.</p> <p>b. The oTMPfc must be clear that the use of variable message signs and other temporary traffic management measures to be placed on the LRN would be the subject of the standard licencing and permitting agreements and processes with the Local Highway Authority.</p> <p>c. The use of electronic variable message signs should be used to complement temporary fixed information signs and notification of works. Signs outside the DCO boundary in connection with a Traffic Management Scheme would be part of that scheme and would need to have additional approvals from the Council</p>	Updated
Table 2.3 – HGVs (pg. 7)	How would the TMP take these into account?	The management of Abnormal Indivisible Loads through the road works and on diversion routes, whether associated with the construction works or in background traffic, must be reflected fully within the TMPs through the robust framework of the oTMPfc	No change
Table 2.3 – walkers, cyclists and horse riders (pg. 8)	How would the TMP take these into account?	a. What mechanism is to be used to “ <i>seek views of highway authorities when designing diversion routes</i> ” and what timescales will be set to ensure acceptable engagement and notice? The oTMPfc must set this process and mechanism out, to which contractors must adhere.	No change
Table 2.3 – Public Transport Users and Operators (pg. 8)	How would the TMP take these into account?	<p>b. What mechanism is to be used to “<i>seek views of highway authorities when designing diversion routes...</i>” and what timescales will be set to ensure acceptable engagement and notice?</p> <p>c. Why are rail companies only identified for engagement? Engagement must include local and strategic bus operators, coach companies and school transport providers.</p> <p>d. The oTMPfc must set this process and mechanism out, to which contractors must adhere.</p>	No change
Table 2.3 – Logistics	How would the TMP take these into account?	a. The Local Highway Authority must be involved in the determination of “ <i>Diversion routes that can accommodate stacking and/or tacho breaks</i> ”. Diversion routes that have been identified in the oTMPfc are not suitable for lorry traffic e.g. in the vicinity of Orsett and Baker Street. Thurrock	No change

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
centres (pg. 9)		<p>Council would not support on network HGV stacking or “<i>tacho breaks</i>” on the LRN – whether specified or not.</p> <p>b. This issue should be expanded and concluded with the Local Highway Authority prior to the oTMPfc being Certified/Control within the DCO. HE must set out in the oTMPfc the mechanisms that it and its contractors will put in place to enforce against on-network stacking or breaks.</p>	
Table 2.3 – Relevant authorities and local stakeholders (pg. 10)	How would the TMP take these into account?	<p>a. Thurrock Council objects to the diminution of control over the permitting and scheduling of temporary works on the LRN, which is proposed through the DCO and indicated within the oTMPfc. The oTMPfc must set out the mechanism and protocols to “Engage with the local authorities on Traffic Management” whilst allowing the Local Highway Authority to retain what it considers are acceptable Network Management controls. That mechanism must be set out for the contractors to conform to and must be consistent throughout the DCO documents and consents. The Local Highway Authority must be able to monitor and manage its network; have sight, overview and co-ordination of operations on its network – including changes to programmes and over-runs.</p> <p>b. This table notes preventing damage on roads but does not address how this will be achieved or how damage would be rectified. A regime of regular inspections and intervention needs to be recognised and set out in the oTMPfc to be reported at via monthly monitoring reports and at the Traffic Management Forum.</p> <p>c. The Council has raised through engagement that the resources required to manage and operate the permitting for the project must be funded by HE/the Promoter and that this must be captured within the DCO and through a separate Agreement, possibly a Section 106 Agreement. This was raised and discussed at the meeting of 19 April 2021.</p>	<p>No change</p> <p>Updated</p> <p>Updated</p>
Table 2.3 – Relevant authorities and local stakeholders (pg. 10)	What are their requirements?	<p>The table does not recognise that the Council continues to have a network management duty for the LRN. Under the Highways Act and the Network Management Act the Council will still be responsible for routes through the construction works areas and along access corridors. The Council needs to ensure it fulfils its statutory duty and therefore it must be set out in the oTMPfc that access for gritting, making safe damage, gully cleansing etc. is maintained at all times. The division between roles and responsibilities between the Council, HE and its contractors must be set out.</p>	No change

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
Table 2.3 – Local schools (pg. 11)	How would the TMP take these into account?	<ul style="list-style-type: none"> a. How will the contract ensure and enforce that “<i>HGV movements will not be allowed to pass school entrances during drop off/pick up</i>” times? This is an admiral proposal that needs further definition within the oTMPfc. b. The Council transports a significant number of children and some with SEND. Changes to routes or delays have an impact on the children and potentially impacts the operator financially. It should be set out in the oTMPfc which schools would be affected and how these impacts will be monitored and mitigated. 	No change
Table 2.3	Who is affected by the project	Major Development Sites in the area will be significantly impacted and should be identified and covered in this table. Their ongoing engagement and involvement in the Traffic Management Forum will be required to ensure effective local network management and minimise impacts.	New
Table 2.3	How would the TMP take these into account?	<ul style="list-style-type: none"> a. Condovers Scout Activity centre is located on a secondary access route to Compound 5, how will this be impacted, particularly at weekends? b. It should be set out in the oTMPfc how the conflict with the use of PRoWs and local road network for activities is managed and mitigated. 	No change
Chapter 3: Overview			
Plate 3.1	Observations, comments....	With whom, how and when will “ <i>Observations, comments and lessons learnt</i> ” be shared? What will be the purpose of the information sharing? How will HE and the Contractors collaborate as a consequence? This should be reflected through the engagement mechanisms and protocols which need to be set out. This in turn will impact on the Council's resource requirements which will need to be adjusted accordingly.	No change
3.1.3	“request roadspace..” and Timescales	<ul style="list-style-type: none"> a. The OTMPfc still proposes to disapply provisions of the New Road and Street Works Act 1991 (NRSWA) (including permitting schemes) and outlines a mechanism for managing road space booking and permitting via the existing road book systems operated by respective local highway authorities (with engagement at a regular Traffic Management Forum). Thurrock Council objects to the diminution of its control over the permitting and scheduling of temporary works on the LRN, which is proposed through the DCO and indicated within the oTMPfc. Thurrock Council as Local Highway Authority and Local Traffic Authority for the LRN within its Borough must retain robust management of its network. b. It is not always the case that local authority powers related to the permitting of street works are disapplied. In relation to the Thames Tideway scheme (also identified as an NSIP) the relevant 	Updated New

Relevant Section in the oTMPfc	The Council's Comments	Comment Status
	<p>local highway and traffic authorities retained their powers for controlling street works and road works related to the scheme (via the London Permitting Scheme - LoPS). This was agreed following representations made by Transport for London at the Examination in Public.</p>	
<p>3.1.4 to 3.1.6</p>	<p>“changes to the permitting application”</p> <ul style="list-style-type: none"> a. Thurrock Council as Local Highway Authority and Local Traffic Authority for the LRN within its Borough must retain robust management of its network. Subject to the detail of a consented DCO, Thurrock Council would not unreasonably obstruct the delivery of the agreed project carried out in line with agreed procedures and consented document, however, the delivery of the project must be co-ordinated with the broader management of the LRN, which would be the jurisdiction of Thurrock Council. The changes to the road space permitting scheme are, therefore, not acceptable to Thurrock Council. b. It should be clear in the document that the mechanism for permitting must reflect that requirement for co-ordination of both programmed and emergency works proposed through the Project and those proposed by other parties not associated with the Project i.e. the fundamental process of the Network Management duties defined within the NRSWA 1991 and through the associated current permitting scheme. c. This matter is further confounded through Plate 3.3 which appears to infer the Local Highway Authority would issue permits – albeit that table is unclear as to the type of permit that would be issued and to whom. 	<p>No change</p> <p>Updated</p> <p>New</p>
<p>3.1.4 to 3.1.6</p>	<p>“changes to the permitting application”</p> <ul style="list-style-type: none"> a. The suggestion to ‘disapply’ the permit scheme would take away any control the Council would have over the co-ordination of much of the borough and the Council are extremely concerned about the diversion routes that would be applied, particularly the ones that do not appear in the oTMPfc document. b. The key to this project is communication and early engagement and the permit scheme is pivotal in it being a success. Without a permitting system in place, HE has the potential to work wherever and whenever, with little regard to existing planned works. c. HE is seeing the permits as a hindrance to the project where in actual fact it can be an advantage to it if it communicates correctly. If it engages early enough, Thurrock Council can ensure that the road space is booked well in advance of works and the Council will be able to fit the utility or other works around the HE works. Without HE being a part of the permit scheme it would work the opposite way around and therefore the systems would fail. 	<p>No change - All</p>

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
		<p>d. The management and visibility of the permitting for network works would similarly impact on the management of Abnormal Indivisible Load routing where works are not recorded on the national StreetManager database and are not 'visible' to the Council.</p> <p>e. This approach would work as can be demonstrated with the success of the A13 project in relation to the way both Kier and the network management team have engaged, discussed any issues together and resolved them resulting in no time lost for the project.</p> <p>f. The Cadent works on London Road were also a success, where again early engagement has taken place and issues ironed out long before works commenced.</p> <p>g. Both of these projects have been successful because the Council has the permit scheme in place. Permit conditions are pivotal in being able to manage the network.</p> <p>h. The Council's Permit Team will show parity across all service users, however, additional resources could be required to maintain a robust service across all users, including the project. The additional resources funding support requirements are set out with the Council's Hatch Report measure CLS1.</p>	
3.1.6	Traffic Management Forum	The oTMPfc must set out the constitution, timeframes and protocols for the mechanisms for engagement on the TMPs, throughout the life of the Project. The framework must include the lines of communication between those represented on the fora, the Promoter and its contractors.	No change
3.2.2	"(DLOA) or Local Operating Agreement"	The heads of terms of a DLOA / Local Operating Agreement should not be left to be determined by the contractor after the DCO consent. The draft heads of terms for such an agreement should be set through the DCO for the contractors to work to. This will provide Thurrock Council a single agreement that has been tested at Examination rather than seeking to reach agreement with multiple contractors post consent as part of consultation on the detailed TMPs.	Updated
3.1	General Principles of Traffic Management	<p>a. The section on the "Nature and General Principles of Traffic Management" has been removed from the latest version of the document.</p> <p>b. This is a concern as it seems a fundamental element of the document and should be included at the start of this section. It should outline:</p> <ul style="list-style-type: none"> i. Nature of traffic management works ii. Nature of all LRN interfaces iii. Key objectives / principles that are proposed to underpin all TMPs e.g. road safety, minimising disruption for all road users 	New

Relevant Section in the oTMPfc	The Council's Comments	Comment Status
	<ul style="list-style-type: none"> iv. Clear list of commitments by the scheme promoter (and those expected of all contractors) v. a commitment to maximising beneficial reuse, maximising use of marine/heavy rail (including a targets e.g. % of exported material by rail/marine) c. This outline document should provide a clear outline of the document content (and possibly a checklist) that contractors should adhere to when producing their TMP. This should reflect the key principles and commitments set out in this document. 	
3.4.2	<p data-bbox="454 539 660 595">"Abnormal traffic movements"</p> <ul style="list-style-type: none"> a. Whilst it is noted at 3.4.2 that "Abnormal traffic movements may occur outside of standard working hours", the document is not absolutely clear whether this specifically refers to Abnormal Indivisible Loads (AILs). It is assumed that the document is not referring to abnormally high numbers of movements by standard sized construction vehicles. In regard to AIL movements, there is only limited information on their likely nature, scale and the process for the identification of proposed routes and assessment of the suitability. It needs to be made clear in the oTMPfc that predictions and definitions of AIL movements will need to form part of all contractor Traffic Management Plans. b. Existing regulation and processes are already set out for these movements and the document should clearly indicate that those processes will be strictly adhered to. Subject to the contractors designs and operations, the construction period will require significant AIL movements which will require careful management and co-ordination. For example, the strategy for the delivery or removal of the Tunnel Boring Machines; associated equipment, batching plants and shutter systems is not set out at this stage and could include many AILs across extended time periods. This will require significant planning well in excess of the standard notice periods and could require temporary traffic management measures substantially in excess of those currently outlined. The management of these processes needs to be set out in the oTMPfc as a framework for the contractors. That process must recognise the need for co-ordination not only with the Local Highway Authority and Police force but also the Port of Tilbury and other affected major stakeholders and place an onus on the contractor to ensure coordination and acceptable routeing submitted by the haulage contractor. c. The out of working hours AIL movement should exclude loading and unloading operations and setting up equipment such as cranes etc. Where it is safe to do so. d. There are a number of weak structures within the Borough which will need assessments and potential strengthening works to allow for some movements. These structures are to be identified early at the expense of the project. 	<p data-bbox="1899 539 2011 563">Updated</p> <p data-bbox="1899 754 2033 778">No change</p> <p data-bbox="1899 1193 2033 1217">No change</p> <p data-bbox="1899 1265 2033 1289">No change</p>

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
3.3	Communication and Community Engagement	<ul style="list-style-type: none"> a. Excellent project communication and engagement will be critical to minimising impacts and disruption during the construction period b. Further information has been provided on how a Community Engagement Strategy (CES) will be produced by HE and Community Engagement Plan (CEP) by all contractors. c. The section on proposed methods of Communication (in-advance of works and during their construction) has been removed. This should be provided as part of the oTMPfc. d. There needs to be a commitment to ongoing engagement with the Council's own Communications officers to assist in the preparation and delivery of these plans. e. Given that this significant communications piece will need to be delivered by HE and across a range of contractors, further information is required on how it will be co-ordinated and managed and how it is proposed that the Council's Communication officers will be engaged. f. HE must set out how communications on the traffic management proposals and timing will feed into that process e.g. will there be a regular Project Communications Management Forum with all directly impacted local authorities invited? How will the Traffic Management Forum deal with communications issues and requirements? 	<p>New</p> <p>New</p> <p>New</p>
3.3	Community Liaison Groups	<p>Further information should be provided in relation to these proposed groups:</p> <ul style="list-style-type: none"> a. How many are proposed? What area would they cover? What will be the proposed membership? b. Who will be responsible for the management of these groups? c. How do the CLGs align with or relate to the proposed Traffic Management Forum and how would these be co-ordinated and constituted? 	New
3.3.8	Distribute information sheets	To whom will these be distributed: the CLGs, residents, stakeholders?	New
3.3.9	"customer contact centre"	<ul style="list-style-type: none"> a. What will be the channel for feedback from the Local Highway Authority and the Local Planning Authority? Will this be via the Traffic Management Forum? b. The Council will receive many community complaints and the mechanism for reporting and resolving those should be set out in the oTMPfc. 	Updated
3.3.10	Traffic Manager	<ul style="list-style-type: none"> a. The oTMPfc now includes a commitment to the appointment of a Traffic Manager by HE which is welcomed. 	All New

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
		<ul style="list-style-type: none"> b. Given the scale of the works proposed under the main works contracts and their associated traffic management activities, it should be clearly indicated that each main works contractor should also appoint a traffic or logistics manager with responsibility for their traffic management c. A key responsibility of HE's Traffic Manager should be to ensure the production of the TMP/s by all contractors and that local authorities are engaged in and consulted on all TMPs d. It should be clear that the Traffic Manager will have a critical function of ensuring co-ordination of the various TMPs that will be produced by contractors e. Point (f) "receive data...". HE's Traffic Manager should also be responsible for collating or preparing and submit a monthly monitoring report to the Traffic Management Forum f. The scope of the monthly Traffic Management Monitoring Report (including the nature and coverage of impact monitoring proposed and the key performance indicators to be reported on) should be provided within the oTMPfc. This needs to be agreed with the Council as part of the oTMPfc. g. It should be clear when the Traffic Manager will be appointed. This should be ahead of all associated enabling and site establishment work. That role must then be maintained throughout the life of the construction period for the Project. The Traffic Manager must be a suitably senior role with the person appointed able to co-ordinate and lead the contractors and inform the development and management of the TMPs. That role must be mandated to drive improvements in the construction traffic management associated with the Project. 	
3.3.14 and 3.3.15 Plate 3.2	Traffic Management Forum	<ul style="list-style-type: none"> a. It should be made clearer in this section that a key role of the TMF will be to initially review and approve the TMPs and their constituent schemes proposed by each of the contractors. The TMF will also govern, monitor, review and if necessary, require updates to the TMPs / scheme proposals b. A mechanism needs to be set out in this section as to how it is proposed that contractor TMPs are kept current and relevant. The construction programme and processes will change during the life of the project and the initial TMPs will need to be refreshed to reflect those changes. Contractors will not propose updates to documents unless there is a contractual requirement to provide them. HE should propose a mechanism for reporting adjustments and updates to the Council at the TMF. That could include a commitment to a quarterly TMP reviews and update if required. 	All New

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
		<ul style="list-style-type: none"> c. Where large changes in impact are expected, an update to the TMPs, CLPs and / or SSTPs should be triggered. The oTMPfc framework should set those trigger criteria and provide an approach where the Council can approve changes. d. It needs to be clear that any "updated" TMPs or measures will be presented back at the TMF. e. Plate 3.2 suggest that the Community Liaison Group will be represented on the TMF – or would they rather receive communications coming out of the TMF? HE must clarify this position. 	
3.3.16 Plate 3.3	Possible traffic management planning/escalation process	<ul style="list-style-type: none"> a. If this is the escalation process proposed, then it should not say "possible". b. The diagram does not indicate the path if the Local Highway Authorities does not agree the TMP. There is no circulation to achieve Local Highway Authority approval, the route always proceeds to the SoS, which also has no route for rejection. The diagram therefore assumes that the TMPs will automatically be approved. c. In the Post DCO row it should be clearer that TMPs will be presented at the TMF. The council will review and comment on the TMP once it has been produced rather than just input to it production 	All New
Chapter 4: Proposed Traffic Management measures			
4	Proposed Measures	This section needs to start by providing a clearly defined list of the traffic management plan measures proposed within this plan and then describe them in more detail. e.g. Safety Measures x, y and z, a set of agreed and defined construction site access routes, a range of highway traffic management schemes across the network as set out in Table x (for schemes > 3 months) and Appendices A and B	New
4.1	"Safety measures"	<ul style="list-style-type: none"> a. The council believes the promoter should be championing and demonstrating best practice in safety, efficiency and environmental protection in relation to construction logistics management and fleet operation. b. There should be specific commitments (or appropriate references given if the commitments are made in other supporting documents) by the HE to require the contractors (and their sub-contractors and suppliers) to comply with the Construction Logistics and Community Safety Standard (CLOCS) and Fleet Operator Recognition System (FORS) Silver Standard. which include driver training programmes such as VanSmart. c. A commitment must also be included for the contractors traffic management work force to meet high levels of competence e.g. appropriate CSCS accreditations. These commitments cannot 	Updated

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
		<p>be left to the contractors to agree post consent as there will be no imperative for them to achieve high standards. HE should be championing and driving standards up within the construction industry, as has been demonstrated by other Major Infrastructure promoters. There should be a clear commitment to these within the oTMPfc and CoCP. There have been commitments to these by other scheme promoters e.g. Thames Tideway Tunnel and the council believes this commitment is vital to ensuring construction traffic activity is as safety as possible for all road users.</p> <p>d. Wheel cleansing and street sweeping regimes should also be set out to for access corridors to ensure debris is not deposited on the Highway. These needs further discussion because current wheel washing requirements definitions are not suitable. The Council is aware of the poor street cleansing on the A13 widening and on Buckingham Hill Road. This increases collision risk.</p> <p>e. Prior to the start of the use of any diversion routes the route will be checked and all conflicting/misleading signs are covered /removed or co-ordinated with other existing diversions.</p>	<p>No change</p> <p>No change</p>
4.1.3	"Consider alternative options, minimal TM measures, safety and space assessment"	<p>This paragraph is vague and unclear. What are minimal traffic management measures? It should be made clearer e.g. that in developing their traffic management plans and schemes contractors will:</p> <ol style="list-style-type: none"> Consider and assess a range of alternative TM options Undertake a safety assessment / audit Consider impacts on all road users especially vulnerable road users and report how those impacts have been addressed 	New
4.1.4	In the event a road has to be closed	There should be commitment that any road closures required will be identified in TMPs along with proposed diversion routes, an impact assessment on all road users and proposed mitigation measures including diversion routes	New
4.1.4	LRN	What provision will be made to repair damage to the LRN where that route is used as a diversion route as a result of the works.	No change
4.3	Access routes	a. The entire access corridors on the LRN within Thurrock, from the SRN, must be defined in the oTMPfc and not just the final approaches to the compounds and worksites. The mechanisms for enforcing the use of those routes must be set out.	No change

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
		b. The gate line management processes could impact on the operation of the adjoining LRN. The methods of safe and efficient management of these impacts must be set out in the oTMPfc.	
4.2.7 (e)	"Emergency access"	It should be stated that the term " <i>emergency</i> " does not include the use of those access points as an alternative construction access for construction traffic during network incidents. The oTMPfc should stipulate that emergency accesses would be used for emergency response vehicles only.	No change
4.3.5(g)	Compound areas	a. Whilst the updated document notes that 'most' compounds would make provision for 'holding' construction traffic off the highway it is still somewhat unclear as to whether any off-site holding facilities will be required? If holding areas are required then these should be indicated, or the prospect identified, with suitable control mechanisms as necessary. Where these are not identified the Local Highway Authority must have the right to veto proposals subsequent put forward by the contractors but are found not to be suitable.	Updated
		b. In addition to off-site Vehicle Holding Areas, if materials storage areas are proposed that are outside of the identified site compounds, these must be identified within the oTMPfc and indicated within the DCO and managed through the commitments within the CoCP and other Certified/Control Documents. Thurrock Council must have sufficient sight of these proposed compounds; information on their proposed use and will comment on their suitability prior to concluding its position on the DCO.	No change
All Plates	Emergency Turning Point	It is not possible to identify these / impossible to distinguish between red and orange lines	
Plates 4.2 and 4.3	Fort Road access corridor	a. The access corridor to the main compound is shown along the old alignment of Fort Road and using the tight alignment of the route around the sub-station. The Development Boundary should be adjusted to show the correct route alignment. The impact of construction traffic on the use of the Fort Road corridor for workforce access (project workers and non-project related workforce) must be considered and mitigated. The Flexible Generation DCO representations from NR have highlighted concern with safety on the approach to the Low Street level crossing. This may be another issue with the Fort Road route for LTC.	No change
		b. HE is acknowledging the development of the Tilbury Link Road (TLR), through the RIS process, and so the haul routes within the CA5/5a compounds should align where possible to the future TLR where that will assist with future delivery of the TLR.	No change

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
Plates 4.2 and 4.3	West Tilbury access corridor	It is noted that Gun Hill and Rectory Road through West Tilbury is no longer recognised as an access corridor to CA5A. The withdrawal of this corridor is favourable to the Council, however, the withdrawal must be reflected through other DCO documents, including the Works Plans.	No change
Plate 4.	A1013 Stanford Road to Buckingham Hill Road	What measures will be in place to ensure construction traffic does not use Stanford Road from the Orsett Cock interchange to access Buckingham Hill Road?	No change
Plate 4.1-4.10	Local roads	The Council has concerns that sections of the LRN identified in the Plates in the oTMPfc are not suitable for construction traffic or large numbers of workforce traffic – including Station Road travelling from East Tilbury. The Council is providing comments on the initial draft of the Materials Handling Plan which may impact on the opinion of the suitability of local roads to handle the intended quantum of traffic on those routes or the effects of possible diversions during incidents.	No change
4.3 Plates 4.6, 4.7 & 4.8	Proposed Utility Access Routes	The indicated Utility corridors can have significant impacts on the operation of those routes for current communities, including Dock Road, Chadwell Hill/Brentwood Road, West Tilbury and Muckingford Road. HE and subsequently its contractors must provide details and assurances that the works will be managed to minimise effects on the communities that use those corridors.	
Tables 4.2 and 4.3	Table Headings	The document now contains multiple lists of TM measures. Table 4.2 and 4.3 Table headings should make clear that these tables only cover measures to be in place longer than 3 months	New
Table 4.2	“A2, A1089, A1013...” Multiple Night closures	<ul style="list-style-type: none"> a. Night closures that affect the A1089 must be programmed, communicated and co-ordinated long in advance to allow the commercial operators, including the Port of Tilbury and Amazon, to manage their operations. This commitment must be set out in the oTMPfc. b. We don't allow closures of the A1089 as no alternative route. We are pressuring for contraflows to be installed for planned works. 	No change
Table 4.2	Orsett Cock Roundabout	These works were previously identified within the works tables. Road works associated with the creation of the interchange between the LTC and A13 and Orsett Cock junction will create significant challenges to the management of the network. Their planning should be identified for significant advance co-ordination.	

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
Table 4.4	LRN HGV restrictions	<p>a. It is noted that HE proposes a system of construction traffic management to defined access routes using ANPR, however, it remains to be seen how that system will be implemented and managed, bearing in mind the many routes that would need to be monitored and the challenges over GDPR compliance around data management. A different basis may need to be used such as a GPS based approach with reporting of non-compliance.</p> <p>b. Reflecting this point, HE must demonstrate how it and its contractors will enforce the defined HGV restrictions set out in Table 4.4 and that those restrictions will apply equally to vans and other construction traffic associated with the Project. The definition of HGV and LGV should set out the Gross Vehicle Weight (GVW) limits for each classification e.g. HGV is >7.5 tonnes GVW, LGV is < 7.49 tonnes GVW.</p> <p>c. The council is concerned that there will be a large number of LGVs/vans associated with the delivery of the Project and these must be the subject of the same level of scrutiny and restriction as HGVs associated with the works.</p> <p>d. The Table does not reflect other routes such as routes through Chadwell St Mary, East Tilbury and Linford, Grays and South Ockenden.</p>	
4.5.3	Construction Transport Planning modelling	<p>The Council will respond on the construction phase models when they are provided by HE. That analysis must reflect the effect of LGVs/vans as well as the movement of HGVs associated with the construction period. Further to the pre-consent strategic modelling, using the LTAM Saturn model, the oTMPfc must set out that post-consent CTMPs, to be prepared by the contractors, will include detailed phase plans which review the effects of the incremental delivery of the scheme, not least any consented interchange with Orsett Cock and A1089. The detailed models must use appropriate Transport Planning modelling software and reflect the stages of the construction. They must demonstrate how they affect the operations on the local roads and how those effects are mitigated. The strategic level analysis of the construction impacts using the LTAM Saturn model will give an indication of the strategic effects but will not inform the detailed management and mitigation of effects during the delivery of the scheme. HE and its contractors must engage with the Council when preparing and analysing the effects of the work stages. This is essential to allow the Council to carry out its Network Management duties. This commitment must be covered by a Requirement within the DCO, including defined engagement periods and communication strategies.</p>	New
4.6	Diversions Routes	<p>a. There is no indication of whether any of these diversions will impact on local bus services. Bus operators should be engaged in discussion regarding diversion routes and their impacts.</p>	All New

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
		<p>b. It is unclear if these will be complete road closures for all road users (including pedestrians and cyclists). Whist closures to vehicles may be required opportunities to maintain safe through access for pedestrians and cyclists must be considered.</p>	
4.8	Public Rights of Way / Vulnerable Road Users	<p>a. There must be a commitment to fully sign all PROW diversion routes and that appropriate public communication regarding planned closures and diversions takes place, including via the Community Liaison Groups.</p> <p>b. More broadly the document is silent on the methods of management of interfaces between construction traffic corridors and vulnerable users along access corridors. Also interfaces with vulnerable road users at traffic management worksites and site compound accesses. The interface with vulnerable users is much broader than at PROWs.</p> <p>c. The importance of safely managing interfaces with vulnerable road users needs to be identified as a critical priority and emphasised when setting the general traffic management principles for contractors and where appropriate re-emphasised throughout the document.</p> <p>d. Contractors should be sign posted to guidance / best practice on planning, designing and operating temporary traffic management associated with construction activities on the highway that will help contractors ensure the convenience and safety of cyclists and pedestrians are fully considered alongside the needs of all other road users, as well as those undertaking the works</p> <p>e. The document needs to clearly define what methods of safety management and initiatives would be expected of contractors within their TMPs in relation to managing all interfaces with vulnerable road users. This is required to demonstrate how the risk of collisions with vulnerable road user will be minimised, fear and intimidation will be reduced and severance impacts mitigated.</p>	All updated
4.11	Incident Management	<p>This section must reflect the requirement for response to incidents both for the Project to notify the Local Highway Authority but also for the Local Highway Authority to notify the Project of incidents that could affect construction operations – this should include the ability to cease access to the works or to manage access during sensitive periods such as during major concrete pours which could require the protection of access to the works.</p>	No change
4.13	Implications of traffic management measures - maintenance	<p>a. This section has been removed from the latest version of the document and should be re-instated. It is critical that the maintenance roles and responsibilities are defined.</p> <p>b. This section must be clearly set out the different jurisdictions between the contractors e.g. those undertaking the tunnelling contracts and those involved in the roads' contracts. Each contractor</p>	<p>New</p> <p>No change</p>

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
		<p>will have different and co-ordinated roles and responsibilities. This governance of those Contractors by the Promoter; the division of roles and responsibilities; the shared responsibilities and the system of co-ordination must be set out in the oTMPfc.</p> <p>c. The systems must include a mechanism to apportion responsibility for the management of traffic management measure and damage to the LRN and how that damage will be resolved.</p> <p>d. The monitoring and review procedures associated with these measures must be greater than quarterly to allow appropriate and timely reaction to any issues raised. The process must also set out the asset inspections before, during and after the construction of the Project. This Operating Agreement process may require a Third-Party Agreement or a Bond, which will be determined as part of the agreement to this mechanism for protecting the structure and soundness of the LRN.</p> <p>e. The systems must also allow for unforeseen traffic management measure to be agreed between the Project and the Local Highway Authority where the need arises but was not predicted during the determination of the DCO.</p>	<p>No change</p> <p>No change</p> <p>No change</p>
Appendix A All Plates	Key	<p>a. It should be clear what "long term" is. HE should add duration e.g. > 3months</p> <p>b. Do the long term schemes correspond with those listed in the main body of the report in Table 4.2 (main works) and Table 4.3 (utilities specific)?</p> <p>c. What does other mean? Its unclear.</p>	New
Appendix A – Roads North TM Measures Table A4	Access to A1089	HE should set out how access to and from A1089 in all directions will be maintained during the works, including whilst the new connections from A13 are being configured. Will access to the Port of Tilbury and the commercial premises around that area be retained. When closures are required for final connections, how will this be communicated, especially to the Port of Tilbury and other commercial operators in that area?	No change
Appendices A and B Table B2	Fort Road	This route is not suitable for workforce access, especially for access on foot or by cycle or motorcycle due to the potential conflict with large vehicles	No change
Tables A3 and B2	Station Road	This corridor is not suitable for large vehicles, especially in volume. Using station road for the site establishment of the compound CA5 is not appropriate. As well as significant materials movement, site establishment would include AILs delivering, swapping out and removing large plant involved in the creation of the compound and associated welfare. The Flexible Generation	No change

Relevant Section in the oTMPfc		The Council's Comments	Comment Status
		DCO representations from NR have highlighted concern with safety on the approach to the Low Street level crossing. This may be another issue with the Fort Road route for LTC.	
Table B2	Princess Margaret Road	It is stated that a workforce shuttle bus may be established from East Tilbury Station. Why is this station the target for workforce travel, rather than Tilbury Town? Establishment of robust pick up and drop off facilities would be required for either East Tilbury or Tilbury Town	No change
Table B2	Muckingford Road	This route would be used by significant volumes of construction traffic to create the new overbridge unless that traffic is able to access the works via internal haul routes. That traffic would involve large plant and materials. What measures are to be put in place to protect vulnerable users, particularly those accessing the recreation and sports ground on this road? What measures are proposed during peak periods of activity at the sports pitches? This element of the works should be programmed after the trace is installed so that access along local roads is minimised.	No change
Table B2	A1013 / Stanford Road	The strategy for the works on this corridor will need a much wider focus where local strategic traffic would be displaced to other routes, such as the Stifford (A1012) Lodge Lane corridor, particularly during night-time closures. Will this element be programmed after the trace is installed so that access along local roads is minimised?	No change
Tables A3, A4 and B2	All routes	<ul style="list-style-type: none"> a. All these routes and proposed TM requirement need in-depth discussion and planning as proposal carry considerable challenges for managing traffic through alternate routes. Also, these routes are not equipped for the additional traffic and are already a maintenance challenge. b. Is there scope for the works to upgrade and strengthen in areas if new stats connections are laid through them? 	No change

2.2 Summary and Recommendations

Summary

- 2.2.1 The updated version of the oTMPfc has addressed some of the earlier comments made by the Council. Further information has been provided in relation to management and governance procedures and proposed traffic management scheme information. In particular this includes:
- i. Committing to the appointment of a Traffic Manager by the scheme promoter with further information on their roles and responsibilities
 - ii. Further details around governance arrangements including the proposed Traffic Management Forum and its membership, roles and responsibilities etc
 - iii. Some further information around proposed monitoring of traffic management and production of monitoring reports
 - iv. A full list of proposed traffic management schemes (short and long-term) associated with the main works, tunnelling and utilities work
- 2.2.2 These changes are welcomed, however, the oTMPfc still only provides a broad range of measures and processes and the Council still believes that it does not provide sufficient detail, certainty or commitment and a clear governance process to give comfort that the temporary traffic management measures will be acceptably controlled and managed or that impacts on the operation of the Local Road Network (LRN) and local communities within Thurrock will be suitably mitigated. The headline concerns are related to:
- i. The lack of a clear set of traffic management principles, objectives and commitments set by the scheme promoter to clearly direct the contractor in the production and implementation of TMPs and associated schemes across all phases of work. The suite of TMPs must be co-ordinated, current and relevant.
 - ii. The proposed disapplication of the council's network management powers, including the current street works permitting systems and the consenting on temporary Traffic Regulation Orders, to which Thurrock Council is not able to agree. The changes would impact on the Council's ability to manage effectively the LRN including works being carried out as part of the delivery of the Project and also works carried out by other major projects and day to day operations on the LRN.
 - iii. The need for a clear commitment in this document by the promoter and all contractors (and their sub-contractors and suppliers) to exemplary levels of best practice in safety, efficiency and environmental protection in relation to construction logistics management and fleet operation. There should be a requirement for contractors to operate to the Construction Logistics and Community Safety Standard (CLOCS) and Fleet Operator Recognition System (FORS) Silver Standard with progression to Gold.
 - iv. The lack of emphasise in the document on the importance of managing construction traffic and traffic management scheme interfaces with, and impacts on, pedestrians, cyclists and other vulnerable road users.
 - v. The need for further information on proposed monitoring, reporting and enforcement arrangements that will be put in place across all construction phases – particularly in relation the scope of monitoring proposed and KPIs that will be regularly reported. Effective enforcement mechanisms also need to be clearly set out in the document.
 - vi. The need for further definition of the management and governance procedures that will be required and put in place during the construction phases;

- vii. The management and reporting processes of incidents and emergencies which affect the operation of the travel networks – which should include contingency planning and defined contingency routes and the reporting processes of the incidents;
 - viii. The details on the commitments that will be required of the contractors prior to and during the construction works and in the decommissioning and hand-over phases;
 - ix. Recognition and inclusion within the strategic and local Transport Planning modelling of the significant movements of LGV construction related traffic as well as the HGVs;
 - x. A Promoter led Requirements on the co-ordination of the contractors to provide detailed appraisal of the effects on the road network of the delivery stages of the Project, in particular the delivery of the A13 interchange and the impacts on the operations of the network.
 - xi. Detail on the designated access routes that would be managed/ enforced and the consequences of non-compliance; and
 - xii. The management and co-ordination of protections to the affected local road network and how that would be set out within and operating agreement.
- 2.2.3 It is the Council's opinion, however, that it should be the approving body for construction period management plans including the contractors' CTMPs. If it is determined that this is not the case then the governance of those TMPs and the process for agreeing them, prior to approval by the SoS, needs to be set out in the oTMPfc. This would give direction and clarity to the appointed contractors and the Council. HE refers to reporting to the SoS that consultation with local authorities has been undertaken, however, the evidence to the SoS must include a report as to what feedback was received and how it has been addressed. This is fundamental if the local authority is not to be the approving body. The local authority must have the right to respond to the report and a system of conflict resolution identified.
- 2.2.4 The document does not provide currently a robust enough framework from which subsequent detailed TMPs would be developed by the appointed Contractors.

Recommendations

- 2.2.5 The oTMPfc must be a robust framework to provide a Certified/Control Document within the DCO and must be clear and explicit as to the commitment the Promoter requires its contractors to meet and observe. That level of clarity cannot be left to future developments of the resultant TMPs.
- 2.2.6 The table within this response document sets out points of observation and concern relating to the updated oTMPfc as submitted by the Promoter. These points and in particular the key concerns outlined above should be addressed by the Promoter.
- 2.2.7 The key points include that Thurrock Council does not agree with the current proposals to disapply powers related to the street works permitting systems or the 'Making' of temporary Traffic Regulation Orders by the Promoter on the LRN. Revisions to these proposals must be agreed prior to the certification of the oTMPfc.
- 2.2.8 The needs to be a clear set of traffic management principles and commitments set by the scheme promoter in the outline document to direct the contractor in the production and implementation of their TMPs.
- 2.2.9 Further detail should be provided (as set out in the comments table) in relation to mechanisms for governance, co-ordination, monitoring and enforcement of the TMPs and the enshrined processes must be set within the oTMPfc to give a structure to which Thurrock Council can agree and that the contractors can conform.



Lower Thames Crossing

Review of Framework Construction Travel Plan

On behalf of **Thurrock Council**



Document Control Sheet

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Contents

1 Introduction1
1.1 Overview1
1.2 Key Themes1
2 Review of Framework Construction Travel Plan.....3
2.1 Comments3
2.2 Summary and Recommendations17

Tables

Table 2.1: The Council’s Comments on the Framework Construction Travel Plan.....3

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1 Introduction

1.1 Overview

- 1.1.1 As part of its technical engagement relating to the proposed Lower Thames Crossing (LTC) Development Consent Order (DCO) application, Highways England (HE) has issued Thurrock Council (the Council) with the draft Framework Construction Travel Plan version 0.1 dated May 2021 and a revised version 0.2 dated June 2021.
- 1.1.2 This document sets out the Council's comments on the draft Framework Construction Travel Plan (FCTP) and the effects of the movements of the workforce on the local and strategic travel network. It identifies if there are any suitable opportunities to improve that plan to minimise the effects on the borough of Thurrock and its communities.
- 1.1.3 The document responds only to the sections of the FCTP relating to the north of the river.

1.2 Key Themes

- 1.2.1 The Council has several concerns and comments on the draft FCTP which are set out at Table 2.1 of this document. The key themes are summarised as follows:
 - i. The delivery of the LTC project must reflect the objectives set out in the NPS for National Networks (NPS NN). It is the Council's opinion that Project as a whole does not effectively meet the requirements of NPS NN, however, this is compounded by the FCTP which does not demonstrate sufficient drive towards supporting a switch to sustainable travel and assisting in meeting the Governments legally binding targets on carbon reduction.
 - ii. HE should reflect on the points raise by the Council's report prepared by Hatch (dated October 2020) which has raised the requirement to mitigate the transport and travel effects of the construction period, as contained within points M1 to M11 of that report and indirectly through CLS1 to CLS12. Furthermore, HE should reflect on the potential to leave a positive legacy following the construction period which is further reflected in the Hatch Report at points L3, L5, L7 and L8.
 - iii. The aspirations to reduce the need to travel and to encourage active travel and sustainable travel are admirable aspirations. The Council recognises that these can be challenging to achieve for construction projects where the destination compounds are often remote from appropriate active travel opportunities or where workers are not able to work remotely. For the Travel Plan to be effective there must be a robust and proactive commitment and governance from the client and contractor with leadership from motivated and motivational Travel Plan Co-ordinators and Managers. Paying lip service to the Travel Planning agenda will not derive results or benefits. HE should lead by example and set strong commitments to achieve stretching targets both for its own workforce travel patterns and those of its contractors. The FCTP as prepared does not provide this solid foundation.
 - iv. It is the Council's opinion that due to the relative remoteness of many of the compounds, HE cannot rely on significant numbers of workers commuting by walking and cycling and so there must be a substantial reliance on facilitating travel by public transport to effectively reduce the impacts of workforce travel within Thurrock. Reliance on car sharing as a major component of mitigation is likely to have limited impact, especially as car travel is not restrained due to substantive parking provision at compounds. This is further affected where HE states in the draft Code of Construction Practice at paragraph 6.3.5 (a) that it will not support walking or cycling to the compounds which use routes that

are not street lit. That requirement would rule out walking and cycling to any of the compounds.

- v. The Travel Planning messaging throughout the Project period needs to begin when the workforce is selected and should be consistently rehearsed as the project progresses. Travel Planning benefits are maximised if they are embedded when workers are taking their first decisions about joining the project and not when they have started to adopt their travel patterns. The FCTP therefore needs to recognise the need for early proactive engagement with workers at the time of appointment.
- vi. The travel impacts associated with the Project will start long before the construction period itself starts. The Travel Plan initiatives should include the pre-commencement and site establishment stages, to ensure that the early workforce is equally incentivised to walk, cycle and use environmentally sound travel means.
- vii. The FCTP must set robust rules of governance for the travel plan that will be adopted and implemented through the TPLG. This must include roles and responsibilities of the members of the TPLG, and arrangements for decision making and dispute resolution. This should ensure that the Local Planning Authority and Local Highway Authority have a key role in setting targets and holding the promoter and contractor to account for the performance of the travel plan. The governance process must have the ability to both incentivise target exceedance and impose sanctions and corrective actions as identified and required through the monitoring and review process.
- viii. Where HE and its contractors are not able to mitigate the effects of its workforce travel, they should look to complementary initiatives which help others, not directly related to the Project, transfer to active travel or other environmentally sound modes of travel. These could include improvements to local cycling and walking facilities or public transport focused measures. This would help to off-set the effects of the project and would leave a positive legacy in the area.

2 Review of Framework Construction Travel Plan

2.1 Comments

Table 2.1: The Council's Comments on the Framework Construction Travel Plan

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
General	A reference table is needed for Abbreviations/Acronyms/Terms.
Chapter 2: Introduction	
2.1	The purpose of the document should also capture worker movement on site to promote sustainable movement – e.g. electric or alternative fuel site vehicles or active travel around the worksites (within safe zones) and between compounds.
2.1.3	FCTP refers, here and at other points in the document, to reducing the need to travel. Initiatives aimed at this reduced need should be identified e.g. virtual briefings and meetings and home based / flexible working for design based staff.
2.2.9	The Council reserves its response on the effectiveness of the project “ <i>to avoid or minimise significant effects on the environment</i> ”.
2.3.1	The FCTP is not a “ <i>standalone</i> ” document as it has its roots and links to many other documents including the CoCP, the oTMPfC, REAC, etc.
2.3.9 c	The SSTP must also recognise the changing nature of the travel network during the project period. These will be because of the project itself and also as a consequence of third party initiatives.
2.4.1	It is positive that HE will own and be responsible for the execution and management of the FCTP and the resultant SSTPs. The initiatives contained within the FCTP and SSTPs must apply to its own workforce employed in relation to the Project as well as the contractors' and suppliers' workforce.
Chapter 3: Aims and Objectives	

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
3.1.3 (a)	<p>a. The Council is not of the opinion that “<i>the Project is committed to.... sustainable travel</i>”. It is the Council’s opinion that there is a long way to go before it is convinced that the design of the Project facilitates sustainable travel. These concerns are identified through other engagement with HE and are not covered in this response document.</p> <p>b. If point 3.1.3(a) is intended to express the commitment of HE to facilitate sustainable / environmentally sound travel through the execution of the FCTP and related SSTPs then this is admirable, however, how are the contractors, sub-contractors, and suppliers to be incentivised to minimise workforce travel impacts and maximise benefits? The FCTP indicates intentions but aspirations and objectives need to be binding and have incentives if they are to be of value. This applies equally to HE itself where employees and its sub-consultants are working from the compounds and Project worksites. Will the Travel Planning initiatives for those workers be enshrined in the respective SSTP or will a bespoke Travel Plan be prepared for “Client” staff?</p> <p>c. Further to the paucity of commitment to sustainable travel, the FCTP does not recognise at all the need for travel by those with mobility impairments. In the interests of equality, the contractors should be incentivised to provide facilities to help those with mobility impairments travel to and from the Project and to move around the project as needed.</p>
3.1.4 (a)	<p>It is the Council’s opinion that the remote locations of most compounds make walking and cycling unlikely to be primary and regular chosen methods of commuting for workers, especially reflecting the working hours and anticipated shift patterns. This is echoed by HE themselves where it states in the Code of Construction Practice that “<i>Walking and sustainable forms of transport at sites shall be supported where travel can be completed in a lit highway environment, with footways for pedestrians</i>” i.e. walking and cycling will not be supported where access is along routes without street lighting. The main compounds around the north portal are many kilometres from the closest residential areas around Grays, Linford, and Chadwell-St-Mary etc. with connections poor and uncondusive. How does HE realistically propose to encourage and facilitate active travel to compounds when it is also proposing that walking and cycling in remote areas is not to be supported? The document recognises that active travel is only realistic where people feel safe. With the rural nature of most access routes there will be many periods when people will not feel safe. Furthermore, statements in the FCTP about the existing network as far away as Aveley and Horndon-on-the-Hill etc. have no relevance to commuting by walking and cycling to the works compounds.</p>
3.1.4 (b)	<p>How will the supply/demand balance be managed within compounds? It is incorrect to set parking provision as a percentage of the number of workers (sections 5.5 refers) it should be a factor of the accessibility of a compound, however, poor accessibility</p>

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
	should not be a justification for high numbers of parking spaces but should lead to improvements in environmentally sustainable options for access. How will HE manage this dilemma? What mechanisms will be put in place to ensure parking does not cascade to other compounds and result in movement between compounds along the trace or disguised as essential inter-compound travel?
3.1.4 (c)	The wording " <i>likely</i> " in relation to shuttle bus provision doesn't provided confidence that this will be provided. Will HE commit to an effective shuttle bus system that is incentivised, perhaps through parking restraint at the compounds? What work has been done to ensure that the shuttle system would align with train timetables and shift patterns, especially for the compounds further from the Grays or Upminster hubs? Those shuttle buses should be electrically, or hydrogen powered or use other non-polluting fuel.
3.1.6	Reference is made to the Travel Plan Co-ordinator (TPC) and, latterly, Travel Plan Managers (TPMs). To be effective, these posts must be filled and maintained by empowered, motivated and motivational employees. The job spec for these roles must be set out and the contractors must maintain that level of commitment throughout the project, to maintain momentum. It will not be suitable for the role to be a bolt on to another role, where that person's functions would be divided and diluted. It will be essential that HE has a robust overseeing TPM to guide and govern the FCTP and SSTPs effectively. HE should commit to appoint and maintain this role throughout the project.
3.2.11 (d)	Shared worker transport should also recognise the use of crew buses. Those crew buses should be powered by non-fossil fuelled engines as should the shuttle buses and other site vehicles. HE has a duty to lead by example in the construction industry by pressing for non-polluting fuelled vehicles.
Chapter 4: Management and Organisation	
4.1.4	The FCTP should stipulate the threshold above which sub-contractors should provide a TPC or Travel Plan Representative (paragraphs 4.3.1 (f) and 4.4.2 refer) e.g. more than 20 workers employed on the project.
4.1.5	Why are the TPCs from the contractors not required to attend the TPLG? This is the forum where they will provide and receive feedback. Any messages would be watered down if they are conducted through the TPM.

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
4.2.1 (e) and (g) and Table 10.1 Item 29	To whom will the TPM report progress and how will that person " <i>determine amendments</i> " are appropriate to resolve short comings of the SSTPs? The Council should be engaged with proposed amendments, not least where they affect the operation of the local transport network. The FCTP should define what the "regular basis" is. The Project Action Plan (Table 10.1) item 29 stipulates " <i>Within the first six months of construction (repeat every three months)</i> ". It is fundamental that Thurrock Council is engaged in the monitoring and review of SSTPs (assuming that the FCTP is a consented and unamended document post consent). Whilst data should be collected continuously by the contractors for the Council to review on a monthly basis, it is the Council's opinion that it must be a primary partner in the quarterly reviews of the SSTPs. That review and management role resource commitment will require a dedicated representative to be funded through the project.
4.2.3 and 4.6	How will the JOF be co-ordinated with the TPLG and will these fora be able to impose sanctions for non- compliance with travel plan targets? The FCTP states that the JOF " <i>will meet regularly</i> " but the interval should be stated. Paragraph 4.6.1 stipulates that the TPLG will meet monthly. The Council questions whether this frequency is appropriate throughout the contract period when monitoring and surveys are less frequent? The meetings should be monthly to review progress against targets and analyse compliance with quarterly reviews of the SSTPs against compliance but also to review programme and initiatives. The lower frequency should be more effective and avoid review fatigue.
4.3.1	As previously expressed, HE must not only appoint but maintain a suitably qualified, motivated, and motivational TPC throughout the pre-commencement and construction period.
4.3.1 (a)	What are the " <i>contractual requirements</i> " that are referred to? As it is current written the FCTP has no requirements other than appointing TPCs and providing monitoring information. There are no binding incentives.
4.3.1(c) & 4.5.1	How will HE and the contractors ensure or enforce worker compliance with the responsibilities indicated in the FCTP? The responsibilities set out at Section 4.5 are not contractually binding and should perhaps not be so. It is the role of the employer to encourage workers to commute by environmentally sound means and to provide the facilities to allow that travel, such as convenient and attractive walking routes; high quality and plentiful cycle parking; robust shuttle bus services; and appropriately constrained vehicle parking provision.
4.6.1	The proposal for the Travel Plan Liaison Group is positive, but the FCTP must set out how the group will be constituted, lead, controlled and any voting rights. The group must have a mechanism to impose sanctions having reviewed compliance against

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
	binding targets. The constitution should include the mechanism for dispute resolution and be given the mandate to apply Project funds where needed to provide corrective action. The governance and management of this group has to be set within the FCTP and cannot be left to be determined post consent. The Council must be a prime member of the group and help with the day-to-day management of the Travel Planning initiatives. Dispute resolution should, perhaps be the jurisdiction of the Secretary of State as a last resort.
4.6.6	The Council is unclear as to how the FCTP can be an iterative document. The FCTP would be set through the DCO examination and should be a certified document which provides the framework for the SSTPs which would be developed after the DCO consent.
Plate 4.2	This diagram needs to show how TPC and JOF feed into the TPLG. As stated in relation to paragraph 4.6.6, the FCTP should be a fixed and certified document out from which there would be no monitoring and reporting. The monitoring and reporting strategy would come from the SSTPs.
Chapter 5: Project Construction Details and Program	
5.2.3	The FCTP and resultant SSTPs should encapsulate the pre-commencement and site-establishment stages of the project in advance of " <i>construction</i> ". These stages require workforce travel in connection with the Project and will start to set people's travel choices.
Plate 5.1 to Plate 5.4	These diagrams need to be clear and legible in the finalised document. Separate keys may be needed as they are too small to read and blurred. The access routes to compounds CA5 and CA5a need to reflect the new Tilbury 2 Infrastructure Corridor.
5.4.1 and 5.4.2	Will the haul and link roads to compounds be suitable for walking and cycling access? It is the Council's opinion that the compound locations are not conducive to walking and cycling access, however, these will be even less suitable if the routes within the compounds do not facilitate safe and convenient access on foot or by cycle.
5.5.1 to 5.5.3	a. The assumed travel distances for the workforce base for public transport access should assume the time taken to access the origin station or bus service and the period to travel from the destination hub or bus stop. This would significantly reduce the geographic coverage for a 60 minute journey.

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
	<p>b. The working periods should further reflect the availability and suitability of public transport services for worker commuting periods e.g. allowing workers to arrive at their briefing locations in sufficient time or to allow time to access the station or bus services after their working hours. In particular, early and late tunnelling shift are not suited to public transport due to the early start or late finishes. How will these challenges be resolved without encouraging travel by private cars?</p>
5.5.7	<p>The percentage mode share for access by private car should reflect the accessibility of a compound by other means and the provision of other initiatives to discourage car travel. It is defeatist to assume that smaller compounds will attract a higher proportion of car travel. There would be no incentive to the contractors to encourage sustainable travel to the compounds will fewer workers. Compounds CA6- CA13 should not be dismissed as in accessible by anything other than the private car. Initiatives such as car sharing, shuttle and crew buses should continue to be promoted. Longer distant cycling should also be encouraged.</p>
5.5.8	<p>If “<i>conservative assumptions</i>” are taken within the FCTP there is no incentive to the contractors to develop SSTPs that will maximise active and environmentally sound travel initiatives. The FCTP should set stretch targets.</p>
Table 5.2	<p>Table 5.2 postulates that at peak only 18% (311) of the northern workforce will live within a 60 minute journey of their base compound. Those workers are assumed to be resident within the wards identified in Plates 5.11 to 5.20. The table shows 932 workers requiring accommodation. Is there evidence that that number of workers can be accommodated within the 60 minute journey profiles – with an emphasis on active or environmentally sound travel? The workforce assessment within the FCTP must align with the Worker Accommodation Summary on which the Council has previously commented.</p>
Table 5.3	<p>The term “two-way hourly car trips” should be explained. A trip consists of two movements (in and out) and so the term used in the FCTP is unclear. The numbers within the righthand column do not appear to correlate with the numbers of workers. What controls are in place to restrict the number of workers assigned to each compound? There is no incentive to contractors to minimise workers located at compounds where a 100% car based travel is currently accepted by HE.</p>
5.5.11 and 5.5.16-5.5.20	<p>Specialist workers are generally going to migrate from the main contractors’ existing work sites, it is unlikely that a significant proportion of workers will live in the 20% + concentrated areas identified. It is further unlikely that workers will be attracted to work north of the river from the Isle of Grain and Medway Towns and Maidstone wards which is indicated by Plate 5.12. How</p>

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
	does correcting this assumption impact on the assumptions for travel to the compounds located north of the river? What measures will be put in place to ensure that workers from wards south of the river attracted to work at compounds north of the river do not travel by car?
Plates 5.11 to 5.20	How is the information provided within the plates used to influence the travel targets for the FCTP and the resultant SSTPs? What relevance is drawn from the data?
5.6.5	As with works compounds, what controls are there in the Utilities compounds to restrict the number of workers assigned to each location.
Chapter 6: Hub Accessibility	
6.5.2	The information on travel time is misleading, the aspiration in the document (5.5.1) is 60 minutes' travel time to site, the indication of an hour travel by train extends the travel time beyond the 60 minutes as time to access the station at commencement of journey and the time to travel from the hub to site will be significantly greater than the hour. A more realistic rail journey as part of a 60 minute journey would be approximately 30 minutes to allow for the further interchange between the hub at Grays or Upminster and the destination compound. This would dramatically reduce the rail catchment to the two hubs.
Section 6.2	This section completely ignores the local routes that will be used to access the compounds whether on foot, cycle, bus, or another vehicle. Of significant impact will be the roads within the Port of Tilbury, Fort Road, Coopers Shaw Road and Muckingford Road or Stifford Clays Road and Stanford Road. The paragraphs do not provide any context as to the description of the routes and what the consequences are of those routes being used for travel to the compounds. The section does not describe the barriers to movement that exist along those routes or what measures might be required to improve the environment or facilities to encourage active travel along those corridors.
Section 6.3	a. This section clearly identifies the challenges to accessing the works compounds by active travel and identifies several footways, footpaths, cycle routes and bridleways which would offer little benefit to workers accessing the compounds.

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
	<p>b. A diagram indicating the connections that are maintained to provide access would indicate the limited value to commuting workers, showing them as either remote from the compounds or in unsuitable rural locations and not offering highly attractive commuting routes. HE should substantiate how the purported network of roads would add value to the commuting network.</p>
6.4.1	<p>HE should set out in greater detail how it envisages to establish a shuttle service from the identified “transport hubs” to the works compounds. As these hubs would serve compounds across more than one contract the co-ordination would fall to HE and minimum services should be specified in the FCTP indicating which compounds would be served and how those shuttle services are co-ordinated with other bus and train services. This would give fuller certainty as to the positive contribution those shuttle services could provide in reducing car based travel.</p>
6.4.5	<p>HE indicates that there could be a draw from Kent wards to work north of the river and that those workers could use the ferry services between Gravesend and Tilbury. The ferry operates across a reasonable period each day but at a relatively low frequency and with the last service departing at 19:10hrs from Tilbury this could be challenging for workers ending their shift at 18:00. The document is also misleading in that the first service from Gravesend is currently 05:40hrs. The alternative public transport connection replacing the ferry at times of disruption involved three bus services and is, therefore, not a tenable alternative. HE commissioned a study by Atkins [Lower Thames Crossing - Sustainable Transport Complementary Measures 31.03.21 version 1] with a remit of considering complementary sustainable transport initiatives and measures which would supplement the operational LTC. Whilst the report capitulated and only recognised measures to enhance the cross river ferry service, that aspiration could help to provide additional options for workers to access compounds north of the river. Is HE proposing to enhance this connectivity as part of the construction programme for workforce travel? This enhancement would provide a legacy to the area and could help to reduce demand for car based trips not directly associated with the construction of LTC. Connectivity into London by fast ferry should also be further reviewed in partnership with the Thames Clipper operator.</p>
6.5.4	<p>The FCTP includes an estimation of the cycle to hub commuting catchment. Is it proposed that workers cycles are taken on the shuttle services to the destination compounds or are those cycles to be stored at the hub? In either circumstance the FCTP should set out how those cycles are catered for and whether infrastructure is required at the hub or on the shuttle buses. What detail has been developed of the circulation of the shuttle services, such that they will need facilities at the hub stations to collect and deposit passengers, and potentially their cycles? These facilities will need not to hinder the safe and efficient operation of the hub stations for existing passengers and services.</p>

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
6.5.7 and 6.5.8	These paragraphs appear to suggest that there will be opportunities for workers to drive to the hub stations and complete their journey to the compound from there. What facilities are proposed for workers to park their vehicles at the hub stations? How will this impact on existing communities and facilities?
Chapter 7: Policy and Guidance	
General	<p>a. This section of the FCTP does not reference the NPS NN. It is the Council's opinion that the construction period is considered to be part of the development of the NSIP and therefore the NPS NN is relevant to the FCTP. NPS NN has an objective "<i>to address the impacts of the national networks on quality of life and environmental factors</i>" (NPS NN paragraph 2.2) and "<i>to minimise social and environmental impacts and improve quality of life</i>", (NPS NN paragraph 3.2).</p> <p>b. Enshrined in the NPN NN is a drive to bring about a modal shift towards more sustainable travel not only on new parts of the network but on the existing SRN. It notes the need to meet "<i>the Government's legally binding carbon targets</i>" (NPS NN paragraph 3.6) which is expanded at NPS NN paragraphs 5.16 to 5.19. Even though this document relates to the temporary nature of the pre-commencement to demobilisation period of the Project, the core objectives of the NPS NN should be reflected within the aspirations, objectives and mitigation in the FCTP. This is supported throughout the NPS NN not least at paragraphs 5.201 to 5.205, 5.215 and 5.216.</p> <p>c. NPS NN supports the switch towards ultra-low emission vehicles and choices to use sustainable transport (NPS NN paragraphs 3.6 and 3.15, respectively) and to overcome barriers to movement which are created by the SRN (3.17) and to providing a more inclusive network to assist with access to jobs, including this Project.</p> <p>d. The national regional and local policy and guidance surrounding worker Travel Planning is focused on encouraging a greater proportion of commuting travel to be carried out using active travel means or environmentally sound public transport. It is the Council's opinion that HE is paying only lip service to this policy and guidance through the FCTP and will not be incentivising its contractors to adopt environmentally sound worker travel patterns. Paragraph 7.4.6 captures only the tip of the intentions of workforce Travel Planning and does not encapsulate how these documents should seek to inform travel choice and mitigate the impacts of worker travel on the transport network and on the environment. Recognising its "<i>corporate social</i></p>

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
	<p><i>responsibility</i>" (paragraph 7.3.16 refers), will HE revisit the FCTP and significantly strengthen the aspirations, requirements and commitments contained therein to minimise the effects on the local travel network of their workforce travel?</p>
Chapter 8: Targets	
Targets	<p>a. The Council acknowledges that HE does not know the origin of the workforce for the project and therefore the SSTPs generated by the contractors must be flexible and agile to respond to workforce changes and emerging travel patterns. The FCTP should, however, define headline targets to be adopted by the contractors to incentivise them to achieve minimal impacts on the travel network. The FCTP should set out what action or consequence will apply if targets are not met, refer to comment 11.4 below.</p> <p>Potential targets could include:</p> <ul style="list-style-type: none"> i. 50% of car trips to site made by EV (supports EV charging in Tier1) ii. 2% trips by cycle iii. 2% trips by foot iv. 50% trips to site via PT v. 25% of workers employed at compounds north of the river living within Thurrock Borough <p>b. It is essential that HE seeks to maximise the local focus for employment and that must be reflected within the FCTP indicative targets and taken through to the SSTPs.</p>
8.1.6	<p>Defining targets based around preliminary surveys will only generate soft targets informed by established travel patterns. Stretch targets should drive minimal impacts and encourage environmentally sound travel choices. The method of establishing the targets within the SSTP should be revised.</p>

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
8.1.7	The initial surveys should be carried out during the pre-commencement phase of the project and not once construction has started.
8.2.6	Where does HE conclude that walking and cycling to the works compounds is not safe? It is noted that HE does not support walking and cycling in unlit areas, as per its Code of Construction Practice, which severely limits options for encouraging active travel by its workforce or that of its contractors. In those locations if there is, or should be, demand to walk and cycle then remedial measures should be provided, or alternative non-polluting provision made for other means of travel.
8.3.6	Reductions in the need to travel should not be limited to the “ <i>enterprise office</i> ” which is to be located south of the river. Virtual briefings and meetings must be promoted and workforce movements between compound minimised or co-ordinated using multi-occupant non-fossil fuelled vehicles. Design focused workers should be empowered to work remotely where appropriate.
Chapter 9: Measures	
9.1.3	HE should commit that the TPM will audit the measures and initiatives to be implemented by the contractors as some of these may not be implemented by the contractors unless evidence is provided.
9.2.5 (e)	<ul style="list-style-type: none"> a. The contractors should offer cycle training and maintenance to encourage new cyclists into the system and to make sure that all systems are suitable for all levels of cyclist. b. To facilitate cycling between stations and compounds HE and the contractors should consider providing cycle storage at the stations to allow workers to commute by train and travel the final section by cycle. c. The FCTP is silent on the use of powered two wheelers and other motorcycles. Will these vehicles be provided for and if so, will advanced training be provided to ensure riders are safe for themselves and other road users?
9.2.7	The provision of electric vehicle charging must be provided in all tiers so as not to stifle the use of electric vehicles. This will also support the use of electric site vehicles and electric shuttle buses.

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
Chapter 10: Implementation Strategy and Action Plan	
Table 10.1	<ul style="list-style-type: none"> a. The timeframes for actions should be revisited. The table should recognise the pre-commencement and site establishment stages and consider the appropriateness of review periods. Reviews carried out too frequently will be abused and create process fatigue. Review periods should be not greater than quarterly and potentially reduced to 6 monthly once the compounds are established. b. The heading of the righthand column is slightly misleading in that several actions will be on-going throughout the Project period and therefore not competed after the first iteration. c. Action 12 indicates a review of active travel but does not express that there is a consequential action to respond to that review. The same is true of other 'review' actions. Only Action 20 notes the need for subsequent remedial action.
10.3 and 11.5.2	Will HE set a financial cap on the funding for Travel Plan measures and initiatives? If so, what will that cap be? Are the contractors expected to contribute to the fund? This is not clear in this section.
Chapter 11: Monitoring and Review	
11.1.2	What does the term "obliged to commit" require the contractor to do? Is there to be a legally binding agreement that has financial incentives where compliance and meeting targets are rewarded or penalised? These obligations need to be set within the FCTP for the contractors to adopt and will be enforced through the TPLG and could include incentives for the contractors where targets are exceeded. There must also be sanctions where the contractors do not meet targets with corrective action required and monitored through the TPLG.
11.2.1	<ul style="list-style-type: none"> a. The review periods stated at this section should be aligned with the action plan at Table 10.1 and should include pre-commencement and site establishment periods. Travel survey should capture travel data on all new workers. b. The data on workers needs to pick up the length of time they are expecting to be working on site e.g. 1 week, 1 month, 6 months, 1 year plus. This will give an indication as to which groups are likely to be influenced to long term sustainable travel.

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
	<p>c. Data will be collected at the compound gate lines when workers arrive and depart which will provide information on travel patterns and means of access. That data can be reported regularly to the Council and the Client team. This will reduce the need for repeated worker surveys and will provide robust data for analysis and assessment. It will inform remedial actions.</p>
11.4	<p>There needs to be a financial incentive placed on the contractors to meet targets. As a last resort consideration should be given to a carbon offset scheme with additional tree planting specific to target failure. (e.g. 200 trees per month for each 5%over target, trees maintained for 5 years post scheme completion, provided locally). Not meeting targets will impact local quality of life and access to local businesses, delays and congestion on local routes and suppressed business development. Carbon off-setting would be a weak resolution.</p>
11.4.1 and 11.4.2	<p>a. HE should explain what is judged to be “significant” by way of a shortfall.</p> <p>b. Shortfall of modal targets if they are set as percentage targets will not be an issue if there is a reduction in the number of movements to that compound. The level of workforce at all compounds will fluctuate and so the targets should be expressed as percentages and not absolutes.</p> <p>c. The TPLG are stated as being presented with proposed remedial measures and changes. What powers of decision is the TPLG to be given to allow effective agreement to the remediation and changes? The FCTP must set out the constitution, governance, and powers of the TPLG and how disputes will be resolved. The TPLG has a substantial role during the lives of the SSTPs and so it is important to clarify its role and powers.</p>
Appendix A	
A7	<p>The London Mayoral policy is of subsidiary relevance in Thurrock Borough, albeit relevant to the London Borough of Havering at the Upmminster hub, but the principles behind that policy are valid. The objectives of the SSTP must reflect the finally agreed FCTP.</p>

Relevant Section in the Framework Construction Travel Plan	The Council's Comments
A8	Will each compound have a bespoke SSTOP and site specific targets? Will those individual plans impact on overall targets i.e. will under-utilised compounds be used to offset overall commitments?

2.2 Summary and Recommendations

Summary

- 2.2.1 The Council acknowledges the principal objectives set out within the FCTP document but remains unconvinced that HE is suitably committed to mitigating the travel effects of the workforce employed to deliver the LTC project.
- 2.2.2 The FCTP document would be used to inform the development of contractor led SSTPs, however the FCTP must set the bar much higher to incentivise the contractors to facilitate and encourage active travel and environmentally sound means of travel.
- 2.2.3 We have indicated that the FCTP does not recognise the full policy and guidance base for the Governments drive to switch to sustainable travel and that the FCTP does not capture or encourage sustainable travel and does not reflect the substantial feedback that the Council, has already provided, much of which is captured within the Hatch Report of October 2020.
- 2.2.4 The FCTP must set robust rules of governance for the travel plan that will be adopted and implemented through the TPLG. This must include roles and responsibilities of the members of the TPLG, arrangements for decision making and dispute resolution, clear targets for the travel plan, and robust mechanisms for attainment of the targets through the DCO.
- 2.2.5 We have set out key themes and detailed observations on which HE must reflect and respond before the FCTP is deemed appropriate for this Project.

Recommendations

- 2.2.6 A range of comments and feedback are given within this response document and HE is encouraged to reflect on those and review the FCTP to develop a more robust and effective document which will derive equivalent robust and effective SSTPs following consent of the DCO.



Lower Thames Crossing

Review of Wider Network Impacts Management and Monitoring Plan

On behalf of **Thurrock Council**



Document Control Sheet

Project Name: Lower Thames Crossing

Project Ref: 43879

Report Title: Review of Wider Network Impacts Management and Monitoring Plan

Doc Ref: Revision A

Date: September 2021

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For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved
A	08/09/2021	Issued to Thurrock Council	<i>NWB</i>	<i>SM</i>	<i>SM</i>

This report has been prepared by Stantec UK Limited ('Stantec') on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which Stantec was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). Stantec accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.

Contents

- 1 Introduction1**
 - 1.1 Overview1
- 2 Review of Wider Network Impacts Management and Monitoring Plan2**
 - 2.1 Comments2
 - 2.2 Summary and Recommendations9

Tables

Table 2.1: The Council’s Comments on the Wider Network Impacts Management and Monitoring Plan
2

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1 Introduction

1.1 Overview

- 1.1.1 As part of its technical engagement relating to the proposed Lower Thames Crossing (LTC) Development Consent Order (DCO) application, Highways England (HE) has issued Thurrock Council (the Council) with the assessment details for the Wider Network Impacts Management and Monitoring Plan.
- 1.1.2 This document sets out the Council's comments on the proposed Wider Network Impacts Management and Monitoring Plan and if there are any suitable opportunities to improve this infrastructure.
- 1.1.3 The document follows the same structure as Wider Network Impacts Management and Monitoring Plan and responds only to the sections relating to the north of the river.

2 Review of Wider Network Impacts Management and Monitoring Plan

2.1 Comments

Table 2.1: The Council's Comments on the Wider Network Impacts Management and Monitoring Plan

Relevant Section in the Wider Network Impacts Management and Monitoring Plan		The Council's Comments
Chapter 1: Introduction		
1.1	Purpose of the document	<p>a. General Comment - It should be clear that the scope of the Wider Network Impacts Management and Monitoring Plan only relates to the monitoring of operational impacts on the wider network once the project has opened. It does not cover monitoring proposed during the construction period.</p> <p>b. General Comment - Monitoring of the construction impacts on the road network will be required to effectively manage and mitigate their impacts. The Outline Traffic Management Plan for Construction (oTMPfc v 0.2) proposes the preparation of monitoring reports during the construction period. However, little further detail is provided in the oTMPfc regarding the proposed survey locations, data type / KPIs, frequency and period etc. A more detailed monitoring plan for the construction period is required, especially given the scale of construction activity proposed and the long period over which construction will take place.</p> <p>c. There is no reference to wider DfT or Highway England guidance or best practice having been used in developing this monitoring plan or whether DfT's monitoring and evaluation team have or will be engaged in developing this plan.</p> <p>d. Local Authority major schemes funded by DfT require monitoring and evaluation plans to be developed in line with DfT Monitoring and Evaluation guidance. All projects costing over £50m require a 'fuller' evaluation as described in the DfT guidance. Given the scale, cost and nature of this project the council would expect that this plan should form part of a project benefits realisation strategy and a project monitoring and evaluation plan. Typically this includes assessing impacts on travel demand/behaviour, impacts on economy, air quality, noise, carbon. It should be made clear if and how this plan links to wider project monitoring and evaluation and the scope of that work.</p> <p>e. Para 1.1.6 - refers to interventions being identified through a 'standard appraisal approach'. Is this referring to DfT Transport Appraisal Guidance or to Highways England's own appraisal guidance/methodology? The document should be explicit about the approach to be followed.</p>

Relevant Section in the Wider Network Impacts Management and Monitoring Plan		The Council's Comments
		f. Para 1.1.6: notes that interventions will be subject to assessment of the business case and the required consenting process. It should be clearer what stage business case will be required.
1.2	Position within the wider DCO application	<p>a. Para 1.2.3 – ‘sufficient management’ of the impact is vague. The purpose / outcome of the plan and monitoring regime proposed should be more explicit e.g. to demonstrate that there will be sufficient monitoring information and evidence available to provide Highways England and project stakeholders with a full understanding and assessment of the projects impacts on traffic flow and network performance across the wider road network so as to be able to:</p> <ul style="list-style-type: none"> i. confirm the priority areas for intervention ii. inform the selection of preferred schemes and interventions in those priority areas iii. support the development of outline business cases for preferred scheme/s and interventions <p>b. The report would be clearer if it included a diagram/flow chart - to clearly summarise the proposed impact monitoring and management process proposed, to clearly demonstrate how it will be delivered alongside the project lifecycle/delivery timeline and show how it will contribute to securing funding for interventions that will mitigate post construction impacts:</p> <ul style="list-style-type: none"> i. when monitoring is proposed and monitoring reports will be produced ii. a breakdown of the further work that Highway England proposes using the monitoring information (that will enable the identification of priority areas and interventions and help secure funding) iii. roles and responsibilities iv. how it will assist in securing funding for interventions
Chapter 2: Wider network Improvements		
2.1	Background	Para 2.1.3 – ‘Continual assessment’ is vague – the monitoring and assessment/evaluation period needs to be defined.
2.2	Identifying potential improvement areas	<p>a. The Lower Thames Area Model (LTAM) forecasts have been used to assess the wider network impact of the project. The council has already responded to HE in October 2020 (<i>A review of the DCO Cordon Model</i>) regarding its concerns with the LTAM outputs, particularly that impacts of LTC on the local road network are underestimated.</p> <p>b. At the same time, in the absence of local road network impact assessments being undertaken by HE and prior to completing our review of the latest cordon models (issued by HE on 26.07.21), junction assessments were also</p>

Relevant Section in the Wider Network Impacts Management and Monitoring Plan	The Council's Comments
	<p>carried out by the Council at the following junctions to better understand the impact of LTC, with the base traffic flows adjusted to better reflect the observed traffic data:</p> <ul style="list-style-type: none"> i. A1089 ASDA roundabout, ii. A13/A128 Orsett Cock junction, iii. A13/A128 The Manorway junction, and iv. Daneholes roundabout and A1013. <p>The Council's junction assessments show that:</p> <ul style="list-style-type: none"> v. The performance of some approaches to The Manorway and Orsett Cock roundabouts will be impacted by the introduction of LTC. vi. The off slips from the A13 at both The Manorway and Orsett Cock roundabouts are likely to block back on to the mainline and/or impact on the slip roads from the LTC. vii. The LTC causes the performance of the ASDA roundabout to significantly deteriorate. viii. Daneholes roundabout is at risk of regularly being used as a rat-run from the LTC to the Port and Grays area. Any further use of the A1013, than modelled in LTAM, would impact upon not only traffic delays, but the bus services that operate through the junction. <p>c. To assist HE in its consideration of the impacts on these local roads, the Council outlined indicative mitigation which has been proposed at each junction and further detail is included in the '<i>Junction Assessment and Mitigation Analysis</i>' report prepared for the Council dated October 2020, which includes more details. The assessment work also showed a risk of greater use of the local road network, particularly the A1013 and via Chadwell St Mary and also at Rectory Road, Orsett and through Orsett village. As a result, the council identified that traffic management is required in these areas to mitigate impacts of LTC. The Marshfoot priority junction with the slip road to the A1089 is also a concern related to increased traffic and safety.</p>

Relevant Section in the Wider Network Impacts Management and Monitoring Plan		The Council's Comments
		<p>d. For Thurrock council locations and areas identified of concern and requiring mitigation can therefore be summarised as:</p> <ul style="list-style-type: none"> i. A13/A1014 The Manorway Roundabout, including slip roads ii. A13/A128 Orsett Cock Roundabout, including slip roads iii. A1089 Asda Roundabout and/or Tilbury Link Road iv. A1013, B149 and Daneholes Roundabout v. Marshfoot priority junction with the slip road to the A1089 vi. Orsett Village and Rectory Road area vii. Chadwell St Mary area <p>Note: our concerns may vary upon completion of our review of the latest cordon models.</p>
2.3	Initial investigations	<ul style="list-style-type: none"> a. Para 2.3.2 – notes that ‘some’ of the local authorities also undertook their own initial assessment. Add specific local authorities. b. Table 2.1 – clarify in table the highway authority responsible for each area / scheme. c. Table 2.1 – Thurrock Local Road Interventions – Thurrock has also identified the need for local road network interventions in the Orsett Village, Rectory Road and Baker Street area and Chadwell St Mary area. d. Table 2.1 – Thurrock Local Road Interventions update to “A13/A1014 The Manorway Roundabout”. e. Table 2.1 – Thurrock Local Road Interventions update to “A13/A128 Orsett Cock Roundabout”. f. Para 2.3.5 - The council disagrees with the statement that at this stage the need for change to the network is not yet determined. The council believes there is already evidence of the need for interventions including at a number of locations (see 2.2). g. Para 2.3.5 / 6 / 7 - The wording of these paragraphs describes a process that is vague, open ended and provides little funding security for measures required to manage the impacts of the project on the wider road network. h. Para 2.3.6 - ‘It is therefore considered that the need and the timelines for these interventions and possible schemes will be monitored and managed separately from the project’. If this is the case the project promoter needs to clearly identify who is responsible for this process and how it will be managed and governed. Also a clear timeline/programme is required. The council and local communities require assurance that the promoter is committed

Relevant Section in the Wider Network Impacts Management and Monitoring Plan		The Council's Comments
		to monitoring LTC impacts on the wider road network and delivering any interventions required to mitigate those impacts.
Chapter 3: Monitoring strategy		
3.1	Traffic impact monitoring scheme	<p>a. General Comment – see comments above – The council need to understand how this plan integrates with wider project monitoring and evaluation and how noise, air quality, carbon and economic impacts will be monitored and evaluated.</p> <p>b. General Comment - It is critical the scope of this plan also considers impacts on the local bus network (particularly impacts on journey times and journey time reliability) and non-motorised users e.g. pedestrians and cyclists. This is not apparent in the document at present and needs to included within its scope.</p> <p>c. Para 3.1.3 - Traffic flow / journey times – Indicate that analysis and reporting will be broken down by vehicle type.</p> <p>d. Para 3.1.2/3.1.3 – Traffic Routes – How will this be monitored? Through the use of ANPR?</p> <p>e. Para 3.1.3 Junction Performance – Greater definition should be given as to how this will be assessed e.g. capacity (RFC), driver delay</p> <p>f. Para 3.1.3 Road Safety – Any monitoring of collision data will need to be over a 5 year period to be of statistical significant. This should be acknowledged.</p> <p>g. Para 3.1.6 ‘at locations identified on the SRN’. These locations should specified or shown on a map.</p> <p>h. Para 3.1.8 – A plan should be added defining the proposed ‘study area’ and proposed monitoring locations. There should be more evidence provided as to how the wider network impacts study area / monitoring locations have been defined. Is it based on modelled forecasts of traffic flow impacts?</p> <p>i. Para 3.1.9 / 3.1.10 - A series of individual junction locations are proposed. The council would expect that the plan will be effective in monitoring both strategic and local road network impacts including any increases in rat running. The council believes further work is required by Highway England to define and agree all the monitoring locations and in particular on local roads that may be impacted by LTC. In Thurrock this includes along the A1013, B149, and at Daneholes Roundabout and on local roads through Chadwell St Mary and Orsett Village (which were identified by the council as areas of concern once LTC is operational and requiring mitigation - see para 2.2). Junctions such as The Manorway roundabout, Orsett Cock junction, ASDA roundabout and Marshfoot priority junction should also be monitored. The construction modelling provided by Highway England to date also raises concerns for the council</p>

Relevant Section in the Wider Network Impacts Management and Monitoring Plan		The Council's Comments
		<p>(Reference: Thurrock Cordon Model Construction Modelling Review, May 2021) regarding the high volumes of construction traffic (either construction vehicles or workforce vehicles) and its impacts at a number of local junctions and on local roads (see council's comments on construction update Chapter 2). Monitoring of the construction traffic impacts on the strategic and local road network will also be required to effectively manage and mitigate their impacts.</p> <p>j. Para 3.1.11 – Please indicate when this consultation is proposed.</p> <p>k. Para 3.1.12 - The criteria for identifying monitoring locations is currently narrowly focused on general traffic impacts e.g. changes to traffic flow, changes to junction V/C. Should also include criteria that recognise that monitoring will be required to address the council and local community concerns about impacts on the performance of the local bus network, NMU routes and potential local rat runs (particularly by HGVs).</p> <p>l. Para 3.1.15 - Post opening data collection is proposed at one year and five years. Over what period are the surveys proposed?</p> <p>m. Para 3.1.17 – An outline structure for the proposed monitoring reports should be provided. The reports should clearly identify/confirm intervention areas and provide evidence to support prioritisation.</p> <p>n. Para 3.1.17 – Suggests that the monitoring reports would also consider the suitability of and type of intervention that might be suitable. The council believes it is critical that monitoring work is accompanied by work to develop and assess interventions and secure funding. However, it is unclear who is responsible for this work, its scope, how it will be managed and governed and who will fund it. The council would expect to be fully engaged this work.</p> <p>o. Para 3.1.18 – Confirm that the council will be engaged on any monitoring scheme updates or reviews.</p>
3.2	Criteria for intervention	<p>a. General – This section needs to more clearly define the highway network performance criteria / indicators proposed and the level of change required that triggers the need for intervention. These need to be SMART (Specific, Measurable, Achievable, Realistic and Timely).</p> <p>b. General – As noted above its should also not just consider network performance criteria and impacts in relation to general traffic but also for local buses and non-motorised users to ensure mitigation measures also focus on sustainable development and travel as required in the National Policy Statement for National Networks (Department for Transport, 2014).</p> <p>c. Para 3.2.3/Plate 3.1 - Describes a process – it does not clearly define the criteria. See general comment above.</p>

Relevant Section in the Wider Network Impacts Management and Monitoring Plan		The Council's Comments
		<p>d. Para 3.2.4 states “Monitoring reports will be reviewed to identify whether there is a significant level of change in traffic conditions”. This is vague. See general comment above about need to define more specific criteria and the level of change required to trigger interventions.</p> <p>e. Para 3.2.5 - It is unclear how HE will consider and determine impact of other influencing factors identified – more detail required.</p> <p>f. Para 3.2.6 proportionate assessment and appraisal process – More definition is required as to what this means and presumably depend on the scale/cost of potential interventions being considered.</p> <p>g. Para 3.2.6 investigate suitability for intervention – It vague here and throughout this document how this process and work be managed, governed and funded. Further clarity is required.</p> <p>h. General – Also the document should recognise that a range of interventions to mitigate impacts may be required across a local area rather than just at specific junctions. Interventions a mixed package of major physical highway infrastructure, smaller scale traffic management measures, physical measures to mitigate impacts (and promote) on buses, walking and cycling and demand management and softer demand management / area wide travel planning</p> <p>i. Para 3.2.6 - Local Authorities will be critical stakeholders and may need to lead on work to identify, assess and deliver interventions. This should be recognised.</p> <p>j. General – the document suggests that timeline for the identification of any areas requiring intervention and work to select suitable interventions will only begin after all the periods of traffic monitoring have been completed (data collection commitment is to one year after opening and five years post-opening). Further work would then be needed to undertake scheme appraisal, develop business case. As a result the potential delivery timescale for mitigation measures would be at least 5 – 10 years following opening. There should be a recognition of the potential need to fast-track scheme development work and/or delivery of early interventions earlier in the monitoring period (after year one monitoring).</p>
3.3	Potential funding options	<p>a. General - This section makes it clear that there is no funding security to deliver interventions required to mitigate post construction impacts.</p> <p>b. General - There is also no commitment to funding the work that will be required to identify, assess and develop business cases etc for interventions.</p> <p>c. General - This provides no certainty or reassurance to LAs and the community that LTC's impacts on the wider network will be mitigated/addressed.</p>

2.2 Summary and Recommendations

Summary and Recommendations

- 2.2.1 A range of comments on the Wider Network Impacts Management and Monitoring Plan are provided above which should be responded to or address in an updated version of the document.
- 2.2.2 The key issues identified and recommendations are:
- i. This plan only relates to the monitoring of operational impacts on the wider network once the project has opened. A monitoring plan for the construction period is required and should be set out separately or as part of the oTMPfc.
 - ii. It is unclear clear if and how this plan links to wider project monitoring and evaluation and the scope of that work includes assessing impacts on travel demand/behaviour, impacts on economy, air quality, noise, carbon. Further clarity is required in the plan.
 - iii. The plan suggests that the need for interventions on the wider road network to mitigate LTC impacts is not yet determined. The council believes there is evidence of the need for interventions at a number of locations (including those at 2.2).
 - iv. It is critical the scope of this plan also considers impacts on the local bus network (particularly impacts on journey times and journey time reliability) and non-motorised users e.g. pedestrians and cyclists. This should be included in the plan.
 - v. The plan suggests that monitoring work will identify areas for intervention and describes in general terms work required to develop and assess interventions and secure funding. However, it portrays a vague and open-ended process with little funding security for interventions at the end of the process. It is unclear who is responsible for this work, its scope, how and who it will be managed and governed by and who will fund it. Further clarity and definition of this process is needed.
 - vi. The plan at present does not clearly define the highway network performance criteria / indicators proposed and the level of change required that triggers the need for intervention. Further work to define these is required.
 - vii. The plan provides no commitment to mitigate wider impacts on the road network post construction. Nor does it indicate there is secured mechanism in place to fund the delivery of required interventions. There is also no commitment to funding the work that will be required to identify, assess, and develop business cases etc for interventions.
 - viii. The document suggests that timeline for the identification of any areas requiring intervention and work to select suitable interventions will only begin after all the periods of traffic monitoring have been completed (data collection commitment is to one year after opening and five years post-opening). There should be a recognition of the potential need to fast-track scheme development work and/or delivery of early interventions earlier in the monitoring period (after year one monitoring).



Lower Thames Crossing

Traffic Modelling Issues

On behalf of **Thurrock Council**



Document Control Sheet

Project Name: Lower Thames Crossing

Project Ref: 43879

Report Title: Traffic Modelling Issues

Doc Ref: Revision A

Date: September 2021

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For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved
A	08/09/2021	Issued to Thurrock Council	DC	SM	SM

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Summary of Issues

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
<p>General Modelling</p> <p>The 'Operational Update' within the latest Non Statutory Consultation indicates some significant changes in Traffic flows in Thurrock (around Orsett Cock, A1013 and Chadwell St Mary). No explanation is provided.</p> <p>The recent consultation does not include an updated Model Forecasting Report.</p> <p>The cordon models relating to the 2029 opening year issued during the Non-statutory consultation period, therefore insufficient time to analyse and inform our response to the consultation documents.</p> <p>The base model is 2016.</p>	<p>Forecasting Model Report</p> <p>Additional time to review the modelling relating to a 2029 opening year and respond.</p>	<p>To check the evidence that HE is using in its consultation.</p> <p>It is not certain whether the consultation is based on the model runs with the two additional lanes at the A13 junction to Orsett Cock.</p>	<p>-</p>	<p>2029 cordon models of the DCO scheme received on 26th July 2021.</p> <p>Inadequate time has been given to analyse the models and include in our response to the Non-Statutory Consultation.</p>	<p>HE to provide Forecasting Model Report.</p> <p>HE to provide additional time to review the latest models.</p>

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
<p>Issue Ref 10.1 Local Road Validation within the Lower Thames Area Model (LTAM)</p> <p>Results from the LTAM is the only evidence used to test the scheme, with regards to both strategic and local road network.</p> <p>The LTAM has not been validated against observed traffic levels on the local roads, with the exception of the A13 and A126.</p>	<p>Awaiting HE's review and comment/justification.</p> <p>Meeting dates for the programme of works/meetings outlined in column 5.</p>	<p>Local road junctions and links might perform worse than modelled. Higher traffic flows could lead to adverse environmental impacts such as: severance, fear and intimidation, safety, noise and air quality.</p> <p>Junctions of concern include:</p> <ul style="list-style-type: none"> a. A13 interchange b. ASDA roundabout (or Tilbury Link Road) c. Orsett Cock d. The Manorway e. Daneholes Roundabout f. Marshfoot Junction priority junction 	<p>We have expressed our concerns related local road validation at Supplementary Consultation (April 2020), Design Refinement Consultation (July 2020), and raised again with analysis in October 2020 and a further submission in March 2021, but a response has yet to be provided by HE.</p> <p>See Report titled "Junction Assessment and Mitigation Analysis" October 2020 for detailed review.</p> <p>In the absence of local network validation by National Highways, the Council has carried out a review comparing observed traffic surveys against DCO modelled traffic flows. This shows that, in general, traffic</p>	<p>Not Willing</p> <p>HE confirmed that they will not be revalidating the model, but a methodology could be agreed to adjust the findings and use to test the key junctions of concern.</p> <p>Outstanding, but Confirmed Approach</p> <p>HE is proposing a programme of work covering: (1) 2016 baseline model, (2) identify areas of concern in forecasts, (3) mitigation/interventions, and (4) Local Plan Options.</p> <p>The Council has grave concerns that this engagement cannot be completed in advance of the DCO submission and would not provide HE the time to make any changes to the scheme.</p>	<p>Although revalidation of LTAM would have been a better basis for local network, it is accepted that, at this late stage, this is unlikely be carried out.</p> <p>Local validated models (e.g. micro-simulation models) should be created to test the local network at key locations.</p>

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
			<p>flows are low on local roads in the base year model and in particular, low on: the A1013; links near Orsett Cock; on A1014 The Manorway; and A1089 near ASDA.</p> <p>Traffic survey data was issued to HE on 25/01/21.</p> <p>Further clarification is provided in our response dated 7th July 2021 to HE's Technical Notes issued 18th June 2021.</p>		
<p>Issue Ref 10.16 Induced traffic</p> <p>The scheme appears to give rise to significant levels of induced traffic, based on the increase in traffic shown across the River. This could result severance, impact on pedestrian and cyclist delay and amenity, fear and intimidation, accidents and</p>	<p>HE to provide a technical note on the impacts of induced traffic.</p>	<p>Concerns relate to the lack of environmental mitigation related to this level of traffic increase in the borough.</p>	<p>Supplementary Consultation, 2020</p> <p>We have requested information on understand whether the changes in traffic in Thurrock is wider reassignment (which cannot be seen in the</p>	<p>Received</p> <p>A technical note was provided on the 19th August 2021 which outlined the overall statistics resulting from induced trips.</p> <p>Which shows that 758 trips in the AM and 924 trips, 0.13% of total trips in both</p>	<p>The effects of the induced traffic on the environment – vehicle emissions (tailpipe and particulates), severance, impact on pedestrian and cyclist</p>

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<p>safety, as well as pollution, dust and dirt.</p> <p>These aspects do not appear to have been fully assessed for both the construction and operational stages of the scheme</p> <p>The modelling shows there is an increase of nearly 14% total travel distance (pcu.kms/hr) with LTC, resulting in 9 to 11% increase in CO2 emissions and 6 to 7% increase in NOx.</p>			<p>cordon model) or variable demand.</p>	<p>peak periods are associated with induced traffic.</p>	<p>delay and amenity, fear and intimidation, accidents and safety, as well as pollution, dust and dirt.</p>
<p>Issue Ref 10.2/10.3 Rat-running on the local roads</p> <p>HE is assuming that traffic travelling from south of river going to Greys and the Port of Tilbury would go via Dartford Crossing, but with the LTC, traffic is forecasted to use more local and unsuitable routes which provide quicker journey times.</p> <p>These routes (A1013, B149 and Brentwood Road for</p>	<p>Awaiting HE's Review of Reports/Notes issued.</p>	<p>Concerns relate to:</p> <ol style="list-style-type: none"> Practical implementation and operation of enforcement and hence the realism of these modelling adjustments. Suitability of the Orsett Cock>A1013>Danesholes>Marshfoot Route lack of mitigation on the route 	<p>Details provided in:</p> <ol style="list-style-type: none"> Review of the Effects of the LTC within Thurrock: DCO Cordon Model Review", October 2020 Thurrock Cordon Model Construction Modelling Review", May 2021 <p>Further clarification is provided in our response dated 7th July 2021 to</p>	<p>Outstanding, Confirmed Approach</p> <p>HE has confirmed that the scheme is reliant on the Orsett Cock>A1013>Danesholes>Marshfoot Route.</p> <p>No mitigation offered.</p>	<p>HE to appraise the suitability of routes and proposal for the necessary mitigation.</p> <p>HE to show TC an effective scheme for banning HGVs, as the</p>

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
<p>example) are not designed to carry strategic traffic, including LGVs and HGVs, to the Port of Tilbury or to accommodate an increase in traffic.</p> <p>No mitigation is proposed. HE has included theoretical banned links within the model, restricting port traffic in the most recent modelling, which affects routes via Chadwell St Mary, however, concerns still remain about the methodology applied, as the current enforcement is not effective.</p> <p>There will also be no access from the A128 to the A1089 and journey times are quicker from M25 north to Grays and the Port of Tilbury via the LTC and local roads as well as from south of the river to these same locations via the LTC.</p>		<ul style="list-style-type: none"> d. Capacity at Orsett Cock and future proofing for Local Plan Growth and Freeports (or commitment to Tilbury Link Road – for future public transport services to operate over the River Thames and east-west across LTC to link Thurrock Growth areas) e. Treetops school and safe routes to school, noise and AQ f. New signal junction at Treetops g. Orsett Heath Academy and safe routes to school, noise and AQ h. Residential frontages and related severance, noise and AQ impacts i. capacity and safety impact on the 	<p>HE's Technical Notes issued 18th June 2021.</p>		<p>existing enforcement scheme is not effective.</p>

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
		<p>Marshfoot priority junction (this is a safety hotspot)</p> <p>j. delays to bus services (and need for bus priority at Daneholes and perhaps at other locations along the route)</p> <p>k. Use of the route through Chadwell St Mary and need for more effective HGV enforcement, residential frontages and related severance, noise and AQ impacts</p>			
<p>Issue Ref 10.14 Micro-Simulation Modelling</p> <p>Given the concerns with the LTAM, the Council believes that the strategic model is not the correct tool to test local junction operation, particularly at:</p> <p>a. A13 interchange b. ASDA roundabout</p>	<p>We have requested to review any Micro-simulation modelling carried out.</p> <p>Additionally documentation regarding the validation of the base models and forecast</p>	<p>No confidence that these junctions will operate efficiently.</p> <p>Design changes are being made using models which has not been made available.</p>	<p>Report titled “Junction Assessment and Mitigation Analysis” October 2020 for detailed review provides suggested mitigation.</p>	<p>Outstanding</p> <p>HE has not been willing to share the microsimulation modelling.</p> <p>HE is proposing a programme of work covering: (1) 2016 baseline model, (2) identify areas of</p>	<p>Local validated models (e.g. micro-simulation models) should be created to test the local</p>

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
<p>c. Orsett Cock d. The Manorway e. Daneholes Roundabout f. Marshfoot Junction priority junction</p>	<p>model development should also be provided.</p> <p>Meeting dates for the programme of works/meetings outlined in column 5.</p>	<p>Junctions of concern include:</p> <ul style="list-style-type: none"> a. A13 interchange b. ASDA roundabout (or Tilbury Link Road) c. Orsett Cock d. The Manorway e. Daneholes Roundabout f. Marshfoot Junction priority junction <p>Detailed junction assessments indicate that there could also be blocking back on to the A13 from Orsett Cock and Manorway Junctions.</p>		<p>concern in forecasts, (3) mitigation/interventions, and (4) Local Plan Options. The Council has grave concerns that this engagement cannot be completed in advance of the DCO submission and would not provide HE the time to make any changes to the scheme.</p>	<p>network at key locations.</p>
<p>Issue Ref 10.20 Orsett Village and Rectory Road</p> <p>Adjustments have been made to zone loading points in the latest DCO model with the addition of new network has been included without any model validation</p>	<p>Awaiting justification for the network and zone changes from the validated base model.</p>	<p>There is concern over an increase in traffic through Orsett village.</p> <p>Traffic levels and delays at Orsett Cock could be underestimated as a result.</p>	<p>The Council has considered possible mitigation for Orsett Cock, see report titled "Junction Assessment and Mitigation Analysis" October</p>	<p>Outstanding</p> <p>HE has not provided any information/ justification.</p>	<p>Although revalidation of LTAM would have been a better basis for local network, it is accepted</p>

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
<p>undertaken, thus resulting local changes in traffic routing and rat running, specifically noted at Rectory Road, Orsett.</p>			<p>2020 for detailed review.</p> <p>Traffic management is also necessary in Orsett.</p>		<p>that, at this late stage, this is unlikely be carried out.</p> <p>Local validated models (e.g. micro-simulation models) should be created to test the local network at Orsett Village, Rectory Road, Baker Street and Orsett Cock area.</p>
<p>Issue Ref 10.5 Allowing for growth in Thurrock</p> <p>TEMPro growth factors do not reflect the emerging growth locations. No testing of future growth scenarios has been carried out to assess the</p>	<p>HE to undertake additional sensitivity tests based on provided \$Include Saturn network files and associated matrices for the</p>	<p>Concerns that the additional capacity provided by the A13 widening scheme will be absorbed by LTC. The scheme results in pressure on the network at the locations most</p>	<p>The Council has provided indicative Local Plan growth assumptions and a set of network options (as \$Include files) to enable HE to make an assessment of</p>	<p>Outstanding, but Confirmed</p> <p>HE has confirmed that these runs will not inform the DCO. HE is proposing to delay these due to recognition that TC is concerned about the</p>	<p>Completion of the modelling of local growth scenarios supplied to HE, and completion of</p>

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
<p>implications of significant planned local growth associated with the Local Plan and Freeport proposals on LTC, and how LTC can best support sustainable growth.</p> <p>London Resort methodology sensitivity test - It is unlikely to reasonable to expect the Port traffic and other traffic in the area to change time of travel, mode of travel or destination. The Tilbury area relies on a single access via the A1089. Businesses may not be able to operate successfully with their operations displaced to outside of the peak periods, particularly freight movements.</p>	<p>indicative Local Plan development sites.</p> <p>Meeting dates for the programme of works/meetings outlined in column 5.</p>	<p>needed for future growth.</p> <p>Council currently remains concerned that the proposals do not recognise the importance of local sustainable growth and connectivity. The scheme does not offer resilience in terms of future people movements (highway, public transport or active travel). The LTC causes severance related to TC emerging growth, particularly growth at East Tilbury and connections between Stanford area and Basildon and Thurrock.</p>	<p>alternative scheme options for the provision of connections to growth areas within Thurrock, and connectivity to A13 and the ports at Tilbury. This was submitted to HE within these reports:</p> <ul style="list-style-type: none"> a. 'HE Modelling Specification Note' (PART 1), March 2020 – includes indicative Local Plan growth assumptions and network files b. 'PART 2 Indicative Local Plan (ILP) Model Runs', June 2021 – includes network files compatible with the latest LTAM model <p>HE has updated the 2027 opening year model to a 2029 opening year model, with forecast year models being updated by 2 years too (e.g. 2042 to 2044, etc.).</p>	<p>validation of the model and their suggestion to start at the beginning. HE's proposed programme covers: (1) 2016 baseline model, (2) identify areas of concern in forecasts, (3) mitigation/interventions, and (4) Local Plan Options.</p> <p>The Council has grave concerns that this engagement cannot be completed in advance of the DCO submission and would not provide HE the time to make any changes to the scheme.</p>	<p>HE's proposed programme to review the strategic modelling of the scheme.</p>

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
			<p>The Council agreed that the models runs should be carried out on the updated model, as it was confirmed that this would be available very shortly. More recently additional lanes have been added to the A13 interchange to Orsett Cock. The model has been updated again to accommodate this change.</p> <p>Initial experimental runs have been carried out within the out of date model (i.e. 2042 forecast year model), so that as soon as the updated model was ready any issues had been identified for running in the latest model (i.e. for forecast year 2044 in model titled DCO 2). These runs have not been provided yet.</p> <p>Further clarification regarding the London</p>		

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
			Resort modelling is provided in our response dated 7 th July 2021 to HE's Technical Notes issued 18th June 2021.		
<p>Issue Ref 10.11 Testing of Scheme Alternatives</p> <p>HE has not presented results of any scheme option testing for example different A13 junction configurations or with a Tilbury Link Road and there is insufficient detail to understand the impacts (on the local road networks as well as residents, businesses, open countryside and designated environmental areas) and to determine mitigation.</p>	<p>Concerns were raised in response to the Statutory Consultation in 2018 where we requested option testing and further modelling detail to understand the scheme impacts on the local networks</p> <p>This has continued to be raised at Supplementary Consultation (April 2020), Design Refinement Consultation (July 2020), and raised again with analysis in October 2020 and a further submission in March 2021.</p>	<p>There continue to be no evidence on alternative scheme configurations to check whether the current scheme is preferred.</p> <p>Transport Appraisal Guidance has not been followed.</p>	<p>\$Include files (based upon the 2029 model) have been issued to HE to undertake some option testing as set out in 'PART 3 A13 and TLR Option Model Runs', 1st July 2021. This includes network files for options (without the networks related to the indicative Local Plan growth) compatible with the latest LTAM model The associated scenarios include:</p>	<p>'Design Construction and Operation' Report 2018 provides insufficient evidence, such as modelling results, to allow stakeholders to take a view about the performance of alternative options at that stage.</p> <p>No modelling results have been provided on the changes to the scheme configuration from 2018 and options considered to identify the DCO scheme.</p> <p>'Lower Thames Crossing A13 Junction Design Approach May 2021' focuses more on the reasoning behind the linkages provided through the iterations of the interchange at A13, rather than the reasoning for the interchange and the</p>	<p>Option testing for at least the options set out in 'PART 3 A13 and TLR Option Model Runs', 1st July 2021.</p>

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
				comparative review of alternative interchanges. Not Willing Having originally agreed to undertake model runs outlined in 'PART 3 A13 and TLR Option Model Runs', 1st July 2021, it is no longer understood that HE is no longer willing to undertake this work.	
<p>Issue Ref 10.7 Sensitivity testing and uncertainty (Scheme Resilience)</p> <p>The LTC design is for a life span of some 100 years, yet there is no modelling for resilience to future change, such as travel trends, mode shift and emerging technologies.</p>	HE to provide information regarding sensitivity testing of the scheme in terms of future mobility.			<p>Outstanding, but Confirmed</p> <p>HE will not be carrying out any sensitivity testing. HE has confirmed that they cannot apply the DfT's Uncertainty Toolkit without the updated TEMPro.</p>	Sensitivity testing of a range of possible or plausible futures.
<p>Issue Ref 10.10 Construction modelling and analysis</p>	HE to provide revised construction modelling which uses	No understanding of the construction assumptions that have been made in the latest	See Thurrock Cordon Model Construction Modelling Review", May 2021.	<p>Outstanding</p> <p>Construction modelling has apparently been updated</p>	HE to issue the updated construction modelling.

Issue Title and Description	What have we asked for?	Why have we asked for it?	Information Issued to HE to facilitate	What have we received or has been confirmed by HE	What we want HE to do now
<p>A number of links see increases in traffic and no mitigation proposed. The recent consultation did not include the latest construction modelling, so the report impacts do not match the modelling we have access to.</p>	<p>an alternative matrix (dataset D). Details of proposed mitigation throughout the construction period.</p>	<p>consultation and whether they are achievable and can be managed/enforced. No evidence available to understand the latest construction (modelling) impacts. LTAM not a suitable tool for local road network testing and for detailed traffic management schemes.</p>	<p>Further clarification is provided in our response dated 7th July 2021 to HE's Technical Notes issued 18th June 2021.</p>	<p>and will be issued mid August (originally planned for W/C 9th August). Note: It is now September and this has not yet been provided.</p>	<p>Local models (e.g. validated micro-simulation models) should be used to test construction traffic and traffic management.</p>
<p>Issue Ref 10.17 Incidents</p> <p>The effects of incidents on the LTC have not been tested and presented to the Council, to understand the local roads that will be at risk of impact.</p> <p>Mitigation measures should be incorporated to minimise the use of unsuitable routes.</p>		<p>Concerns relate to the lack of mitigation as part of the local impacts resulting from the LTC.</p>	<p>Supplementary Consultation, 2020. Further consideration of impacts of incidents and mitigation of these.</p>	<p>Not Willing</p> <p>HE has confirmed that any modelling would not be realistic, as traffic radio and Sat Navs will stop people travelling.</p>	<p>An assessment of the routes at greatest risk of use as a result of incidents on the LTC and consideration of mitigation.</p>



Lower Thames Crossing

Review of Outline Site Waste Management Plan

On behalf of **Thurrock Council**



Document Control Sheet

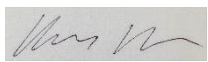
Project Name: Lower Thames Crossing

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For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved
A	08/09/2021	Issued to Thurrock Council	CH	DB	CS

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Contents

1 Introduction1
1.1 Overview1
2 Review of Outline Site Waste Management Plan3
2.1 Comments3
2.2 Summary and Recommendations9

Tables

Table 2.1: The Council’s Comments on the Outline Site Waste Management Plan3

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1 Introduction

1.1 Overview

- 1.1.1 As part of its technical engagement relating to the proposed Lower Thames Crossing (LTC) Development Consent Order (DCO) application, Highways England (HE) has issued Thurrock Council (the Council) with the draft outline Site Waste Management Plan (oSWMP).
- 1.1.2 This document sets out the Council's comments on the draft oSWMP and if there are any suitable opportunities to improve this infrastructure.
- 1.1.3 The document follows the same structure as our other reports and respond only to the sections relating to the north of the river.
- 1.1.4 In their response to the initial application the Planning Inspectorate identified two specific issues with the oSWMP:
- i. 13 - There are elements of a generic site waste hierarchy within the documentation but limited information as to the actual implications of the waste handling implications on a 23km long site with twin bore tunnels under the Thames. Even where a high percentage of materials is to be retained for reuse (in accordance with the hierarchy) would still require extensive movements of large tonnage to / from excavation to stockpile / sorting / treatment locations before reuse over an extended area and which may or may not need to cross the river between the respective tunnel portals.
 - ii. 14 - The ES considers a 'road only' outlier position but this is not a substitute for an actual handling strategy which would need to consider multi-modal approach (see TfL considerations) and this all deferred for later consideration which means that mitigations have not been fully assessed. This interfaces with the Transport Assessment and Navigation elements identified above for the construction period particularly as it sets the 'significance' threshold as being at 1% of landfill capacity in the whole of England rather within the study area. There are a number of unfinished paragraphs and missing cross reference in the Materials and Waste section of the ES which make it difficult to read fully.
- 1.1.5 The Council has significant concerns over the oSWMP as prepared and does not consider that the document contains sufficient information to address the shortcomings of point 13 within the PINS response.
- 1.1.6 The Council's concerns relate to the sufficiency of the level of detail provided for the scale, duration and waste generation potential of the proposed project. At a high level we believe that the oSWMP fails to appropriately set out the following key points:
- i. The nature of the targets for reuse, recycling and recovery are not defined.
 - ii. The waste arisings are not described with regards to their phasing.
 - iii. There is no evidence that the storage capacities within the compounds have been assessed for sufficiency.
 - iv. There is no explanation of how waste transport, storage and treatment locations will be assessed for compliance with any relevant regulatory requirements (Waste Carriers License, Exemptions, Environmental Permits, etc).

- v. There are no proposed actions identified to ensure that the materials identified are captured for reuse, recycling or recovery and in particular no detail on how material will be separately collected.
 - vi. There is no identified structure for monitoring, recording and reporting on the wastes generated by the scheme.
- 1.1.7 Point 14 is considered in more detail within our response to the outline Material Handling Plan (oMHP) however the concerns regarding the capacity within the surrounding waste infrastructure is not addressed within either the oMHP, oSWMP or Excavated Materials Assessment (EMA).
- 1.1.8 It is essential that the Council pursues an acceptable outcome for the draft oSWMP prior to submission of the DCOv2 to protect its interests with regards to the management of wastes within and through the Borough. Once consent for the project is granted, the Council will have very limited opportunity to influence the detailed strategies which will have a significant impact on the Borough for the many years of construction.

2 Review of Outline Site Waste Management Plan

2.1 Comments

Table 2.1: The Council's Comments on the Outline Site Waste Management Plan

Relevant Section in the Outline Site Waste Management Plan		The Council's Comments on the initial draft of the Outline Site Waste Management Plan	Thurrock Council's Comments on the Consultation Draft (July 2021) of the Outline Site Waste Management Plan
Chapter 1: Executive Summary			
All		It is difficult to consider this OSWMP properly without receipt of the Outline Materials Handling Plan (OMHP), which will cover the flow of waste and materials within the scheme and externally, due to be issued in draft in May 2021 for our review.	Whilst the OMHP has been received the lack of detail provided within the 2 documents on the phasing of the works means that it is still not possible to understand the impacts and implications of the works.
Chapter 2: Introduction			
2.3	Scope	<p>a. Requirement 4 requires approval by the SoS following consultation with Local Planning Authorities (LPA) and Natural England. LPAs therefore have a limited measure of control over the detail of all EMPs (2nd Iteration), despite potentially being impacted. The Council requires approval rights over matters affecting its area through this Requirement 4.</p> <p>b. Does prior to commencement of construction works include enabling works?</p>	These points do not appear to have been addressed within the consultation draft of the oSWMP.
2.5	Materials Handling Plan	a. Whilst this OSWMP is intended to be secured by the DCO, although no details of how are yet available,	oMHP has now been provided and will from now on be considered within the specific feedback document but, as

Relevant Section in the Outline Site Waste Management Plan		The Council's Comments on the initial draft of the Outline Site Waste Management Plan	Thurrock Council's Comments on the Consultation Draft (July 2021) of the Outline Site Waste Management Plan
		<p>there is no similar indication for the OMHP, which must be similarly legally secured in the DCO.</p> <p>b. Multi-modal transport split on waste movements will need to part of the Navigational Risk Assessment in terms of additional barges and risk.</p>	<p>set out within the Councils comments, the oMHP lacks sufficient detail.</p>
2.6	Project Commitments and Targets	<p>a. Comments on the REAC have been made by the Council for 'Materials (MW001 - MW004, MW007, MW009, MW010, MW011, MW012 and MW014). LTC's responses to these points need to be reviewed to determine their acceptability and then where agreement is reached amend both the REAC and OSWMP. Further clarity is required over specific targets that each Principal Contractor (PC) would be required to adhere to, e.g. MW001 and MW011.</p> <p>b. As stated and agreed within 'Response to Thurrock Council comments on Environmental Matter (REAC), MW010 points 2 and 3 (which are now b and c in the OSWMP) have not been incorporated within the OSWMP.</p> <p><i>“(2) the Contractor would provide suitable containers for reception and temporary storage of waste on site and shall arrange for waste to be periodically collected and transported to a suitably licensed facility for treatment or disposal (3) the Contractor would be responsible for obtaining any relevant</i></p>	<p>a. The REAC commitments within tables 2.3 and 2.5 do not reflect the drafting from within the Code of Construction Practice document.</p> <p>b. Table 2.2 presents estimated waste reduction savings from specific actions without evidence for their calculation (before & after waste arisings, reference to before & after layouts, material types, etc.)</p> <p>c. The section makes no comment on what regulatory measure will be implemented for the management/storage of wastes within the compounds nor how the wastes will be monitored to ensure that the waste within the Compounds does not breach any restrictions.</p>

Relevant Section in the Outline Site Waste Management Plan		The Council's Comments on the initial draft of the Outline Site Waste Management Plan	Thurrock Council's Comments on the Consultation Draft (July 2021) of the Outline Site Waste Management Plan
		<p><i>permits/exemptions for on-site management of waste.</i></p> <p>c. The following commitments are missing from Table 5 in the OSWMP. MW001, MW002, MW003, MW004, MW006, MW007, MW008, MW009.</p> <p>d. MW015 is a new commitment which has not been reviewed by the Council.</p>	
2.7	Roles and Responsibilities	The role of local authorities also needs to be set out. Also, the role of HE, Designer, Principal Contractor and Contractor/Subcontractors in liaising with local authorities needs to be specified.	This remains unaddressed.
2.8	Waste Management Contractors		The document does not set out how the Duty of Care responsibilities for ensuring that waste carriers and destinations comply with the relevant regulatory requirements will be monitored and reviewed.
2.9	Waste Forecast		Whilst allocated to a high level separation of the works the waste forecasts do not consider phasing. For a project of this size and duration the Council would expect to see phased arisings.
	Tables 2.6	a. It is not clear if the Principal Contractor would be required to comply with or better the 'anticipated management' targets or if the targets are only for guidance – clarify in the text.	a. It is still not clear whether the figures within the table are <i>de minimis</i> targets or aspirational targets. Targets are only derived from generic estimations not from an assessment of suitability for recovery based on any

Relevant Section in the Outline Site Waste Management Plan	The Council's Comments on the initial draft of the Outline Site Waste Management Plan	Thurrock Council's Comments on the Consultation Draft (July 2021) of the Outline Site Waste Management Plan
		<p>b. Confirmation is required that there is sufficient capacity at off-site recycling sites and landfill sites to take the large amounts of waste that will come from LTC development.</p>
		<p>studies undertaken or proposed actions to ensure that material is captured in a format suitable for processing at the relevant sites.</p> <p>b. Evidence for the identification of the waste arisings is not provided and the timing of the waste production through the phasing of the works is not identified therefore it is still not possible to confirm whether there is sufficient capacity within the identified sites. Some of the necessary information is located within the EMA, other parts within the OMHP but neither contain all of the necessary information, they cannot be linked together in a meaningful manner and without a phasing program the suitability of the surrounding facilities cannot be considered.</p> <p>c. Without detail on how the material will be separated and stored on site it is not clear whether the material taken off site will be suitable for immediate recycling or will require processing, this will determine the relevant facilities that are required for the management of the waste.</p> <p>d. The use of Inert. Is this meant to be excavated material classified as Non-hazardous and with WAC testing shown to acceptable at a landfill receiving inert waste? Or is this Natural Ground and 'contaminated' is Made Ground.</p> <p>e. Has a preliminary waste classification exercise been undertaken? What proportion of the 11.73M m3 of</p>

Relevant Section in the Outline Site Waste Management Plan	The Council's Comments on the initial draft of the Outline Site Waste Management Plan	Thurrock Council's Comments on the Consultation Draft (July 2021) of the Outline Site Waste Management Plan
		<p>excavated material is Made Ground and might be classed as Hazardous waste if designated for off-site disposal.</p> <p>f. To understand how much of the excavated material might be designated as waste in terms of being surplus an understanding of the quantities required for the construction is needed plus how suitable for re-use been defined (criteria) and any limiting factors such as where asbestos containing soil cannot be re-used.</p>
Table 2.7		<p>a. It is still not clear whether the figures within the table are <i>de minimis</i> targets or aspirational targets. Targets are only derived from generic estimations not from an assessment of suitability for recovery based on any studies undertaken or proposed actions to ensure that material is captured in a format suitable for processing at the relevant sites.</p> <p>b. The waste arisings are not identified either spatially or temporally.</p>
Section 2.10		<p>The reporting structure only sets out how the overall performance figures will be presented not how data will be recorded, managed and compiled prior to presenting. The data to be recorded is not indicated so it is not clear how HE will comply with their Duty of Care responsibilities.</p>
Table 7		<p>This refers to 'project targets' but is not clear what these are and if they are % within the study area or nationally;</p> <p>Not addressed.</p>

Relevant Section in the Outline Site Waste Management Plan		The Council's Comments on the initial draft of the Outline Site Waste Management Plan	Thurrock Council's Comments on the Consultation Draft (July 2021) of the Outline Site Waste Management Plan
		and, how these targets are derived from the REAC commitments is needed – clarity is required in the text.	
Annexes			
A.1- A.5		Annex A.1 – A.5 need to be completed, when will this be undertaken?	Tables have still not been populated.

2.2 Summary and Recommendations

Summary

- 2.2.1 The document builds upon the initial review of the oSWMP that Thurrock sent to HE on 22nd March 2021. Within this review of the consultation draft of the oSWMP we have identified whether we consider the original comments have been addressed appropriately and also identified where additional concerns have been raised.
- 2.2.2 As drafted the oSWMP is insufficiently developed to allow the Council to draw a considered opinion on the management of the wastes from the project. The full range of waste arisings are not broken down by source nor by the timing of their production, the scheme targets are unclear in their nature and do not appear to have been developed against any project specific basis. There is no information on how wastes will be managed to ensure that the project attains the standards/targets that have been set nor complies with regulatory requirements.

Recommendations

- 2.2.3 The oSWMP needs to be developed to ensure that:
- i. The basis for the targets within it are clear
 - ii. The basis for the estimations of waste arisings are provided
 - iii. The waste arisings are considered both with regard to where and when they will arise
 - iv. The approach to managing the wastes is clear to demonstrate regulatory compliance can be maintained
 - v. The approach to the recording, compiling and reporting of the wastes managed is appropriate for the scale of the project
 - vi. The potential offtake locations for the wastes to be taken from the site are clearly identified and their potential to manage the waste arising over time is identified
- 2.2.4 The oSWMP, oMHP, MMP and EMA are complementary documents, however they need to be able to be considered as standalone documents and all relevant evidence and information should be presented within each document.
- 2.2.5 It is essential that the Council pursues an acceptable outcome for the draft oSWMP prior to submission of the DCOv2 to protect its interests with regards to the management of wastes within and through the Borough. Once consent for the project is granted, the Council will have very limited opportunity to influence the detailed strategies which will have a significant impact on the Borough for the many years of construction.



Lower Thames Crossing Review of Outline Materials Handling Plan

On behalf of **Thurrock Council**



Document Control Sheet

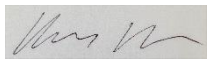

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For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved
A	08/09/2021	Issue to Thurrock Council	CH	CC	AN

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Contents

- 1 Introduction1**
 - 1.1 Overview1
- 2 Review of draft oMHP4**
 - 2.1 General Comments.....4
 - 2.2 Summary and Recommendations7

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1 Introduction

1.1 Overview

- 1.1.1 As part of its technical engagement relating to the proposed Lower Thames Crossing (LTC) Development Consent Order (DCO) application, Highways England (HE) has issued Thurrock Council (the Council) with the draft Outline Materials Handling Plan (oMHP).
- 1.1.2 This document sets out the Council's comments on the proposed oMHP and gives an indication as to where there are any suitable opportunities to improve that document and the constituent plan.
- 1.1.3 This document follows a similar structure to other reviews carried out by the Council and references within this document align to the referencing within the oMHP. The document responds only to the sections relating to the north of the river.
- 1.1.4 The National Policy Statement for National Networks (NPS NN) has as one of its objectives the vision to provide a national "*Networks which support the delivery of environmental goals and the move to a low carbon economy*" (NPS NN page 9). This in turn should help towards achieving the legally binding Carbon Budgets (NPS NN references at 5.16). Whilst the NPS NN has its basis in the development of National Network initiatives it is appropriate that that covers the construction period and therefore the objective to engrain environmentally sound construction processes including the movement of materials by low polluting transport modes. This drive for reduced environmental impact during the construction period is further emphasised at paragraph 4.29 on NPS NN, where "*good design*" will be "*efficient in the use of natural resource and energy used in their construction*". That aspiration around "*use*" should include the efficient handling of materials and how the options for types of material have influenced the environmental sustainability of the design and the associated construction processes and effects on Air Quality. There must be a golden thread running through the design and construction of LTC that shows how the environmental effects have been minimised, including using environmentally sound handling of materials. Paragraph 5.19 refers to the mitigation of effects, including the use of materials and that this will be a material factor in the Secretary of States decisions on the proposals currently being put forward.
- 1.1.5 The Council has many concerns with the oMHP as currently prepared, and these are outlined within this report and captured in the following headlines.
- i. The proposals for materials handling are not evidenced with data;
 - ii. Only excavated material and bulk aggregates are considered within the document, leaving all other material as "smaller less frequent deliveries" (oMHP para 1.1.3 refers) and for the main works contractors to manage;
 - iii. HE dismisses, almost entirely, the use of marine and rail for the movement of materials, plant and equipment, without adequate evidence;
 - iv. The assertions and "principles" are not supported by commitments from HE and targets for the contractors to achieve and are left to the Contractor to research and adopt with no consequences if the principles are not observed; and
 - v. With the apparent sparsity of soundness, it is difficult for the Council to conclude a properly reasoned response to the oMHP.
- 1.1.6 In their response to the DCOv1 application the Planning Inspectorate identified nine issues which impact upon the oMHP:

- i. The ES identifies that certain materials for the construction of the tunnels could be delivered by river transport via an existing jetty at Goshem's Farm. ES Chapter 2 paragraph 2.5.26 states that in the worst case scenario, the jetty would be refurbished and used for the transport of materials. The ES has not consistently stated how this jetty would be used and there are discrepancies within the ES as to the number of barges per day which would deliver this material, as well as some discrepancy in respect of the current usage of the jetty, which only has planning permission up until 2022. For examples of discrepancies, see para 11 and 12 below.
- ii. The application is not clear as to whether there would be an increase in barge / other river vessel movements as a result of the construction of the Proposed Development and the extent to which this might impact on the navigation of the River Thames.
- iii. Within the Scoping Opinion, the Secretary of State, Marine Management Organisation and the Port of London Authority (PLA) requested that if the River Thames is to be used to transport material, a navigation assessment should be included within the ES in order to determine the effects of these movements (in terms of both commercial and recreational craft). Statutory consultation responses from Port of Tilbury and the PLA reflect their concern at the lack of a navigation assessment.
- iv. No navigation assessment has been undertaken. Appendix 4.1 states that a navigation assessment is not required as "it is assumed that barge movements would be limited to two a day", but this contradicts other information as set out above. ES Chapter 13 in respect of a navigational assessment is noted, however this lacks detail and relates to marine and riparian assets only.
- v. Whilst no new jetty is to be constructed, as would have been the case at the time of the Scoping Opinion, the existing one would be refurbished, used and decommissioned and navigational impacts on the River Thames remain an issue which could be assessed and presented as part of the application.
- vi. For example, ES Chapter 13 paragraph 13.6.19 suggests that there would be two barges per day during the construction period; one per tide cycle. This is also identified in ES Chapter 9 paragraph 9.6.86 and in ES Appendix 4.1. However, ES Chapter 9 paragraph 9.6.192 suggests there would be up to six barge deliveries per day, and ES Appendix 2.1 paragraph 1.3.15 suggests there would be three barges per high tide and that high tide occurs twice a day. The HRA Stage 1 Screening Report (Document 6.5) also states up to six barges per day. In addition, the ES Air Quality Chapter Paragraph 5.6.7 states that a maximum of 1,800 movements (six barges per day) would occur and this quantity of movements is also stated in Appendix 2.1. In respect of the current use of the jetty, ES Chapter 13 paragraph 13.4.26 suggests three barges in any given 12- hour shift whereas paragraph 13.6.19 suggests three barge movements per day.
- vii. ES Chapter 9 paragraph 9.6.188 states that "Marine construction would require plant, barges, workboats and safety boats to be brought to site with movement occurring within the Order Limits during the construction phase. Once the marine works are complete and the East Tilbury jetty is operational, there would be continued marine traffic from vessels transporting materials and equipment."
- viii. There are elements of a generic site waste hierarchy within the documentation but limited information as to the actual implications of the waste handling implications on a 23km long site with twin bore tunnels under the Thames. Even where a high percentage of materials is to be retained for reuse (in accordance with the hierarchy) would still require extensive movements of large tonnage to / from excavation to stockpile / sorting / treatment locations before reuse over an extended area and which may or may not need to cross the river between the respective tunnel portals.

- ix. The ES considers a 'road only' outlier position but this is not a substitute for an actual handling strategy which would need to consider multi-modal approach (see TfL considerations), and this all deferred for later consideration which means that mitigations have not been fully assessed. This interfaces with the Transport Assessment and Navigation elements identified above for the construction period particularly as it sets the 'significance' threshold as being at 1% of landfill capacity in the whole of England rather than within the study area. There are a number of unfinished paragraphs and missing cross reference in the Materials and Waste section of the ES which make it difficult to read fully.
- 1.1.7 The concerns identified within this review indicate that HE has failed to address these issues and that the oMHP lacks specific information and evidence, referring to overarching themes and aspirations without identifying how these will be achieved.
- 1.1.8 It is essential that the Council pursues an acceptable outcome for the oMHP prior to submission of the DCOv2 to protect its interests with regards to the movement and handling of material, plant and equipment within and through the Borough. Once consent for the project is granted, the Council will have very limited opportunity to influence the detailed strategies which will have a significant impact on the Borough for the many years of construction.
- 1.1.9 The oMHP must form a robust framework in which stretching targets around the movement and handling of materials which will bring about reductions in the environmental impacts of moving and handling that material. The targets should be minima which the contractors adopt within their developed Materials Handling Plans and that they are incentivised to exceed those targets. The oMHP must include a defined management and governance process which encompasses the mechanisms by which the contractors' compliance is judged and measured. It must set out the corrective action procedures and timescales and the way in which dispute is resolved. The day-to-day governance process must be a system operated by the Client and the affected Local Authorities in collaboration with the Contractor. Only unresolved disputes should be referred to the Secretary of State. The draft oMHP does not include such governance and management mechanisms.

2 Review of draft oMHP

2.1 General Comments

- 2.1.1 The oMHP document is not sufficiently developed to allow for a detailed examination of the impacts of the proposed works to be made. The information provided is at a high level and lacks sufficient detail, justification, evidence and specific commitments towards actions to allow detailed comments to be provided.
- 2.1.2 The overarching issues within the document submitted are:
- i. The actions to be taken are caveated and commitment is deferred until later stages of the project. The document should set out actions that will be implemented and make commitments to achieve these. The oMHP refers at paragraph 2.3.1 to the draft CoCP and “commitments to secure mitigation”. The Council has concerns with the robustness of that document and the absence of Client organisation commitments and so that lack of robustness is translated into the oMHP.
 - ii. There is a lack of detail regarding the timing/phasing of the works therefore it is not possible to identify the timing or quantum of vehicle movements to identify the potential impacts – this is despite the construction period apparently being divided into 11 phases. Information on the number of vehicle movements inbound and outbound should be provided on at least an averaged monthly projection to give an indication as to the impacts on the local road network. This would give the Council a yardstick to judge against and the main works contractors a measure of the quantum of movements anticipated to allow them to profile and programme their works to accord with the DCO commitments.
 - iii. There is a lack of detail on the sites receiving the wastes to provide confidence that they are suitably licensed or have sufficient capacity to receive the wastes generated at the point that they are produced. It is not possible to align the facilities identified within Appendix B with those considered within the Excavated Materials Assessment (EMA) making it impossible to assess the surrounding capacities and potential for the management of the material arising from the site.
 - iv. There is a lack of evidence to support the assumptions relating to the availability of storage for wastes within compounds prior to dispatch to the receiving sites or the stockpiling of imported and manufactured materials. HE has proposed that a segment factory will be created within the Order Limits. Aside from the footprint of that factory it will need component materials which will need to be stockpiled and there will need to be space to store segments for use. These areas can be substantive and should be indicated within the draft plans to give confidence that the worksites are sufficiently sized. Furthermore, there will be the need for batched concrete for various operations, including tunnel secondary lining (if required). If these are to be batched on site then the footprint for that batcher and associated infrastructure should be estimated and indicated within the plans for the oMHP. The final details of these proposal would be developed by the main works contractors and their sub-contractors but indications of their space and access requirements cannot be excluded entirely from the oMHP.
 - v. There is no information to identify whether the material produced from the excavation is suitable for re-use within the site, whether the material will be generated at an appropriate time or identification of the locations where material will be produced from compared to where it will be used. This lack of information makes it impossible to assess whether the assumptions on the on-site reuse rates, and hence off-site transport requirements, are realistic.

- vi. There is no evidence to support the assessment of the number of on-line vehicle movements identified and the assessment appears to use different vehicle capacities for the waste removed from the North of the river to that removed from the South of the river with no justification for this difference. The Council cannot agree to the oMHP when there is no clarity as to the number and type of movements associated with materials handling and there is no cap on movements from the project in total or from any defined compound, including the newly introduced Utilities compounds.
- vii. We note that the Excavated Material Assessment report provided states that waste classification of the soils (as either Hazardous or Non-Hazardous) will be undertaken once ground investigation is complete. Without this fundamental assessment we do not understand the origin of the quantities used in this oMHP.
- viii. The proximity principle is referred to (paragraph 2.4.10 of the oMHP) as an admirable aspiration, however, how would that aspiration be achieved and incentivised in contract? This appears to be a toothless intention.
- ix. The use of marine or rail transport to minimise road mileage is discussed through the document but is largely discounted due to reported challenges. Whilst HE alludes to the juxtaposition of the Port of Tilbury and Tilbury2 as “opportunities to use” (paragraph 5.2.8), there appears no comprehensively reasoned evidence as to why there can be so little commitment or opportunity to move material, plant and equipment by rail or marine. That paragraph states that a marine based strategy “*should consider traffic impacts on the Asda roundabout*”. The Council has repeatedly raised the potential for the project to negatively affect the Asda roundabout and has been told that the worst case scenario modelling of the construction period has no negative impacts on that junction. Whilst the Council continues to refute that claim, the text at paragraph 5.2.8 appears to suggest that a strategy that would take many lorry movements off the A1089 network by having shorter movements between the Port and Compounds 5 and 5a, but introduce a percentage of movements northbound on A1089 to other compounds, could have a deleterious effect on the operation of the Asda roundabout. HE must explain which the impact is and whether that is deemed to be Significant.
- x. The dismissal of the jetties within or close to the Order Limits for the use by the Project is not supported by evidence but it is stated that other projects would restrict their use for the project. Firstly, if the jetties lie close to or within the Order Limits they would be difficult for other projects to use for transshipment and lighterage; and secondly the projects referenced (i.e. Tideway and Silvertown Tunnel – referenced at paragraph 7.2.23 of the oMHP) would be either complete or nearing completion by the time of the construction of the LTC project. Section 7 of the oMHP refers to the intention for the contractors to consider multi-modal and last mile strategies but there is no incentivisation to the contractors to use non-road transport. They are free to consider and then dismiss these modes without any consequences. The application of incentivised targets which are encapsulated within a much improved and subsequently consented oMHP, which will in turn be law and a contractual requirement through a Requirement of the DCO, will form part of the governance and management of sound Materials Handling Plans. Those Materials Handling Plans will drive reduced environmental impacts and move towards mitigating the construction impacts.
- xi. Paragraphs 2.5.1 and 2.5.4 refers to the use of Vehicle holding points and the oTMPfC. The preliminary version of that document does not currently propose holding points at the site entrances. This shows the absence of consistency across the related documents and does not give the Council confidence that these plans will derive a robust and positive strategy for materials, plant and equipment management and the associated vehicle management. If consented these documents would not provide a clear framework within which the contractors would work and would not achieve the environmental protections to which HE and the project should aspire.

- xii. Supply chain data analysis is included within this document, whilst this may be more appropriate within the oTMPfc, the initiative again does not provide a restrictive environment within which contractors would work. Data could be collected but there is no performance target to achieve and no compliance regime.
 - xiii. Medebridge Road is reported as a key access route and this is in line with the wider project proposals, however, HE makes no proposal to cap its use or to mitigate the effects on the surrounding road environment at High Road and the North Stifford interchange. The impact on this network must be set out and mitigated.
 - xiv. The detail provided regarding the final mile strategy for the project is lacking in detail and specific proposals to mitigate the impacts of the final mile deliveries to the works site.
 - xv. The oMHP needs to set out how it aligns with the Navigational Risk Assessment (NRA) for the project. The Council has not yet provided a view on the draft NRA and so reserves opinion on that matter.
- 2.1.3 Without addressing these substantive issues, it is not possible to make a thorough assessment of the appropriateness of the materials handling strategy. Without a phased assessment of the material movements then it is not possible to draw an informed conclusion on the potential for alternative transportation approaches which should be revisited or the impacts on the local road network of the movement of materials, equipment and plant. That assessment must include the analysis of the quantum of other materials not currently included such as cement and concrete, surfacing materials, bulk steel and additives, rails and ducts, topsoil etc. The governance, management, compliance and corrective action strategy that accompanies must be detailed within the oMHP as that will provide the basis on which the contractors' performances will be judged and enforced.
- 2.1.4 In addition to the issues identified above there appear to be referencing inconsistencies/omissions within the document that need to be reviewed and rectified.
- 2.1.5 The plate images are not clear within the document, plates should be provided at an appropriate scale.

2.2 Summary and Recommendations

Summary

- 2.2.1 It is considered that the document presents insufficient evidence to demonstrate that a robust assessment has been undertaken to define the quantum and timing of the various materials and that appropriate approaches to the handling have been identified. As the oMHP is currently presented it is considered that there is insufficient confidence in the viability of the proposed plan or the mechanisms for governance and management of the procedures.
- 2.2.2 There is no incentive to contractors to adopt environmentally sound processes and no requirement for corrective action where targets are not met.

Recommendations

- 2.2.3 We recommend that the revised document provides:
- i. Detail of the calculations and assessments which are stated to have been undertaken.
 - ii. Clarity on the types and quantities of arisings (Topsoil, Made Ground identified as chemically and physically suitable for re-use, Natural Ground that meets the requirement and are excluded from the scope of the WFD, Made Ground identified as not chemically and/or physically suitable for re-use, Natural Ground identified as not suitable for re-use).
 - iii. Criteria used to decide suitability for re-use.
 - iv. For each type of spoil arising requiring off-site disposal provide a waste classification assessment to determine whether Hazardous or Non Hazardous. A second stage of acceptance assessment (informed by WAC testing as appropriate) to inform the identification of likely destination landfill – which should consider the location and timing of generation.
 - v. Clarity on the destination compound /location of stockpiles and duration.
 - vi. Clarity on the phased vehicles movements associated with the works.
 - vii. Information on the receiving sites identified to provide comfort that they will be able to accept the wastes generated at the point that they are exported from the site.
 - viii. An assessment of the potential for alternative transportation measures to be incorporated based upon the phased movement of materials identified within the oMHP and those that are not as yet considered within the oMHP.
 - ix. Definitive commitments to targets and aspirations and to incentivise contractors to reduce road mileage and materials mileage and to comply with stretching targets.
 - x. The governance processes and dispute mechanisms.