

The Planning Inspectorate
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Our ref: KT/2023/131194/01-L01
Your ref: 20035862
Date: 05 December 2023

Dear Examining Authority

Lower Thames Crossing (TR010032) Development Consent Order Application

Please find to follow our responses to the Examining Authority's Third Written Questions; Report on the Implications for European Sites and draft Development Consent Order Commentary on behalf of the Environment Agency in relation to the application for a Development Consent Order for the Lower Thames Crossing made by National Highways (NH). In addition, our written submission in relation to Article 68 of the draft Development Consent Order is attached separately.

Our comments in response to **Action 10 from Issue Specific Hearing 11 Environmental Matters: Star Dam response are as follows:**

The Environment Agency currently chooses to exercise permissive powers available to us under section 165 of the Water Resources Act 1991 to deliver maintenance activities to Star Dam. The Environment Agency will continue to exercise these permissive powers into the future unless the costs of delivering the maintenance activities outweigh the benefits those activities provide. The Environment Agency currently require, and will in the future, access to be able to deliver maintenance activities and any future replacement and/or raising that may be required under the aspirations of the Thames Estuary 2100 Plan.

I hope this is helpful.

Yours sincerely

Richard Penn
Environment, Planning and Engagement Manager
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Examining Authority's Third Written Questions

EXQ3	Question to	Question	Environment Agency Response
Q10.1.1	Applicant EA LLFAs IDB	<p>Flood Risk Assessment: locationally specific provisions</p> <p>In general terms, standard guidance has been followed in the current Flood Risk Assessment [APP-460 to 477 and REP1-171] that has been submitted for the project as a whole.</p> <p>The following additional assessments have been provided:</p> <ul style="list-style-type: none"> • [REP6-102] Deadline 6 Submission - 9.147 Coalhouse Point Flood Risk Assessment • [REP4-225] Deadline 4 Submission - 9.103 Hole Farm Appx F.3 Flood Risk Assessment <p>Are there any other particular locations where non-standard considerations should be included and if so why?</p> <p>If there are such locations, can the Applicant provide copies of such assessments or the indication of when/if they will be undertaken alongside the reasons why they have not been undertaken thus far?</p>	<p>Matters 2.1.54 and 2.1.56 of the Statement of Common Ground state we are satisfied with all parts of the Flood Risk Assessment for the scheme and flood models for the Mardyke and Tilbury Main [REP7-102].</p> <p>As the habitats regulations assessment mitigation at Coalhouse Fort was put forward by the applicant at a later stage, we requested a separate Flood Risk Assessment and hydraulic modelling for this location. We have now reviewed the hydraulic model and Flood Risk Assessment and are now satisfied with the findings as set out in matter 2.1.35 of the Statement of Common Ground [REP7-102].</p> <p>For management of surface water (pluvial) volumes, the Lead Local Flood Authority are the statutory consultee to the planning process for Major development with surface water drainage and have responsibilities under the Flood and Water Management Act 2010 and the Flood Risk Regulations 2009 to manage local flood risk such as groundwater flooding, surface water run-off and ordinary watercourses. Therefore, we are not a statutory consultee on the Hole Farm Flood Risk Assessment.</p> <p>We are not aware of any other locations which we feel should have been considered separately that we have not been involved in.</p>
Q10.1.6	Applicant Environment Agency	<p>Culvert design</p> <p>In RDWE013 of the REAC document [REP6-038], and similar</p>	<p>Yes, this is more appropriate as we are not the flood management authority for ordinary watercourses and do not have any regulatory or permissive powers under Water</p>

	LLFAs IDBs	<p>clauses, it is suggested that the SoS approves designs in consultation with the Environment Agency. Are there conditions, such as on non-Main River watercourses, where it would be more appropriate for the Drainage Authority or LLFA to be the consultation body?</p>	<p>Resources Act 1991. We permit works in, under, over or within 8 metres (m) from a fluvial main river and from any flood defence structure or culvert or 16m from a tidal main river and from any flood defence structure or culvert. Questions regarding ordinary watercourses should be directed to the Lead Local Flood Authority (LLFA) in this area, Thurrock Council.</p> <p>These requirements for Flood Risk Activity Permits have been disapplied under the Protective Provisions as set out in matter 2.1.3 of the Statement of Common Ground [REP7-102].</p>
Q10.1.11	Environment Agency Applicant	<p>Water Framework Directive: culverting</p> <p>At ISH9 (transcript [EV-075]), it was suggested that the River Basin Management Plan (RBMP) and Water Framework Directive (WFD) requirements were developed in the Mardyke area, alongside the Environment Agency but that the WFD Assessment in ES Appendix 14.7 - Water Framework Directive [APP-478] concluded that the proposed culverting had a negligible risk of deterioration at the waterbody scale. There being three waterbodies to be considered within the project's 'Zone of Influence'.</p> <p>The Environment Agency has additionally suggested that the</p>	<p>In the Water Framework Directive (WFD) assessment in the Environmental Statement, Appendix 14.7, paragraph 4.2.1, 'additional impacts' are referred to due to new ecological data in acknowledgement that ordinary watercourses have already been included within the Zone of Influence specifically in 4.3.3 [APP-478].</p> <p>Therefore, we consider that the applicant has considered the impacts of ordinary watercourses, including culverting proposals. Matter 2.1.33 of the Statement of Common Ground [REP7-102] states notwithstanding Statement of Common Ground items 2.1.28, 2.1.29 and 2.1.31, the Water Framework Directive assessment has been agreed with the Environment Agency.</p> <p>The focus of the Choosing by Advantage Workshop was the refinement of the West Tilbury Main culvert. The other culverts were not been part of this process and are covered in the WFD Assessment, Appendix 14.7, Environmental Statement. This is due to us not having a permitting remit</p>

		<p>proposed culverting is the ‘least bad option’, but that they are only concerned with those watercourses defined as “Main River”.</p> <ul style="list-style-type: none"> The ExA would like to know why non ‘Main River’ watercourses are not covered by the WFD and RBMP requirements and why it is only those bodies listed in paragraph 4.2.1 of the Environmental Statement Appendices, Appendix 14.7? <p>In the ISH9 Transcript it is confirmed that there was a “Choosing by Advantage Workshop” which has allowed the design of the West Tilbury Main (Main River designated watercourse) culvert to be refined.</p> <ul style="list-style-type: none"> Which other watercourses have had the benefit of such a process? <p>If West Tilbury Main is unique, then why have other watercourses not been considered worthy of such attention?</p>	<p>over ordinary watercourses which would rest with the Lead Local Flood Authority.</p> <p>The West Tilbury Main is within our permitting remit so the focus of our concern. Issues with ordinary watercourses, not within our permitting remit, are dealt with in the WFD assessment, Appendix 14.7 of the Environmental Statement.</p> <p>These requirements for Flood Risk Activity Permits have been disapplied under the Protective Provisions as set out in matter 2.1.3 of the Statement of Common Ground [REP7-102].</p>
Q11.1.4	Applicant Other IPs	<p>Wildlife pond provision Document 7.5 Design Principles Volume 7 [REP6-046], LSP.31 states that “ ... <i>The design of all ponds shall follow the guidance</i></p>	<p>For the great crested newt ponds there will be no fish introduced. Other ponds can be designed to benefit a full range of species including aquatic flora and fauna found in the area. We do not advise introducing fish to the non great crested newt ponds either as they will colonise naturally despite the lack of direct watercourse linkage.</p>

		<p><i>given in the Great Crested Newt Conservation Handbook ...”.</i></p> <p>Why are other species not considered as being the species on which ponds are designed?</p> <p>Are there other species that should be considered in the design of the proposed Wildlife Ponds?</p>	
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Habitats Regulations Assessment and the Report on the Implications for European Sites (RIES)

RIES Qs	Question to	Question	Environment Agency Response
Q17.1.1: QR16	<p>Habitats Regulations Assessment and the Report on the Implications for European Sites</p> <p>TR010032-004901-TR010032 Report on the Implications of European Sites RIES.pdf (planninginspectorate.gov.uk)</p>	<p>QR16: To the EA: Are you satisfied with the approach and conclusions of the Applicant's FRA for the works at Coalhouse Point supplied at Deadline 6 [REP6-102], including the proposal for an inspection and maintenance plan at detailed design stage?</p>	<p>We have now reviewed the hydraulic model and Flood Risk Assessment and are now satisfied with the findings as set out in matter 2.1.35 of the Statement of Common Ground [REP7-102].</p> <p>A design and maintenance plan seems a pragmatic way of supporting the proposal's timescales yet maintaining some degree of visibility over the scheme. A key feature will be the applicant's design to ensure that the post-development scenario doesn't manifest into tidal breach of the embankment via structural failure of the proposed assets and its interface with the surrounding embankment.</p>
QR17	<p>Habitats Regulations Assessment and the Report on the Implications for European Sites</p> <p>TR010032-004901-TR010032 Report on the Implications of European Sites RIES.pdf (planninginspectorate.gov.uk)</p>	<p>QR17: To the EA: Noting your initial preference was to avoid a water supply structure that would breach the existing flood defences, have you any further comments to make on the Applicant's decision to proceed with this option? What additional information, if any,</p>	<p>The Applicant held a site visit on 20 April 2023 with representatives from partner organisations. This session outlined the extensive route taken by water entering the drainage network landward of the riverside embankments then flowing towards Star Dam and then outwards to Bowaters Sluice. Detail was given around the water management practices carried out by Thurrock Council staff to keep the Coalhouse Fort moats topped up and thus demonstrated the complexities of ensuring the LTC proposals had an adequate water supply for the intention design parameters. It was felt that those design parameters were better achieved via a Regulated Tidal Exchange (RTE) structure.</p>

		<p>do you consider could be required in order for this approach to be feasible?</p>	<p>Our initial preference to avoid creation of a new asset was to ensure all other avenues had been explored and exhausted prior to disturbing the existing low, riverside embankment as a secondary, fall-back position. Furthermore, the applicant clarified that the future maintenance of the riverside embankment to house the proposed RTE would fall to National Highways. As they would be both the riparian landowner as well as the operator of the same length of embankment and RTE itself.</p> <p>A design and maintenance plan for the structure is to be provided to us for review under the Protective Provisions within the Development Consent Order which would allow for any comment to be made on the proposed permanent and temporary construction works. No further comment would be made on the specifics of the design with regards whether we think "it would work or not" as that is not our place to do so (e.g., size of pipe, level of inlet and outlet inverts etc).</p> <p>This is now agreed in matter 2.1.35 of the Statement of Common Ground [REP7-102].</p>
QR18	<p>All Ips Habitats Regulations Assessment and the Report on the Implications for European Sites TR010032-004901-TR010032 Report on the Implications of European Sites RIES.pdf (planninginspectorate.gov.uk)</p>	<p>QR19: To all IPs: Are there sufficient management, monitoring and control processes in place to ensure that the proposed wetland will meet its objectives?</p>	<p>The Operation and Maintenance of the proposed regulated tidal exchange structure would rest with the applicant as they would also have become the landowner of the proposed structure via compulsory purchase.</p> <p>A design and maintenance plan for the structure is to be provided to us for review during the detailed design phase under the Protective Provisions in the Development Consent Order. This would enable us to</p>

			<p>approve the applicant's permanent and temporary proposals.</p> <p>The current watercourse is an ordinary watercourse so we do not have any regulatory nor permissive powers, this role would rest with Thurrock Council.</p> <p>The Applicant may require a water resource license (abstraction license) under the Water Resources Act 1991 to achieve the wetland water demand via a supply directly from the River Thames through the new regulated tidal exchange structure as set out in the Consents and Agreements Position Statement [REP6-014].</p> <p>Matter 2.1.4 of the Statement of Common Ground [REP7-102] sets out that the applicant has engaged with us on the requirement for and potential approaches to the agreed licensing route for the water supply. We recommend that permits are applied for in appropriate time to facilitate the effective implementation of the mitigation, subject to our pre-application advice regarding further assessment being undertaken at detailed design stage using detailed water demand estimates.</p> <p>We would undertake our own Habitats Regulation Assessment as a competent authority on permits which we issue.</p>
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Draft Development Consent Order Commentary

Questions relating the dDCO have been consolidated into the ExA's Commentary on the dDCO, published on 14 November 2023
Our responses to questions of relevance to us as below.

dDCO Qs	Question to	Question	Environment Agency Response
QD2:	Draft Development Consent Order Commentary	Do any IPs have any submissions to make on the structure or broad function of the provisions in the dDCO?	No
QD3:	Draft Development Consent Order Commentary	Are there any documents that have been submitted to the Examination that should be certified but are not recorded in the dDCO?	Yes – Coalhouse Fort Flood Risk Assessment [REP6-102] .
QD6- 8	Draft Development Consent Order Commentary)	QD6: Should the REAC be individually identified in Schedule 16 (certified documents)? QD7: Should the Mitigation Road Map be included as part of the REAC, as a separate CD or certified document or not at all? QD8: Do any IPs have any further submissions to make on the manner in which certified documents and specifically CDs are recorded in the dDCO?	QD 6 – Yes for the reasons given by the ExA the REAC should be individually identified as a Certified Document. QD7- No comment. QD8- No

QD11	<p>This section of the dDCO Commentary addresses the content of the dDCO in the following terms: ▪ the function and content of the Articles; and</p> <p>▪ the function and content of the Schedules.</p>	<p>QD11: Are there Articles that the ExA has not yet commented on in respect of which a change in drafting is sought? If so, please provide reasons and evidence for your position.</p>	<p>Please refer to our Written Submission on Article 68 submitted at Deadline 8.</p>
QD17:	<p>Interpretation of “watercourse” A2 defines the term as follows: “watercourse” includes all rivers, streams, ditches, drains, canals, cuts, culverts, dykes, sluices, winterbournes, sewers and passages through which water flows except a public sewer or drain.</p> <p>This is somewhat of a catch-all definition which places natural systems watercourses with their attendant water quality and biodiversity considerations through to sewers and passages into a common definition (with all other species of watercourses in between). This is a well precedented definition. However, there may be an argument that precision in</p>	<p>The Applicant, the Environment Agency (EA) and other water environment and industry stakeholders are asked to consider whether a more specific group of definitions of a watercourse would be justified and the possible drafting benefits of making such a change.</p>	<p>In relation to Article 19 this Article makes it clear that it does not relate to the need to obtain an environmental permit to discharge under the Environmental Permitting (England and Wales) Regulations 2016. The EPR refer to discharge to ‘inland freshwaters, coastal waters or relevant territorial waters’ rather than discharge to ‘watercourses’. This Article will rarely require the Environment Agency to give any separate consent as it does not normally own watercourses. The Environment Agency will be controlling physical works affecting main rivers under its Protective Provisions. “Watercourse” is defined in the Protective Provisions for the Environment Agency as follows. “Watercourse” includes all rivers, streams, ditches, drains, cuts, culverts, dykes, sluices, basins, sewers and passages through which water flows except a public sewer. This is almost exactly the same as the definition of “watercourse” under s72(1) of the Land Drainage Act 1991. The Environment Agency would have no objection to the definition of watercourse in the DCO simply cross referring to s72(1) Land Drainage Act 1991. (The</p>

	<p>the dDCO might be assisted by reframing this definition to refer to such other, preexisting statutory definitions that are available (for example but not limited to the application of the term “watercourse” in the Land Drainage Act 1991, or of the term “public sewer” in the Water Industry Act 1991) which would ensure that the functionality, biological and chemical characteristics of relevant watercourses are not inadvertently confused.</p>		<p>definition of ‘watercourse’ in the Water Resources Act 1991 is very similar).</p>
QD27	<p>Discharge of water uncertainty and deemed consent A19(8) and (9) provide an expedited deemed consent procedure for discharge approvals. Given the circumstances identified above, although the need to retain delivery of NSIP development to project timescales is an important consideration, is 28 days an adequate period for the express discharge of such consents?</p>	<p>QD27: The Applicant and any prospective consenting bodies are asked whether the deemed discharge consent period of 28 days under A19 is appropriate and, if not, what an appropriate period might be</p>	<p>As stated above Environment Agency consent will rarely be required under this Article. However, we would comment that 28 days may not be sufficient time to determine whether consent should be given and our preference is for deemed refusal rather than deemed consent (we have insisted on deemed refusal in our Protective Provisions).</p>
QD32:	<p>Disapplication of legislative provisions, etc and</p>	<p>QD32: Does any IP have any concern that the draft</p>	<p>No</p>

	<p>Application of local legislation, etc A DCO under PA2008 is empowered to disapply and amend other legislation as required to give effect to the consent provided for NSIP development.</p>	<p>provisions unreasonably or inappropriately seek to disapply or modify other applicable legislative provisions? If so, what changes are sought to this provision or the dDCO more generally and why?</p>	
<p>QD34, QD35</p>	<p>A64 & A65 Arbitration and Appeals to the Secretary of State In contrast with a number of recent submitted dDCOs, the arbitration provisions here are relatively simple and well precedented. However, with reference to both A65 and Schedule 2 Part 2, it is important to note that appeals to the SoST only lie in respect of decisions by local authorities. Most decisions arising from Requirements directly are taken by the SoST. There appears to be no appeal from a decision taken by the SoST pursuant to Schedule 2 Part 2, and A64(2) specifically provides that '[a]ny matter for which the consent or approval of the Secretary of State is required under any provision of this Order is not subject to arbitration.'</p>	<p>QD34: Does any statutory body with formal decision-making powers have any concern that the proposed arbitration mechanism unduly affects their statutory role or powers? If so, what changes are sought and why? QD35: What does the undertaker do if the SoST refuses to grant the discharge of a Requirement and there is no means of dispute resolution? One answer is that the decision of the SoST is final and that must suffice, but is that the intended position?</p>	<p>No comments.</p>

<p>QD43:</p>	<p>Draft Development Consent Order Commentary Schedule 2 Requirements Specific provision securing implementation of measures included in the REAC can be found in R4 (Construction and handover environmental management plans) and R8 (Surface and foul water drainage). Given the importance of the REAC as a record of commitments which a broad range of stakeholders will consider important and necessary for delivery should the Proposed Development be consented, there is an argument that it should be more extensively referenced in other requirements.</p>	<p>Local Planning and Highway Authorities, Port Authorities and Operators, Natural England, the Environment Agency and the Marine Management Organisation as asked whether the REAC commitments are sufficiently secured. If not, what specific additional references to the REAC are required in any of the existing draft Requirements, or are any additional Requirements sought (and if so reasons for their inclusion and drafts should be provided)?</p>	<p>No comments in relation to QD43.</p> <p>However, on considering the REAC we note this refers to flood risk activity permits which will no longer be needed as consent will be sought under the Protective Provisions agreed between the Environment Agency and National Highways.</p>
<p>QD44:</p>	<p>Schedule 2 Requirements Do the requirements provide adequate security for the performance of the project as described in other CDs?</p>	<p>Local Planning and Highway Authorities, Port Authorities and Operators, Natural England, the Environment Agency and the Marine Management Organisation as asked whether the other CDs are sufficiently secured? If not, what specific additional references to specific CDs are required in any of the existing draft Requirements, or are any additional</p>	<p>Yes</p>

		Requirements sought (and if so reasons for their inclusion and drafts should be provided)?	
QD49	R3 Detailed Design Detailed design is driven by the design principles document [REP6-046], an important CD. Gravesham Borough Council seeks amendments to it [REP6-135]	QD49: Are the design principles guiding the Proposed Development adequately secured and do any of the principles need to be amended? If amendments are sought, why are they required?	No comment
QD50/51	R4 Construction and handover environmental management plans R4 sets out the process whereby the EMP and the CoCP are iterated by stages of the Proposed Development, iterations are approved by the SoS and then content within those documents is secured. The CoCP sets out the iteration process. Preliminary works must be carried out in accordance with the preliminary works EMP [REP6-043]. The REAC is not expressly referenced. The REAC as a source for the EMP (second iteration) is secured in R4(3), which is required also to include specific measures to manage	QD50: Is the iteration and approval process sufficiently clear? Does it provide adequate security for initial stage commitments and for the REAC? If amendments are sought, why are they required? QD51: Should any specific consultations prior to approval by the SoS be secured?	QD50: Yes QD51: No comments.

	<p>site waste (substantially in accordance with the outline site waste management plan (oSWMP) [REP6-040], materials handling (with the outline materials handling plan (oMHP) [REP5-050], noise and vibration, air quality, cultural heritage, ecology, soils, contaminated land, substances hazardous to health and pollution prevention controls. The construction of relevant parts of the authorised development must then meet the EMP (second iteration) measures.</p> <p>An EMP (third iteration) is then required to be prepared to govern operation and maintenance of the proposed development. This must contain a smaller range of specific measures including: the environmental information need for future maintenance and operation; the long term commitments to aftercare, monitoring, maintenance and mitigation; and a record of relevant consents, commitments and permissions. The authorised development must then meet</p>		
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	the EMP (third iteration) measures in this stage.		
QD54:	<p>The specific interests of the Environment Agency (R6 & R8), Natural England (R7) and Historic England (R9) are managed by these requirements. The REAC is specifically secured in R8 but not in the other requirements. Differing consultative requirements apply to SoS approval. Having created a definition of 'begin' in the dDCO that aims to include preliminary works, R7 authorises environmental surveys and monitoring works that begin before the Proposed Development begins. (Please refer back to questions on A2 and Sch 2 R1 in responding to this issue). R9 provides security on archaeological matters via the Outline Written Scheme of Investigation (oWSI). Specific security is not provided in relation to any historic building actions. Given questions in EXQ2 and ExQ3 about the management of historic buildings proposed to be removed, are any particular recording or</p>	<p>Do the Environment Agency, Natural England and Historic England consider that the approval process is sufficiently clear? Does it provide adequate security for initial stage commitments and for the REAC? If amendments are sought, why are they required?</p>	<p>Yes but the Environment Agency would comment that paragraph 20 of the Requirements should be consistent in terms of deemed consent/deemed refusal – to have both is confusing - and the Environment Agency considers deemed refusal instead of deemed consent would be preferable. Please see matters 2.1.74, 2.1.75 and 2.1.78 of the Statement of Common Ground [REP7-102].</p>

	relocation measures needed?		
QD78, QD80, QD81	Draft Development Consent Order Commentary	<p>Schedule 14 sets out the following sets of Protective Provisions:</p> <ul style="list-style-type: none"> • Part 1 – for the protection of electricity, gas, water and sewerage undertakers • Part 2 – for the protection of electronic communications code operators • Part 3 – for the protection of drainage authorities • Part 4 – for the protection of railway interests • Part 5 – for the protection of specified gas undertakers • Part 6 – for the protection of National Grid Gas plc as gas undertaker • Part 7 – for the protection of National Grid Electricity Transmission plc as gas undertaker • Part 8 – for the protection of Port of London Authority • Part 9 – for the protection of the Environment Agency • Part 10 – for the protection of the Port of Tilbury London Ltd <p>QD78: Are the named beneficiaries of the Protective Provisions content that the provisions drafted for their</p>	<p>QD78 The Environment Agency has agreed the form of Protective Provisions in Part 9 of Schedule 14 of the DCO for its benefit with National Highways.</p> <p>QD80: No comments</p> <p>QD81: No comments</p>

		<p>benefit are appropriate and correct? If not, please explain why not.</p> <p>QD80: Do any other IPs and specifically statutory undertakers affected by the Proposed Development consider that they should benefit from Protective Provisions? If so, why and what ought the provisions to contain?</p> <p>QD81: Are there any other requests for amendments to Protective Provisions? If so what changes are sought and why?</p>	
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