

The Planning Inspectorate  
The A303 Amesbury to Berwick Down  
Case Team  
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**Our ref:** WX/2022/136152/03-L01  
**Your ref:** TR010025  
**Date:** 02 August 2022

Dear Sir/Madam

**A303 STONEHENGE (AMESBURY TO BERWICK DOWN) DEVELOPMENT  
CONSENT ORDER APPLICATION. REQUEST BY DEPARTMENT FOR  
TRANSPORT FOR COMMENTS ON THE INFORMATION PROVIDED AS PART OF  
THE APPLICANT'S RESPONSE TO SECRETARY OF STATE LETTER DATED 20  
JUNE 2022.**

Thank you for your email dated 13 July 2022, consulting all interested parties on the information provided by the applicant, National Highways, in response to the Secretary of State's letter dated 20 June 2022.

We have reviewed the information provided, which includes reports and plans relating to potential alternative routes and options. If any of these alternative schemes were proposed to be taken forward, we consider there is **insufficient evidence** currently to support the conclusions of the Environmental Appraisals, and we would have **significant concerns** in relation to the potential impact on groundwater and flood risk matters. We would therefore require further information to be provided as part of any amended Development Consent Order (DCO) scheme. This is discussed in the following paragraphs.

**Groundwater**

We provide comments on the following documents which are relevant to controlled waters impacts from the potential alternatives to the previously approved DCO Scheme:

- Applicant's response to the request for comments Q2 - Conclusion on alternative routes Environmental Appraisal – Bored Tunnel Extension Document reference: Re-determination 4.7 – National Highways, July 2022
- Applicant's response to the request for comments Q2 - Conclusion on alternative routes Environmental Appraisal – Cut and Cover Tunnel Extension Document

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The modelling and assessment carried out on the DCO Scheme design showed that the scheme would raise groundwater levels to the north and lower groundwater levels to the south of the tunnel alignment. A longer section of tunnel below groundwater level would broaden the area over which those impacts will occur and potentially increase their magnitude. Extending the tunnel to the west brings it, and its impacts, closer to sensitive water features including the River Till and a number of groundwater abstractions.

The relationship between the vertical alignment of the extended tunnel alternatives and the groundwater level have not been presented and there has been no modelling and assessment of the extent and magnitude of impacts from a c.40% longer tunnel. This information is required to determine the likely impacts from the alternatives and whether they are acceptable or can be adequately mitigated.

We therefore do not consider that there is sufficient evidence to support the conclusions of the Environmental Appraisals that alternatives with a longer tunnel element would have an effect on controlled waters receptors that is equivalent to that of the DCO Scheme.

Chapter 4.8.4 of both documents state that impacts to the aquifer and River Till from any dewatering would be controlled by the abstraction/ transfer licence. A licence will only be granted if it can be demonstrated that the operation will not pose an unacceptable risk to the environment or existing abstractions. The applicant should consider alternatives to dewatering and the potential control and mitigation measures that may be required to address the risks from dewatering. We recommend these assessments are carried out and the licence application process is begun as early as possible to avoid delays to the scheme. This is especially true for the Cut and Cover Tunnel Extension option which, due to the method of construction may require significant dewatering. One of the key mitigation measures in the Outline Environmental Management Plan (OEMP) for the DCO Scheme to manage risks to water resources is that dewatering would be minimised through use of a closed face tunnel boring machine that can bore through saturated ground without the need for dewatering. The scale of dewatering required for a cut and cover approach may be significant and not in line with the principles agreed during the Examination and reflected in the DCO Scheme and therefore constitutes a greater risk to the environment. There is currently insufficient information to determine whether the impacts of the likely dewatering could be adequately and economically mitigated, and it cannot therefore be assumed that a cut and cover approach is a viable option.

Paragraph 4.8.6 of both documents states that the groundwater modelling undertaken so far supports the conclusion that there will be no significant effects at the River Till from an extension to the tunnel. Paragraphs 5.2.36 and 5.2.35 relating to the Bored Tunnel Extension and Cut and Cover Tunnel Extension Environmental Appraisals respectively state that impacts on groundwater flow will be no more significant than the DCO Scheme. We disagree strongly with these statements since the impacts of an extended tunnel have not been modelled and the length of tunnel is significantly longer and comes closer to the River Till. The groundwater modelling conducted to date was set up to represent the DCO Scheme design and therefore cannot be considered to demonstrate the effects of a different design. We recommend that the modelling is repeated to demonstrate the extent and magnitude of impacts from the alternative designs and inform any decision to alter the proposed scheme design.

Despite identifying groundwater abstractions as potential receptors, the Road Drainage and the Water Environment sections in chapters 4 and 5 make no reference to potential changes to groundwater levels at abstraction points that may be caused by an extended tunnel. The extension would mean the tunnel is closer to some abstractions and could potentially bring them within the extent of groundwater level changes. The potential for derogation to existing abstractions should be assessed and mitigation proposed where necessary.

### **Flood risk**

We have reviewed the following documents in detail, which are the ones which addressed flood risk, in particular section 4.

- A303 Amesbury to Berwick Down Secretary of State letter 20 June 2022 Applicant's response to the request for comments Q2 - Conclusion on alternative routes Environmental Appraisal – Bored Tunnel Extension Document reference: Re-determination 4.7  
[TR010025-003632-A303.4.7.SoS letter 20 June 2022.Q2.EA Bored Tunnel Extension.Redetermination-4.7.202207011.pdf \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/tr010025-003632-A303.4.7.SoS%20letter%20June%202022.Q2.EA%20Bored%20Tunnel%20Extension.Redetermination-4.7.202207011.pdf)
- A303 Amesbury to Berwick Down Secretary of State letter 20 June 2022 Applicant's response to the request for comments Q2 - Conclusion on alternative routes Environmental Appraisal – Cut and Cover Tunnel Extension Document reference: Re-determination 4.8  
[TR010025-003633-A303.4.8.SoS letter 20 June 2022.Q2.EA Cut & Cover Tunnel Extension.Redetermination-4.8.202207011.pdf \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/tr010025-003633-A303.4.8.SoS%20letter%20June%202022.Q2.EA%20Cut%20&%20Cover%20Tunnel%20Extension.Redetermination-4.8.202207011.pdf)

We have also reviewed the following document, which provides an overview of the options being proposed as alternatives:

- A303 Amesbury to Berwick Down Secretary of State letter 20 June 2022 Applicant's response to the request for comments Q2 - Conclusion on alternative routes – Overarching response Document reference: Re-determination 4.2  
[HE551506-AMW-GEN-ZZ\\_ZZ\\_ZZ\\_ZZ-RP-IM-6000731 \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/he551506-AMW-GEN-ZZ_ZZ_ZZ_ZZ-RP-IM-6000731)

Section 4.8 of both of the first two documents state that the alternative tunnel methodologies will not impact the flow to the River Till or Wylye due to the distance between these and the tunnel extension. As mentioned in our groundwater comments above, there is potential here for groundwater/ flow to be interrupted, particularly as the tunnel extension is 1km longer and the groundwater modelling has not been updated to assess the potential impact.

Assessment of the alternative options requested by the Secretary of State seem to be able to utilise the mitigation already in place for the DCO such as the OEMP and abstraction licence from the Environment Agency for the groundwater. The groundwater modelling and associated reports are stated to still be relevant.

The submitted information states that surface water flood risk will be present for one of the alternatives due to the movement of the junction further west. We would expect the Lead Local Flood Authority (LLFA) to comment on this.

As mentioned in our groundwater comments above regarding the differing methodologies and the need for dewatering, the DCO scheme only required minimal dewatering due to the closed face tunnel boring machine. With the other methodologies more significant dewatering will be required and the abstraction licence will not address the potential flood risk issues that this will present, such as timings of

this dewatering and the lack of assessment of the increase in risk this may cause downstream.

We have **significant concerns** due to the potential risk of flood risk being increased downstream from the significant increase in dewatering requirements from the differing methodologies proposed, and that no assessment or mitigation has been discussed or proposed.

**Biodiversity**

We have reviewed the cut and cover tunnel extension and bored tunnel extension environmental appraisal documents in relation to biodiversity matters. We do not have any further comments to what has been submitted previously.

I hope this information is useful, but please contact me if you have any queries.

Yours faithfully

**Miss Katherine Burt**  
**Sustainable Places - Planning Specialist**

