

A303 Amesbury to Berwick Down

Secretary of State letter 20 June 2022

Applicant's response to the request for comments
Q1, Q3–Q6 – Response document

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Table of contents

Chapter	Pages
1 Consortium of Stonehenge Experts	1
1.1 Question	1
1.2 Response	1
2 Conclusion on alternative routes	6
2.1 Question	6
2.2 Response	6
3 Information and assessments	7
3.1 Question	7
3.2 Response – General	7
3.3 Response - Stonehenge Alliance	7
3.4 Response - Consortium of Stonehenge Experts	16
3.5 Response - Wiltshire Council	17
3.6 Response - International Council in Monuments and Sites UK (ICOMOS)	31
3.7 Response - Historic England	34
3.8 Response - Environment Agency	35
3.9 Response - Rachel Hosier	44
4 Stonehenge Alliance	54
4.1 Question	54
4.2 Response - Biodiversity baseline surveys and reports	54
4.3 Response - Issues relating to adverse impacts of tunnelling through chalk bedrock	59
5 Environmental Statement on heritage matters	63
5.1 Question	63
5.2 Response	63
6 Newly assessed assets	78
6.1 Question	78
6.2 Response	78

1 Consortium of Stonehenge Experts

1.1 Question

1.1.1 The Secretary of State notes in response to his consultation letter dated 24 February 2022 that the Consortium of Stonehenge Experts identified that four assets are not included in the Applicant's assessment.

1.1.2 The Applicant is asked to confirm to the Secretary of State whether these assets have been included in the assessment and, if so, to specify in the material where the assessment of those assets is set out. If an assessment has not been undertaken, the Applicant is asked to provide the necessary assessment on these assets so the Secretary of State can appropriately consider them.

1.2 Response

1.2.1 The Consortium set out four heritage 'assets' they view have not been considered by National Highways:

- (a) Remains of a large Beaker-period settlement with burials
- (b) Remains of a probable Early Neolithic settlement west of the Beaker-period settlement
- (c) Remains of a probable Early Neolithic settlement at the eastern portal
- (d) Remains of a Mesolithic settlement at Blick Mead

1.2.2 National Highways can clarify that all of the information put forward by the Consortium, excepting that of sedaDNA in relation to (d) (the Blick Mead Site), is not 'recently available' or 'largely new information'. We consider (d) (the Blick Mead Site) below following our consideration of (a), (b) and (c).

1.2.3 The information for 'assets' (a), (b) and (c) draws on information presented in the National Highways archaeological evaluation reports submitted to the examination relating to the [Western](#) and [Eastern](#) Portals (including figures for the [western](#) and [eastern](#) reports) [REP1-045 to REP1-048], and the [Review of Ploughzone Lithics and Tree Hollow Distributions](#) [REP3-024]. This information already was known about and was considered by National Highways in their DCO application documentation, specifically in the [Environmental Statement Chapter 6: Cultural heritage](#) [APP-044] (paragraph 6.9.25) and the [Heritage Impact Assessment](#) [APP-195] (paragraphs 6.10.33, 6.10.34, 9.3.7 and Table 10), as well as [information we provided during the public examination](#) [REP5-003] (paragraphs 34.1.2 – 34.1.5, 34.1.9 and 34.1.26).

1.2.4 With regards to ‘assets’ (a), (b) and (c) (as described at the top of this response), none of these sites are identified as assets in the Wiltshire and Swindon Historic Environment Record, which was consulted in December 2021 for the purposes of responding to the Secretary of State’s Statement of Matters in January 2022. They are therefore not recognised regionally as heritage assets.

1.2.5 National Highways’ position is that our responses to examination already considered these assets, and therefore our previous assessment still stands (REP5-003, paragraphs 34.1.2 – 34.1.5, 34.1.9 and 34.1.26).

1.2.6 Decisions regarding protection of archaeological monuments or sites as Scheduled Monuments under the Ancient Monuments and Archaeological Areas Act 1979 (as amended) are a matter for the Secretary of State for Digital, Culture, Media and Sport, advised by Historic England.

1.2.7 In compiling the Environmental Statement Chapter 6: Cultural heritage and the Heritage Impact Assessment, National Highways has considered the value (importance) of the remains taking into account, where relevant, the criteria for national importance (the Principles of selection for Scheduled Monuments at Annex 1 of the DDCMS Scheduled Monuments Policy Statement¹) and the relevant Historic England Scheduling Selection Guides, in this case ‘Sites of Early Human Activity’². The archaeological remains identified by the evaluation surveys [REP1-045 to 048] at the Western and Eastern Portals and their approach cuttings comprise a small number of subsurface archaeological features (small pits) buried beneath the topsoil and, within the topsoil, scatters of worked flint flakes comprising mostly ‘debitage’ (waste material from the production of flint tools) and occasional flint tools that are characteristic of activity of Late Neolithic and Early Bronze Age date. The Scheduling Selection Guide for Early Human Activity notes (p. 1) that, ‘*Sites of early human activity without structures [...] are defined as comprising groups of objects of various type and their associated deposits*’. This is the case with the archaeological remains identified by the evaluation surveys within the footprint of the Scheme at the Western and Eastern Portals. The selection guide also notes (p. 1) that, ‘*Broadly speaking, for legal reasons [...] those without structures are not presently eligible for designation by scheduling*’.

1.2.8 The Heritage Impact Assessment (page 483) assesses the archaeological remains within the footprint of the Scheme at the Western and Eastern Portals and their approach cuttings as of Medium value (importance) (Designated or non-designated assets that contribute to regional research objectives). This assessment follows the Criteria for determining the value of heritage assets set out in the Environmental Statement Chapter 6: Cultural heritage (Table 6.2), and takes account of the nature of the material and the lack of association with subsurface features.

¹ [Scheduled Monuments & nationally important but non-scheduled monuments \(October 2013\)](#)

² [Sites of Early Human Activity Scheduling Selection Guide](#)

National Highways' position, therefore, is that these archaeological remains are not schedulable under the 1979 Act, nor are they considered to be of equivalent significance to Scheduled Ancient Monuments and of National importance.

1.2.9 National Highways' submission on the value (significance) of 'assets' (a), (b) and (c) still stands, and the likely impact from the Scheme and the appropriate mitigation measures are as set out in the DCO application [Environmental Statement Chapter 6: Cultural heritage](#) (paragraph 6.9.25) and the [Heritage Impact Assessment](#) (paragraphs 6.10.33, 6.10.34, 9.3.7 and Table 10). The [Detailed Archaeological Mitigation Strategy](#), as updated in May 2020 in response to the Secretary of State's request, provides for a comprehensive programme of archaeological excavation and recording of the archaeological remains located within the footprint of the Scheme in advance of construction, followed by a programme of post-excavation assessment, analysis and publication.

1.2.10 With regards to the Mesolithic site at Blick Mead (d), it is recognised by National Highways as being of High (National) significance. This was recognised in our October 2018 DCO application, that is in the [Environmental Statement Appendix 6.3: Gazetteer of Archaeological Assets](#) (see page 75, Asset 4032).

1.2.11 The Mesolithic site at Blick Mead was considered extensively by National Highways within the DCO application documentation:

- Environmental Statement (ES) (see ES Chapter 6: Cultural heritage (Table 6.9, page 53)
- ES Chapter 6: [Appendix 6.8: Cultural Heritage – Summary of Non-significant effects](#) (Table 1.2, page 5, asset 4032) [APP-217]
- ES Chapter 6: Appendix 6.1: Heritage Impact Assessment (paragraph 5.10.29 (a)) [APP-195]
- ES Chapter 11: [Appendix 11.4: Groundwater Risk Assessment](#) (Annex 3, Blick Mead Tiered Assessment) [APP-282]

1.2.12 The impact of the DCO Scheme on the Mesolithic site at Blick Mead was the subject of extensive discussion during examination:

- [Deadline 2 Submission – Response to the Examining Authority's Written Questions – 8.10.5 Cultural heritage \(CH.1\)](#) [REP2-025] – Responses to questions CH.1.8, CH.1.17, CH.1.26, CH.1.31, CH.1.45
- [Deadline 2 Submission – Response to the Examining Authority's Written Questions – 8.10.11 Flood risk, groundwater protection, geology and land contamination \(Fg.1\)](#) [REP2-031] - Responses to questions Fg.1.26 – Fg.1.29

- Deadline 3 Submission – 8.17 – Written summaries of oral submissions put at Open Floor Hearings held on 22 and 23 May 2019 [REP3-012] - Paragraphs 3.4.1.1-3.4.1.9 and 3.4.3.1
- Deadline 3 Submission – 8.18 – Comments on Written Representations [REP3-013] – Paragraphs 3.4.2-3.4.7, 10.2.36-10.2.40, 12.3.98-12.3.101, 21.4.59-21.4.62, 26.3.6, 26.3.8, 44.2.2, 44.5.22, 45.2.26-45.2.28, 57.1.2-57.1.3, 57.1.5-57.1.8, 57.2.3, 57.2.7-57.2.11, 57.3.2, 57.3.5-57.3.6, 58.1.33-58.1.34, 60.2.2, 60.2.7-60.2.8, 60.2.22, 60.3.2, 60.3.7-60.3.13, 61.5.2, 67.2.9
- Deadline 4 Submission – 8.30.2 – Written summaries of oral submissions put at Cultural Heritage hearings on 5th and 6th June 2019 [REP4-030] - Section 6 (vii) and Section 8 (I), (ii), (iii), (iv)
- Deadline 4 Submission – 8.31 – Comments on the DAMS and on any further information requested by the ExA and received to Deadline 3 [REP4-036] – Paragraphs 8.2.8, 13.1.5
- Deadline 5 Submission – 8.36 – Comments on any further information requested by the ExA and received at Deadline 4 [REP5-003] – Paragraphs 7.5.13, 9.1.4, 11.2.33, 34.1.40-34.1.46, 34.1.63-34.1.74
- Deadline 6 Submission – 8.37.4 – Responses to the ExA’s Written Questions – Cultural Heritage (CH.2) [REP6-022] - Response to question CH.2.8
- Deadline 7 Submission – 8.44 – Comments on any further information requested by the ExA and received at Deadline 5 and 6 [REP7-021] - Paragraphs 13.2.15, 27.1.30-27.1.31, 40.1.6-40.1.8
- Deadline 8 Submission – 8.49 – Comments on any further information requested by the ExA and received to Deadline 7 [REP8-013] – Paragraphs 2.1.4, 2.1.7, 2.1.23-2.1.26, 6.5.1, 8.1.1-8.1.3
- Deadline 8 Submission – 8.52.1 – Written summary of oral submissions put at Cultural heritage, landscape and visual effects and design hearing on 21 August 2019 [REP8-016] - Section 8
- Deadline 8 Submission – 8.52.3 – Written summary of oral submissions put at Flood risk, groundwater protection, geology and land contamination hearing on 29 August 2019 [REP8-018] - Section 7
- Deadline 8 Submission – 8.52.4 – Written summary of oral submissions put at draft Development Consent Order hearing on 30 August 2019 [REP8-019] - Section 4.9(iv)
- Deadline 9 Submission – 8.55 – Comments on any further information received by the ExA and received to Deadline 8 [REP9-022] – Paragraphs

2.1.4, 3.4.7, 10.1.22, 12.1.8-12.1.12, 12.2.1-12.2.2, 12.3.1, 16.1.7-16.1.9, 18.1.12, 21.2.4-21.2.7

- [Closing Submission - 8.70](#) - Paragraphs 5.5.1 to 5.5.3
- [Response to Secretary of State Consultation 3 \(2020\)](#) – Detailed Response Tables, Paragraphs 2.33-2.35 on pages 78-87

1.2.13 The Blick Mead site will not be physically impacted by the Scheme, nor will the groundwater levels at the Blick Mead Site change due to the construction and operation of the Scheme. The current preservational conditions that exist at Blick Mead that allow the preservation of its nationally important archaeology, including sedaDNA (sedimentary ancient DNA), will not be affected.

1.2.14 Historic England confirmed that it endorsed National Highways' approach and interpretation of Historic England's tiered assessment guidance. Historic England also noted that sufficient information had been brought together for the conceptual model to have reached an acceptable level. This is noted in the [Examining Authority's Recommendation Report](#) (see paragraph 5.9.57).

1.2.15 The Examining Authority was satisfied that a Historic England Tier 4 assessment was not required and that the Tiered Assessment conducted by National Highways was adequate – as noted in the Recommendation Report's paragraph 5.9.101 - as well as being adequate to indicate the likely effect on the Blick Mead Site from the construction of the Scheme (see Recommendation Report paragraph 5.9.106).

1.2.16 The [Outline Environmental Management Plan](#), as updated in May 2020 in response to the Secretary of State's request, requires in measure MWWAT10 that the Groundwater Management Plan sets out how Blick Mead is to be considered to safeguard the groundwater levels associated with the preservation of archaeological remains at the Blick Mead site. Nonetheless, as confirmed above and in the referenced application and examination documents, there would be no likely significant effect on Blick Mead in terms of heritage impact, before or after any mitigation derived from the Groundwater Management Plan.

2 Conclusion on alternative routes

2.1 Question

2.1.1 The Secretary of State notes that a number of consultees have raised the issue that it is not clear how the Applicant has arrived at the conclusion that the alternative tunnel routes would only have minimal additional heritage benefits over the Development.

2.1.2 The Applicant is asked to explain fully the basis on which they reached this conclusion. The explanation should include full detail of reasoning, the matters considered and any methodology that was used and, where applicable, be cross-referenced to the examination material or subsequent information provided to the Secretary of State. The Applicant should also provide any additional documents that are relevant to understand the conclusion that the Applicant reached on this matter.

2.1.3 The Applicant is also asked to confirm whether the assessment of the heritage impact of alternative routes has been updated to take into account the 7 additional monuments that were added to the heritage baseline and provide any additional documents that are relevant.

2.2 Response

2.2.1 Our response to this request for comments is covered in separate documents. Please see the Applicant's response to the request for comments - Q2 - Conclusion on alternative routes – Overarching response (Re-determination 4.2), which sets this out.

3 Information and assessments

3.1 Question

3.1.1 The Applicant is asked to comment on the consultation responses from the consultation of 29 April 2022 where further information and/or assessments are sought. In particular, responses from: Stonehenge Alliance; Consortium of Stonehenge Experts; Wiltshire Council; International Council in Monuments and Sites UK; Historic England. The Applicant is asked to provide additional information and/or assessments or other documents where it is necessary to deal with the matters raised in the consultation responses.

3.2 Response – General

3.2.1 In responding to this question, National Highways have referred to the consultation responses received from interested parties in response to the Secretary of State's consultation letter of 24 February 2022, rather than to their consultation letter of 29 April 2022 as referenced in the Secretary of State's letter of 20 June 2022. This is because three of the five parties referred to in the letter of 20 June did not respond to the consultation of 29 April 2022, which was limited to the topic of carbon, and another of the parties – Wiltshire Council – reiterated points made in their response to the 24 February 2022 consultation.

3.3 Response - Stonehenge Alliance

3.3.1 It is noted that, in their consultation response of 4 April 2022, responding to the consultation of 24 February 2022, the Stonehenge Alliance comment on a wide range of issues. In responding to the Secretary of State, and as requested, National Highways focus on the parts of their response where it is clear that Stonehenge Alliance are seeking further information and / or assessments.

3.3.2 National Highways stands by our assessment of the significance of designated heritage assets, the contribution of setting to that significance and the impacts of the A303 Scheme upon that significance. We therefore are not revising material in respect of the A303 Scheme that has been previously assessed by National Highways and provided for the DCO application, examination and in response to previous requests from the Secretary of State. In respect of further information / assessment relating to longer tunnel alternatives, we have addressed this in our response to question 2 of the Secretary of State's letter of 20 June 2022.

3.3.3 As requested by the Secretary of State, we address comments made by the Stonehenge Alliance relating to biodiversity baseline surveys and reports as well as

the impacts of tunnelling through chalk in our response to question 4 of the Secretary of State's letter of 20 June 2022.

Carbon

3.3.4 In respect of carbon, on the same day the Stonehenge Alliance submitted their 4 April 2022 response, National Highways submitted an update to section 4 of our document of 11 January 2022 concerning carbon. Whilst the Stonehenge Alliance provided a response to that in June 2022, National Highways maintain that no additional information and / or assessments relating to carbon are needed for the Secretary of State to make a decision on the A303 Scheme. As our April 2022 [Response to the request to update section 4 of their \[National Highways'\] response to the Statement of Matters on carbon \[Re-determination 3.1\]](#) confirms, the information provided to date demonstrates that the Scheme is consistent with [National Policy Statement for National Networks \(NPSNN\)](#). We note that decisions recently have been taken on multiple National Highways projects, for example the M54 to M6 Link Road, on the basis of the same level of information that already has been submitted for the A303 Scheme.

Traffic modelling

3.3.5 The [Transport Assessment Review \[Redetermination-1.4.1\]](#), submitted as part of National Highways' response to the Secretary of State's Statement of Matters on 11 January 2022, documents refinements to the transport modelling, updating the forecasts from those presented in the DCO application and subsequent examination. As noted by the Stonehenge Alliance, the updates aligned the transport models to the then latest guidance provided by the DfT in its Transport Analysis Guidance (TAG) and the current National Transport Model (NTM) Road Traffic Forecasts 2018 (RTF18) forecasts, in addition to updating local sources of uncertainty.

3.3.6 As with previous documents submitted in the DCO application and for the examination of the DCO, the refined transport modelling for the Scheme has followed the approach required by the NPSNN, following the "*national methodology and national assumptions around the key drivers of transport demand*" as set out in paragraph 4.6 of the NPSNN. Paragraph 4.7 of the NPSNN notes that the DfT's TAG (referenced there as WebTAG) is the relevant national methodology. Paragraph 4.6 of the NPSNN notes that an assessment of the scheme impacts under high and low growth scenarios, in addition to the core case is encouraged.

3.3.7 The updated core traffic forecasts, for cars, continue to be based on the latest and current growth forecasts made available by the DfT in the National Trip End Model (NTEM) version 7.2. As noted by the Stonehenge Alliance, the updated traffic forecasts have been updated to incorporate the DfT's latest and current RTF18 Scenario 1 forecasts: as set out in the Transport Assessment Review, these forecasts are used as the basis for the growth of both Light Goods Vehicles (LGV)

and Heavy Goods Vehicles (HGV). The Scenario 1 forecasts represent a central forecast in a range of plausible futures presented in RTF18.

3.3.8 Sensitivity testing across all modes, not just LGV and HGV, has been undertaken following guidance in TAG. The approach adopted to produce high and low growth forecasts follows the guidance given in TAG Unit M4 to help decision-makers assess the merits of the Scheme.

3.3.9 As demonstrated, the transport modelling undertaken, including the recent updates set out in the Transport Assessment Review, fully accords with the latest and current guidance: this includes TAG and RTF18, forming the “*national methodology and national assumptions*” that are required by the NPSNN. The transport modelling undertaken in support of the application for DCO, and in the updates since is, therefore, robust. Indeed, the [Examining Authority’s Recommendation Report](#) concluded that:

“5.17.67. The ExA finds that the Applicant’s approach to modelling is robust and has followed the relevant guidance. Evolution of the model has taken into account consultations with relevant bodies, in particular WC [Wiltshire Council] as Highway Authority, who accept that it is fit for purpose. No substantive evidence of significant forecasting inadequacies or errors have been presented to the Examination.

5.17.68. The ExA acknowledges that travel patterns and vehicle usage may change in future in response to climate change and technological advances. However, in the ExA’s view there is a strong likelihood is that the A303 will remain an important corridor for motorised transport and that congestion will continue to occur at this location without the Proposed Development, even assuming the lower growth forecasts assessed in the TA [Transport Assessment].”

3.3.10 National Highways maintains that the assessment undertaken aligns with DfT TAG, and therefore there is no new / updated assessment to be provided on traffic forecasts. As National Highways has previously demonstrated in the [Case for the Scheme and NPS Accordance](#) [APP-294] and the [Combined Modelling and Appraisal Report](#) [APP-298] there is a clear case for intervention and there is severe congestion on the route, particularly in Busy Periods.

Business Case

3.3.11 The Stonehenge Alliance considers that National Highways must provide an updated business case.

3.3.12 The business case for the A303 Scheme is being developed in compliance with Her Majesty’s Treasury Green Book and Department for Transport guidance, through the 3 core stages of Strategic, Outline and Full Business Case - with the Strategic and Outline stages having been completed previously. The Full Business Case will be produced to seek investment approval to start construction, a decision point that is also dependent upon the DCO having been granted.

3.3.13 National Highways has maintained the currency of the business case, albeit the Full Business Case document is not yet finalised. However, we have provided below a summary of the updated cost benefit analysis figures from 2022, which confirm a Benefits to Cost Ratio (BCR) of **1.55** - an improvement on the BCR of **1.08** (for the publicly financed approach) presented in the DCO application [Case for the Scheme and NPS Accordance](#) [see paragraph 5.3.15], and as referenced by the Stonehenge Alliance:

Summary of Scheme cost benefit analysis and costs

Benefit component (£ million - 2010 Prices and Values)	Case for the Scheme (figures in Tables 5-5 & 5-6 and paragraph 5.3.15)	Updated Cost Benefit Analysis figures – 2022
Costs (PVC)		
Cost estimate	1,206	959
Benefits (PVB)		
Economic Efficiency of Transport System (TEE) benefits (including construction)	252	294
Indirect tax revenues	87	45
Accident benefits	4	2
Increase in pollution (from higher speeds and flow)	-86	-124
Journey time reliability benefits	61	142
Wider economic impacts	35	172
Value of removing road from WHS (contingent valuation)	955	955
Benefits included in Adjusted BCR	1,307 (1.08)	1,486 (1.55)

3.3.14 The improvement in the BCR for the scheme (to **1.55**) is due to:

1. An increase in the Present Value Benefits (PVB) of the Scheme - as a result of updating the traffic, economics and environmental modelling and appraisals in line with the latest government guidance, software and DfT Databook current in Spring 2021, taking into account:
 - a. The updated DfT Databook which included:
 - i. a revised vehicle fleet mix and economic growth forecasts, which led to an increase in the transport economic efficiency benefits and also reduced greenhouse gas emissions - as presented in National Highways' January 2022 [Statement of](#)

Matters Response to Bullet Point Three – Carbon

[Redetermination 1.3] and April 2022 Response to the request to update section 4 of their [National Highways’] response to the Statement of Matters on carbon [Re-determination 3.1]³ - due to greater update of electric vehicles than previously assumed in the modelling.

- ii. the ‘high’ carbon price for the appraisal of greenhouse gas pollution, which led to an increase in the monetary valuation of the dis-benefits, despite a reduction in greenhouse gas tonnes attributed to the Scheme. We also conducted a sensitivity test of latest BEIS carbon prices published in September 2021, which had very limited effect on the Scheme’s value for money.
- b. Updated MyRIAD (Motorway Reliability Incidents and Delays) software released in October 2020, which now includes the capability to assess single carriageway enhancements, and to appraise the associated journey time reliability, including incident related delays
 - c. A broader geographic scope for appraising wider economic impacts to consider the benefits of improved access for the South West to London and the South East
2. A reduction in the Present Value Costs (PVC) of the Scheme - from £1,206 million, as previously presented in the DCO application Case for the Scheme and NPS Accordance [APP-294, see Table 5-6], to £959 million. This cost reduction is due to the application of revised inflation rates as confirmed with the ORR for the Road Investment Strategy 2 portfolio, together with the removal of historic sunk costs as directed by government guidance.

3.3.15 In their section on Project and Programme, the Stonehenge Alliance argue that a combined Business Case and Strategic Environmental Assessment should have been carried out for all projects on the A303/A358 corridor. As our website confirms, some of these projects are uncommitted potential future projects, whereas another - A303 Sparkford to Ilchester – is in construction. It would therefore not be appropriate to provide combined documents for separate projects at different stages of the investment lifecycle. Moreover, our approach to uncommitted projects

³ Carbon emissions tonnages have decreased due to recalculating road user emissions using newer versions of the Department for Environment, Food and Rural Affairs’s Emissions Factor Tool Kit (EFT) than that used for the 2018 DCO application including the Environmental Statement, which was EFT version 8. Our Statement of Matters response in January 2022 provided an assessment using EFT v10.1. EFT v10.1 was also used in calculating the Updated Cost Benefit Analysis figures – 2022 in the table above this paragraph. Our April 2022 submission provided calculations using EFT v11, which is the current version of EFT. EFT v11 includes updated data, projected to 2050 for the first time, relating to the UK vehicle fleet mix and associated emissions, and includes greater uptake rates of electric vehicles than in previous versions of the EFT, including EFT v8 and EFT v10.11. The development and use of EFT is considered in more detail in paragraphs 1.5.4 – 1.5.6 of National Highways’ Response to the request to update section 4 of their response to the Statement of Matters on carbon [Re-determination 3.1].

is consistent with the DfT TAG Uncertainty Log. Projects potentially committed to in DfT's Road Investment Strategy 3, or later road investment strategies, are considered hypothetical, and therefore have not been included in the A303 Scheme assessment.

Environmental Information Review – cultural heritage

3.3.16 The Stonehenge Alliance assert that National Highways, as the applicant, need to inform the decision-maker (i.e. the Secretary of State) of the level of potential harm the development might cause to any designated heritage asset. This is not correct. [Planning practice guidance related to the historic environment](#) states the following:

What assessment of the impact of proposals on the significance of affected heritage assets should be included in an application?

Applicants are expected to describe in their application the significance of any heritage assets affected, including any contribution made by their setting ([National Planning Policy Framework paragraph 189](#)). In doing so, applicants should include analysis of the significance of the asset and its setting, and, where relevant, how this has informed the development of the proposals. The level of detail should be proportionate to the asset's importance and no more than is sufficient to understand the potential impact of the proposal on its significance.

Paragraph: 009 Reference ID: 18a-009-20190723

Revision date: 23 07 2019

3.3.17 National Highways has supplied this in our DCO application documents for cultural heritage – in particular in our Environmental Statement [Chapter 6: Cultural heritage](#) [APP-044] and its accompanying appendices, and also in our [Case for the Scheme and NPS Accordance](#) [APP-294] - in particular our responses to paragraphs 5.131, 5.132, 5.134 and 5.135 of the [National Policy Statement for National Networks](#).

3.3.18 It is for the decision maker to judge the level of harm and whether this is 'substantial' or 'less than substantial' on a designated asset(s). The Planning practice guidance states the following:

How can the possibility of harm to a heritage asset be assessed?

What matters in assessing whether a proposal might cause harm is the impact on the [significance](#) of the heritage asset. As the National Planning Policy Framework makes clear, significance derives not only from a heritage asset's physical presence, but also from its setting.

Proposed development affecting a heritage asset may have no impact on its significance or may enhance its significance and therefore cause no harm to the

heritage asset. Where potential harm to designated heritage assets is identified, it needs to be categorised as either less than substantial harm or substantial harm (which includes total loss) in order to identify which policies in the [National Planning Policy Framework \(paragraphs 194-196\)](#) apply.

Within each category of harm (which category applies should be explicitly identified), the extent of the harm may vary and should be clearly articulated.

Whether a proposal causes substantial harm will be a judgment for the decision-maker, having regard to the circumstances of the case and the policy in the National Planning Policy Framework. In general terms, substantial harm is a high test, so it may not arise in many cases. For example, in determining whether works to a listed building constitute substantial harm, an important consideration would be whether the adverse impact seriously affects a key element of its special architectural or historic interest. It is the degree of harm to the asset's significance rather than the scale of the development that is to be assessed. The harm may arise from works to the asset or from development within its setting.

While the impact of total destruction is obvious, partial destruction is likely to have a considerable impact but, depending on the circumstances, it may still be less than substantial harm or conceivably not harmful at all, for example, when removing later additions to historic buildings where those additions are inappropriate and harm the buildings' significance. Similarly, works that are moderate or minor in scale are likely to cause less than substantial harm or no harm at all. However, even minor works have the potential to cause substantial harm, depending on the nature of their impact on the asset and its setting.

The National Planning Policy Framework confirms that when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). It also makes clear that any harm to a designated heritage asset requires clear and convincing justification and sets out certain assets in respect of which harm should be exceptional/wholly exceptional (see [National Planning Policy Framework, paragraph 194](#)).

Paragraph: 018 Reference ID: 18a-018-20190723

Revision date: 23 07 2019

3.3.19 See also the section on Decision Making, paragraphs 5.128 – 5.138 in the National Policy Statement for National Networks.

3.3.20 As stated earlier in this response, National Highways stands by our assessment of the significance of designated heritage assets, the contribution of setting to that significance and the impacts of the A303 Scheme upon that significance. We therefore have no further / amended information or assessments to provide on this area in relation to the A303 Scheme.

Environmental Information Review – other topics

3.3.21 On Landscape and Visual, we can confirm that the changes in assessment of likely significant effects that have been reported in our 2022 response to the Statement of Matters are as a result of the changes in guidance, rather than a revised professional judgement, as already confirmed by our Environmental Information Review document [Redetermination 1.4]. The 2018 Environmental Statement for the Scheme and the rest of the environmental information submitted by National Highways to the examination and post-examination, as supplemented by our 2022 response to the Statement of Matters, is adequate and sufficient to inform the Secretary of State’s re-determination of the application.

3.3.22 On Noise and Vibration, the Stonehenge Alliance claim that “*the problem of potential damage to archaeological remains resulting from vibration of the tunnel boring machine was not fully resolved at the Examination stage and appears not to have been further addressed by NH in the interim*”. However, section 5.13 on this topic in the [Examining Authority’s Recommendation Report](#) specifically considers construction vibration effects on archaeology including from the Tunnel Boring Machine, with the Examining Authority concluding (in paragraph 5.13.156) that:

“In respect of the vibration effects that could occur the ExA are satisfied that with the appropriate mitigation in place as secured through the OEMP [Outline Environmental Management Plan] and dDCO that no significant adverse effects would occur, and that the development would comply with the requirements of the NPSNN, NPPF and local planning policies”.

Alternatives

3.3.23 The Stonehenge Alliance claim that insufficient comparative information has been provided on options that would fully bypass the World Heritage Site, including in our consultations prior to the DCO application. However, Page 16 / Section 6 of our Public Consultation Booklet of January 2017 (see [Appendix B1 of the Consultation Report](#) prepared for the DCO application) signposts the considerable information that was published at this point, being the Technical Appraisal Report. The [Technical Appraisal Report](#) [REP1-031, also see appendices REP1-032 - REP1-038] was submitted to the DCO examination. When we announced the preferred route for the Scheme in September 2017, we also published the [Scheme Assessment Report](#) [REP1-023, also see appendices REP1-024 - REP1-030], which likewise was submitted to the DCO examination. The Technical Appraisal Report and the Scheme Assessment Report explain why two route options were taken forward for public consultation and further design development and appraisal and why other options were discounted. For further detail on the contents of the Technical Appraisal Report and Scheme Assessment Report, including their appendices, please see our comments on the representation from ICOMOS in section 3.6 of this document.

3.3.24 It is not true, as the Stonehenge Alliance have stated, that National Highways has failed to provide assessments to substantiate our conclusion that option F010 would have a greater overall environmental impact. Our January 2022 [Statement of Matters Response to Bullet Point One – Alternatives](#) [Redetermination 1.1] signposts to the Technical Appraisal Report and Scheme Assessment Report. The [Technical Appraisal Report Appendices G and H](#) [REP1-038] provide the assessments for option F010. The methodology and conclusions of the environmental assessment are provided in Volume 1 of the Technical Appraisal Report. Both Volume 1 and Appendices G and H present information at the level of individual environmental topics. As stated above, this information was first published in January 2017 (for public consultation), and then submitted to the DCO examination in spring 2019. This information is not missing as claimed.

3.3.25 The Scheme has followed a comprehensive, robust and proportionate optioneering process. The appraisal methodology applied in the optioneering process was common across options (including corridor options). This was a level of assessment appropriate for the early project development stage of options appraisal, and it is in accordance with the applicable widely recognised transport sector industry guidance found in the Department for Transport’s (DfT’s) Transport Analysis Guidance (TAG, previously referred to as WebTAG). Appraisal of corridors and route options within selected corridors used the Early Assessment and Sifting Tool (EAST) and the Options Assessment Framework contained in DfT’s TAG. This proportionate appraisal provided appropriate evidence for the staged scheme appraisal using the DfT’s Business Case Five Case Model criteria. Options were subject to a multi-criteria assessment considering the Client Scheme Requirements, national and local policies, and implications with regard to construction and civil engineering, traffic and operation, heritage, environment, programme and cost.

3.3.26 It was not necessary to carry out the same level of assessment for each option that subsequently was required for the DCO Scheme to meet the statutory requirements for the application, including those around statutory environmental impact assessment and heritage impact assessment. This degree of assessment is only required for the proposals that relate to an application for development consent. It would not be proportional, due to the scale of work and resource that would be involved, to carry out this level of assessment for multiple options.

3.3.27 With reference to the Stonehenge Alliance’s comments on our assessments of the alternative tunnel routes (cut and cover and longer bored tunnel alternatives), please see our separate response to question 2 of the Secretary of State’s letter of 20 June 2022.

3.3.28 On modal alternatives, the Stonehenge Alliance argue that National Highways only gave “*cursory consideration to non-road alternatives*” in the Technical Note being Appendix 8.5 to the DCO application’s [Transport Assessment](#) [APP-297]. However, the Technical Note demonstrates that walking, cycling and local public

transport are not viable alternatives to car use for most of the journeys made on this section of the A303 due to the trip lengths that are involved. Moreover, later responses to specific questions on this topic were provided to the Examining Authority during the DCO examination, including our response to Question Tr.1.37 in our [Deadline 2 Submission - 8.10.16 - Traffic and Transport \(Tr.1\)](#) [REP2-036]. Paragraph 5.17.53 of the [Examining Authority's Recommendation Report](#) confirms that the Examining Authority “*accepts that there is no realistic prospect of improvements to public transport capable of delivering a decisive modal shift away from reliance on private motorised transport for the majority of trips in this corridor, whether undertaken for leisure or business purposes. Accordingly, the ExA accepts that the alternative modes considered would not provide a solution to the problems experienced on the A303 between Amesbury and Berwick Down, or meet the principal objectives of the Proposed Development*”.

3.4 Response - Consortium of Stonehenge Experts

3.4.1 National Highways have reviewed the representation from the Consortium of Stonehenge Experts to identify content where further information and/or assessments are sought. We conclude that we have commented on these parts of their representation in our response to question 1 above, in this document.

3.5 Response - Wiltshire Council

Topic	Matter raised	Response
Alternatives	<p>The Council also wishes to understand the parameters upon which the updated environmental information has been utilised to inform this submission. It is noted that in paragraphs 3.3.4 and 4.3.6 it states: “the baseline for the western approach road and western portal areas has not changed since the previous assessment”, however in the Environmental Review Information (document reference number 1.4), the cultural heritage baseline has been updated with the inclusion of additional monuments. It could be that the additional monuments have not been referenced due to not being within a specific proximity of the alternative option being considered, however if this is the case, it is considered that the assessment parameters should be clearly stated.</p>	<p>As stated in National Highways’ Statement of Matters Response to Bullet Point Four – Environmental Information Review [Redetermination 1.4, see paragraph 3.3.11], “[t]he majority of the [Historic Environment Record] HER updates represent heritage assets already assessed in the 2018 ES and are therefore not ‘new’ heritage assets requiring additional consideration as part of the redetermination” of the DCO application. This is the case with regards to the additional HER entries within the western approach road and western portal areas, which relate exclusively to features identified during the 2018 archaeological evaluation work carried out for the Scheme’s DCO application: all of these features were known and considered in the 2018 ES. As an example of how and where they were considered, a small ‘hengiform’ monument identified by ground penetrating radar survey (‘anomaly 10000’) is noted in ES Chapter 6: Cultural Heritage [APP-044] at paragraph 6.6.26, and the impact of the DCO Scheme on it is assessed in the Heritage Impact Assessment [APP-195] on pages 481-2 (as amended in the Errata Report [REP7-022], page 15) as Slight adverse. Hence it is correct that, as you state, “the baseline for the western approach road and western portal areas has not changed since the previous assessment”.</p>

Topic	Matter raised	Response
		<p>See also our comments below relating to the HER update.</p> <p>Please also see our response to question 2 of the Secretary of State's 20 June 2022 letter for further information sought by Wiltshire Council in this section of their consultation response.</p>
Carbon	<p>The Department of Transport are in the process of developing the new Local Transport Plan guidance and the technical guidance for quantifiable carbon reductions. A public consultation on the emerging guidance is expected to be held in the summer 2022 with the guidance published in autumn 2022. The target date for the updated Local Transport Plans to be in place is spring 2024 with the future funding condition due to be phased in in 2025/26.</p> <p>Until this guidance is available, the exact extent of the requirements on Local Authorities is unknown, however it is assumed that it will be necessary to estimate the current baseline for transport emissions in the local authority area and calculate how transport emissions are expected to change over time without any specific interventions. The estimated reduction in carbon emissions to be achieved through the Local Transport Plan will then need to be calculated, which is likely to be</p>	<p>There is no statutory requirement to calculate this data to inform the Secretary of State's decision on the A303 Scheme. No additional information and / or assessments relating to carbon are needed for the Secretary of State to make a decision on the A303 Scheme. We note that decisions recently have been taken on multiple National Highways projects, for example the M54 to M6 Link Road, on the basis of the same level of information that already has been submitted for the A303 Scheme.</p> <p>Moreover, as set out in Wiltshire Council's representation, the requirements for local authorities from the forthcoming DfT guidance on the development of Local Transport Plans are not known at this time. It would be premature to prepare calculations when the exact requirements of what will be useful for Wiltshire Council have not been confirmed by DfT. Separate to the re-determination of the DCO and once these requirements have been published, National Highways will engage with Wiltshire Council as needed.</p>

Topic	Matter raised	Response
	<p>required to be supported by robust evidence as to how these expected reductions have been derived.</p> <p>...the increase in emissions as a percentage of the county target for transport decarbonisation along the High Ambition Pathway (25% reduction in passenger miles travelled per person) at 2030 and 2045 should be calculated. The actual and percentage increase in passenger miles between now and 2030 and 2045 should also be calculated, since these will need to be offset by measures to reduce passenger miles elsewhere.</p>	
Carbon	<p>As the A303 Stonehenge scheme is part of a wider programme of 8 schemes along the A303 corridor, it is expected that National Highways will calculate the carbon impacts of this wider programme as a percentage of the total emissions during that carbon budget in response to the Secretary of State's request. Wiltshire Council therefore requests that it be given the opportunity to update this response once this further information has been provided by National Highways.</p>	<p>National Highways are not in a position to provide an assessment of the cumulative effects of the greenhouse gas emissions for the A303 Scheme for anything other than the national level carbon budgets. This position has been set out and explained in section 1.3 of National Highways' response to the request to update section 4 of their response to the Statement of Matters on carbon [Re-determination 3.1].</p> <p>With reference to the programme of schemes for the A303 / A358 corridor, where a scheme had reached the appropriate certainty level set out in the Design Manual for Road and Bridges (DMRB) or Transport Analysis Guidance (TAG), that scheme was included within the future do-minimum and do-something scenarios for the appraisals for the A303 Scheme.</p>

Topic	Matter raised	Response
		<p>This provided a cumulative assessment of the A303 Scheme with the other A303 / A358 corridor schemes. The A303 / A358 corridor schemes included were A303 Sparkford to Ilchester and A358 Taunton to Southfields. Other schemes on the A303 / A358 corridor have not yet reached the threshold of delivery certainty mandated by TAG to be included in the forecasts.</p>
Cultural heritage	<p>Wiltshire Council welcomes the inclusion of the 7 additional monuments into the baseline assessment for cultural heritage. The Council concurs that the information contained within Appendix 3.1 of the Environmental Information Review (document reference number 1.4) contains an overview of the information required to be taken into account for the re-determination of the development consent application for the scheme. However, without further information on the methodology and approach of how the presented information has been assessed, the Council is unable to concur with the National Highways conclusion that that the updated baseline assessment does not alter the outcome of the 2018 cultural heritage assessment within the Environmental Statement. The Council therefore requests the full baseline assessment is provided</p>	<p>The updated baseline archaeological gazetteer submitted to the Secretary of State in February 2022 [Redetermination 2.1] identifies 100 additional heritage assets that have been added to the Wiltshire and Swindon Historic Environment Record (HER) since publication of the 2018 ES.</p> <p>This document, Appendix 3.1 of the Environmental Information Review [EIR; Redetermination 1.4], identifies significant effects on 10 of the 100 heritage assets that would arise due to construction (Table 3.1) and operation (Table 3.2) of the Scheme. Non-significant effects are identified on 7 of the 100 assets due to construction (Table 3.3) and operation (Table 3.4). The new likely significant effects identified in EIR Appendix 3.1 are assessed as Large beneficial effects. The new non-significant effects are assessed as Slight beneficial effects. No new likely significant adverse effects, or non-significant adverse effects, have been identified. No impacts have been identified in respect of the</p>

Topic	Matter raised	Response
	<p>by National Highways in order for it to be able to reach a conclusion on this matter.</p> <p>Similarly, in paragraph 3.3.11 it states: “comparison of the updated HER and NHLE datasets against the 2018 ES baseline has not identified any new heritage assets that would be adversely impacted by the Scheme.” However, in accordance with the comments above, the Council is not in a position to concur with the National Highways conclusion that no additional likely significant adverse effects on cultural heritage are predicted, until further information relating to the methodology and approach of how the presented information has been assessed is provided for review and verification.</p>	<p>remaining heritage assets identified in the updated baseline archaeological gazetteer [Redetermination 2.1].</p> <p>The assessment methodology follows that set out in the EIA scoping report (2017) and applied in the 2018 ES. The 2018 ES Chapter 6: Cultural Heritage reported significant effects on cultural heritage and archaeology in Tables 6.10, 6.11 and 6.12. Non-significant effects (slight adverse or slight beneficial) were reported in ES Appendix 6.8.</p> <p>Neutral effects – where no impact is assessed (‘no change’) – are not reported in the EIR. This is consistent with the approach adopted in the ES, where effects not deemed significant were not reported (see ES Chapter 4: Environmental assessment methodology, paragraph 4.5.10).</p> <p>The level of assessment reported in the EIR is consistent with the baseline assessment included within the ES. The assessment is presented in full in Tables 3.1 – 3.4 of document Redetermination 2.1, in the same level of detail as that presented in ES Tables 6.10, 6.11 and 6.12 and in ES Appendix 6.8, Summary of Non-significant Effects.</p>
Biodiversity	The Badger Sett Survey Report (2021) (document reference number 2.5) is marked as confidential and as such the report’s content has been removed prior to publication. It is also noted that there are redactions within the Parsonage Down	National Highways now has provided unredacted copies of the confidential Badger Sett Survey Report (2021) and the Parsonage Down Stone Curlew Plot - Botanical Survey Report (2021) direct to Wiltshire Council.

Topic	Matter raised	Response
	<p>Stone Curlew Plot – Botanical Survey Report (2021) (document reference number 2.10). As the Local Planning Authority, Wiltshire Council requires complete and unredacted copies of these reports, and therefore requests that these are provided to the Council by National Highways.</p>	
<p>Geology and soils</p>	<p>In relation to the Stage 1, Tier 2 Land Contamination Assessment Report (document reference number 2.17), it would be helpful to have further information on the rationale for the approach adopted by National Highways. It is noted that for the purposes of this assessment, the scheme has been divided into 4 areas (paragraph 1.2.9). The Council is concerned that the assessment scale may be so large, that localised impacts may be masked by averaging datasets and the lack of targeted samples. Further information from National Highways for its sampling strategy and justification for some potentially contaminated sites not being sampled is therefore requested.</p>	<p>The objectives and approach to the Stage 1, Tier 2 Land Contamination Assessment Report were agreed with the Environment Agency and Wiltshire Council on 17 June 2021. The objectives and scope of the assessment can also be found in Section 1.2 of the Stage 1, Tier 2 Land Contamination Assessment Report.</p> <p>It was necessary to divide the Scheme into four areas for reporting purposes and to provide a logical structure to the report. The division of the Scheme in this way was agreed with the Environment Agency in the consultation meeting of the 17 June 2021, as recorded in the Meeting Action Notes. For the screening of soil, soil leachate and groundwater samples, and within each of the four areas, each potential contaminated land site was assessed separately using only data that was deemed applicable to that site, where available. This was done using site-specific samples, and in some cases, incorporating relevant adjacent samples. This is presented in detail in Appendices E to G of the Stage 1, Tier 2 Land Contamination Report. An additional area-wide</p>

Topic	Matter raised	Response
		<p>screening assessment was also discussed for all samples that were available within the Scheme boundary but not relevant to the site-specific assessments. This was done to provide a level of assessment for this data set given it was available in the Scheme boundary. Reference was also made in the groundwater assessment to regional groundwater monitoring data (metals and inorganic substances) to assess whether measured concentrations at the site-specific level may be representative of wider background concentrations. National Highways does not consider that this approach could dilute or mask localised impacts.</p> <p>Tables 4.6 to 4.9 in the Stage 1, Tier 2 Land Contamination Assessment Report provide a description of where sample data was obtained and where it was not available, along with an explanation. A key objective of the report was to identify where data gaps existed and where, based on risk assessment, further assessment and/or investigation would be needed, which is best undertaken once the contractor is in possession of the site. Whilst the report assesses available soil and groundwater data, it also considers the baseline Conceptual Site Models (CSM) and preliminary risk assessments completed for each of the potential land contamination sites assessed in the ES (equivalent to Stage 1, Tier 1 under Land Contamination Risk Management (LCRM)), the nature of the proposed construction works within 50m of each site and the level of ground disturbance</p>

Topic	Matter raised	Response
		<p>expected from these construction works. The distance from and nature of the planned construction is a key consideration that has formed part of the overall risk assessment alongside the preliminary risk assessment and screening of available soil and groundwater data. This was designed to meet the requirements of items PW-GEO4 and MW-GEO8 in the draft Outline Environmental Management Plan's (OEMP) Record of Environmental Actions and Commitments, which require that a risk assessment is provided when working within 50m of a potential or known land contamination site (as defined in the ES).</p>
<p>Geology and soils</p>	<p>Whilst it is recognised that these sites [see representation section 2.4.6] have been considered in some depth as individual sites, there is concern that the conclusions drawn by the Phase 1 Tier 2 Land Contamination Assessment Report do not necessarily provide the required confidence that any contamination present would have been identified. This could be as a result of lack of samples, or the location of samples, or recorded exceedances not being proposed for remediation etc.</p> <p>3.5.1 [.....]</p>	<p>In accordance with LCRM, a risk-based approach has been adopted to arrive at the recommendations in the Stage 1, Tier 2 Land Contamination Report. Whilst in some Areas/potential land contamination site assessments, exceedances were reported, the risk evaluation has provided details on whether these represent a potential unacceptable risk, recognising that in some cases an exceedance alone is not indicative of an unacceptable risk. In some instances, the report refers to marginal exceedances or exceedances being consistent with reported background levels that data indicates is typical of the wider area.</p> <p>The assessment made specific recommendations for six potential contaminated land sites plus the area north and south of the Countess Roundabout. Other potential land</p>

Topic	Matter raised	Response
	<p>Given that some of these 8 sites [see representation section 2.4.6] have recorded exceedances of contaminants (such as lead, copper, zinc, Polycyclic Aromatic Hydrocarbons (PAH) etc.) and no samples have been taken from other sites from the epicentre of potential contamination, further clarification and justification is requested from National Highways in relation to their proposed approach for further assessment and conclusions reached.</p>	<p>contamination sites have not been identified for further assessment as the assessment has indicated an acceptable level of risk, as defined in LCRM considering land contamination potential, the CSM and the proximity and nature of proposed construction works. For the six sites and areas north and south of Countess junction, additional sampling and assessment has been recommended for one site and the area north and south at Countess junction. In addition, and common to all was the need to implement measures to manage potentially contaminated soil, if encountered during the construction works, and for there to be a testing strategy for soil before re-use. This included also for a watching brief by a suitability qualified professional and the application of site-specific re-use assessment criteria. This approach during construction to systematic sampling, testing, and risk review against agreed re-use criteria provides a sampling plan that extends the level of ground investigation throughout earthworks in the construction phase. Sampling on a per volume basis during construction will provide statistically robust data, much more so than can be obtained from further ground investigation at this stage. This is due to the contractor being in possession of the land required to construct the scheme and therefore land access and above ground constraints are in the most part removed.</p>

Topic	Matter raised	Response
		<p>The preliminary works, commencing before the main works, are to include investigations for the purpose of assessing ground conditions and remedial work in respect of any contamination or other adverse ground conditions. The OEMP includes various measures relating to contaminated land, which secure further identification, risk assessment and mitigation. These include measures PW–GEO1 (Ground investigation), MW GEO1 (Contamination Risks), PW–GEO2 and MW GEO2 (Contaminated Land). OEMP measure MW-GEO7 (Excavated materials management) requires the main works contractor to assess excavated soils for any potential risks posed to health and the environment from the reuse of soils as engineering fill, including mitigation of the effects on soils and the spread of contamination to ensure that those soils identified as contaminated are not mixed with uncontaminated soil. The contractors also will be required to implement control measures, as required by measures PW-GEO4 and MW-GEO8 in the OEMP, which make provision for further investigation, assessment and mitigation based on the findings; this will be carried out in consultation with the Environment Agency and Wiltshire Council.</p>
Road drainage and	With regard to the Flood Risk Modelling Climate Change Update (document reference number 2.18), the Council’s review has focused on the surface water modelling, as it is considered that	The change in volume of surface water runoff was not explicitly detailed in the Flood Risk Assessment (May 2019), or was otherwise required to support examination of the DCO application. In the Flood Risk Assessment (May 2019), the

Topic	Matter raised	Response
the water environment	<p>the Environment Agency is best placed to comment on the river modelling. It is noted that in paragraphs 1.10-1.11 of this document, the climate change allowances for peak river flows, instead of peak rainfall intensity, have been applied to the Parsonage Down surface water modelling. This represents an increase from 40% to 56% for Higher (previously Higher Central) and 85% to 102% for Upper (previously Upper End) and appears to provide a more robust assessment. It is noted that the higher allowances appear to reduce the difference in peak flow between Baseline and Proposed for all of the scenarios modelled. However, it has not been possible to assess how the volume of runoff is changed with the use of these updated allowances.</p>	<p>change in volume was inferred from the hydrographs extracted from the pluvial model, as discussed in Annex 1B Sections 4.4.7 – 4.4.12. The information presented in the Flood Risk Modelling Climate Change Update [Redetermination 2.18] includes hydrographs extracted from the updated pluvial model, consistent with the information presented in the Flood Risk Assessment (May 2019) to enable a direct comparison of the results to be undertaken and to be relevant to what is required to re-determine the DCO application.</p> <p>OEMP measures PW-WAT2 and MW-WAT14 concern surface water drainage and require the preliminary works contractor (roads) and the main works contractor to ensure that the surface water drainage system reflects the mitigation measures identified within the ES and conforms with Requirement 10 of the DCO.</p> <p>OEMP measure MW-WAT1 requires the main works contractor to undertake the works and implement working methods to protect surface water and groundwater from pollution and other adverse impacts, including change to flow, flood storage volume, water levels and quality, having regard to industry guidance.</p> <p>Paragraph 5.9.126 of the Examining Authority's Recommendation Report confirmed that:</p>

Topic	Matter raised	Response
		<p><i>“Overall the ExA considers that the impact on the water environment has been adequately assessed. The mitigation measures proposed in the Requirements (as proposed by the ExA) and the OEMP would be adequate. This would sufficiently mitigate any impact that is likely to arise from the Proposed Development. The ExA notes that the Proposed Development would result in improved pollution control through the imposition of upgraded measures and it considers this to be a modest benefit. The ExA is satisfied that the Proposed Development would meet the requirements of the NNNPS on flood risk, water quality and drainage matters”.</i></p> <p>The Examining Authority also noted in paragraph 7.2.40 of the Recommendation Report:</p> <p><i>“The ExA considers that Requirement 10 of the dDCO [AS-121] and the OEMP would provide approval and consultation mechanisms to allow the road drainage scheme to be appropriately scrutinised. It concludes that the road drainage strategy would be adequate, and that this would result in a betterment in terms of control. The ExA concludes that the effect on private water supplies would be appropriately managed”.</i></p>
Transport Assessment Review	...it is noted that at paragraph 4.2.10 it is stated: “...to the west of Amesbury, the Scheme will include stopping up of the direct connection	National Highways notes the clarification raised by Wiltshire Council on paragraph 4.2.10 of the Response to Bullet Point Four – Environmental Information Review Appendix:

Topic	Matter raised	Response
	<p>between Allington Track and the A303...”. The Council wishes to clarify that the junction referred to is to the east of Amesbury and not to the west as stated and should be corrected within this document.</p>	<p>Transport Assessment Review [Redetermination 1.4.1]. The text in paragraph 4.2.10 should indeed refer to the Allington Track being to the east of Amesbury, and not to the west as is erroneously written in the original submission. This has no material consequence for any conclusions reached by reading the document.</p>
<p>Transport Assessment Review</p>	<p>The Council considers that the differences between the 2041 and 2044 forecast traffic flows on the local roads to the north and south of the Scheme vicinity are generally anticipated to be of a magnitude set out in the revised forecasts, simply owing to traffic growth in the period.</p> <p>However, there appears to be a counter intuitive effect shown in Figures 4-5 and 4-6, in relation to the impact on volume to capacity ratios at the eastern end of The Packway (west of the A345 junction). In the 2041, without scheme scenario (Figure 4-5, upper pane), no issue is shown. In the 2044 scenario (Figure 4-6), there is forecast to be a volume to capacity issue both in the without scheme and with scheme scenarios. The Council considers this apparently counter intuitive situation to be worthy of a brief explanation in the document text.</p>	<p>National Highways notes the specific comment concerning the Volume-to-Capacity (V/C) ratios presented for the average AM hour for the DCO application Design Year (2041) forecasts (Figure 4-5) and the recently updated Design Year (2044) forecasts (Figure 4-6). The DCO application forecasts did highlight a high V/C on The Packway on the westbound approach to the junction with Glover Road, which is an access/egress to the zone in the ‘A303 Stonehenge SWRTM (DCO)’ transport model covering and area of Larkhill to the north of The Packway.</p> <p>In the DCO application 2041 forecasts, the reported V/C ratios for this location were 96% in the without-scheme forecast and 88% in the with-scheme forecast. These increase to 100% and 99%, respectively, in the updated Design Year (2044) forecasts, as shown in Figure 4-6 of the Transport Assessment Review.</p> <p>There have been several changes to the demand assumptions between the DCO application and the recently</p>

Topic	Matter raised	Response
	<p>Furthermore, at paragraph 4.3.7, the report notes: “b. [Paragraph 6.5.18] In the busy period the journey times on The Packway are forecast to improve with the Scheme by over two minutes in both directions. This conclusion is still valid.”, this appears potentially contradictory.</p>	<p>updated forecasts that have affected the forecast traffic volumes, as summarised in section 3.2 of the Transport Assessment review. Of particular relevance to the forecasts highlighted by Wiltshire Council on The Packway, the updates to the demand Uncertainty Log identified a new development in Larkhill that was not in Wiltshire Council’s planning portal at the time of the production of the DCO application forecasts. Combined with other changes that have amended the distribution of demand near Larkhill, this has resulted in additional trips using the eastern section of The Packway in the recently updated forecasts in both the without-scheme and with-scheme scenarios. We observe that the forecast scheme impacts are a modest reduction in traffic and stress at this location, unchanged from those made in the DCO application.</p> <p>Paragraph 4.3.7, as identified by Wiltshire Council, is still valid and the conclusion reached in the Transport Assessment in respect of busy period journey time is not impacted by the change in demand forecasts. The Scheme is still forecast to remove ‘rat-running’ traffic in the busy period from The Packway, offering significant improvements to journey times, regardless of changes in the local demand as noted above.</p>

3.6 Response - International Council in Monuments and Sites UK (ICOMOS)

3.6.1 Our response to ICOMOS's representation responds to their comments on information National Highways has provided prior to the date of the submission of our response to the Secretary of State's 20 June 2022 letter. Please also refer to our response to question 2 of the Secretary of State's letter.

Matter raised

3.6.2 *In the supplementary information now submitted by the Highways Agency, further details are provided on the alternative options they considered as well as the preferred route. There are difficulties in considering this information as the evidence upon which impacts on OUV and other assets are based has not been set out in detail as no detailed HIAs have been undertaken. The conclusions thus remain questionable.*

Response

3.6.3 National Highways' January 2022 [Statement of Matters Response to Bullet Point One – Alternatives](#) [Redetermination 1.1] summarises information we have previously submitted to the Examining Authority relating to the consideration of alternatives, including longer tunnel options and alternative routes. Therefore, this is not additional information, but a summary of information already published.

3.6.4 The Scheme has followed a comprehensive, robust and proportionate optioneering process, including consideration of the impacts of options on the Outstanding Universal Value (OUV) of the World Heritage Site (WHS) at every stage. As route corridors are broad and multiple early options are considered before significant design work can be invested in them, Heritage Impact Assessment (HIA) on all the landscape under consideration is not appropriate at this early stage.

3.6.5 The appraisal methodology applied in the optioneering process was common across options (including corridor options). This was a level of assessment appropriate for the early project development stage of options appraisal, and it is in accordance with the applicable widely recognised transport sector industry guidance found in the Department for Transport's (DfT's) Transport Analysis Guidance (TAG, previously referred to as WebTAG). Appraisal of corridors and route options within selected corridors used the Early Assessment and Sifting Tool (EAST) and the Options Assessment Framework contained in DfT's TAG. This proportionate appraisal provided appropriate evidence for the staged scheme appraisal using the DfT's Business Case Five Case Model criteria.

3.6.6 It was not necessary to carry out the same level of assessment for each option that subsequently was required for the DCO Scheme to meet the statutory requirements for the application, including those around statutory environmental

impact assessment and heritage impact assessment. This degree of assessment is only required for the proposals that relate to an application for development consent. It would not be proportional, due to the scale of work and resource that would be involved, to carry out this level of assessment for multiple options.

3.6.7 Impacts from route corridors and route options taken forward for further appraisal on the OUV of the WHS are considered in the 2017 Technical Appraisal Report, which was submitted to the Examining Authority in 2019. As well as the [Technical Appraisal Report Volume 1](#) (main report), [Appendix B](#) covering the assessment of route corridors, [Appendix D](#) covering initial route option assessment, and [Appendices G and H](#) covering the assessment of route options selected for further appraisal are of note. For example, Appendix B3 shows how consideration of the historic environment, and particularly the OUV of the WHS, was built into the scoring system applied to corridors and options.

3.6.8 The 2017 [Scheme Assessment Report](#) (link is to Volume 1, the main report) also submitted to the Examining Authority covers the assessment that was carried out on options prior to the preferred route announcement, with [Appendix E](#) of that document being a Historic Environment Assessment.

3.6.9 A summary of the options appraisal process for the Scheme is also included in section 3 of the [Case for the Scheme](#), [chapter 3 of the Environmental Statement](#) and the Environmental Statement Appendix 6.1 [Heritage Impact Assessment](#), section 7.3, Assessment of Scheme Alternatives (pages 520-529). These documents all show how cultural heritage was a significant factor in the decision-making process relating to design development.

Matter Raised

3.6.10 *On what precise basis the benefits and disbenefits of the longer tunnel have been assessed is not clearly set out, but ICOMOS-UK considers that the conclusions reached by the Highways Agency cannot be supported. In ICOMOS-UK's view, these supplementary materials fail to offer the clarity that is needed as it cannot be said that the alternative options have been assessed in a similar way to the preferred option in line with the impact assessment process. This process should be the tool used in the early stages of a project to set out in an open and transparent manner how the necessary options have been assessed on an equitable basis. Unfortunately this has not happened, and the limited amount of extra material now provided does not adequately support the conclusions made by the Highway Agency.*

Response

3.6.11 National Highways has carried out a comprehensive and robust process for option identification and selection. As explained above, corridor and route option appraisal used the transport sector's widely recognised EAST and the Options

Assessment Framework contained in the DfT's TAG. Options were subject to a multi-criteria assessment considering the Client Scheme Requirements, national and local policies, and implications with regard to construction and civil engineering, traffic and operation, heritage, environment, programme and cost.

3.6.12 Details of this process can be found in our January 2022 [Statement of Matters Response to Bullet Point One – Alternatives](#) [Redetermination 1.1].

3.6.13 Section 2 of the above document describes the thorough assessment process to confirm the Preferred Route in 2017 as well as the later assessment supporting the DCO application and examination, including the assessment of alternatives for the application's Environmental Statement. The Statement of Matters response includes a summary of the information produced early in the Scheme's development that National Highways put before the Examining Authority relating to consideration of alternatives. This includes full assessment reports (complete with appendices) produced during the option assessment and selection process. These documents include the Technical Appraisal Report, where sections 6 and 7 evidence the consideration given to three longer tunnel options (D002, D006 and D010) before the Scheme's route was confirmed. This document confirms that these three longer tunnel options all were deemed unaffordable, and therefore were not appropriate to consider further.

3.6.14 Moreover, in our response to Question AL.1.29 of the Examining Authority's First Written Questions on alternatives - [Deadline 2 - 8.10.4 - Alternatives \(AL.1\)](#) [REP2-024] – we considered cut and cover and bored tunnel extension alternatives. We confirmed the same reason for rejecting both bored tunnel extension and cut and cover tunnel extension alternatives, explaining that, for each option, “*This option was rejected on the basis of a balanced appraisal of operational performance, safety and maintenance, engineering and buildability, cost, environmental impacts and heritage impacts.*” (see paragraph 37 on the cut and cover tunnel extension and paragraph 43 on bored tunnel extension). In our response to Question AL.1.29 we confirmed that the “*consideration of the balance of benefits and disbenefits would not justify the significant additional cost ... over and above the cost of the Proposed Scheme*” (see paragraph 17 on the cut and cover tunnel extension and paragraph 26 on the bored tunnel extension), and concluded that “*There is no evidence that the additional investment required to extend the tunnel length would deliver meaningful additional benefits to the WHS that would justify the additional cost*” (paragraph 1).

3.6.15 Sections 3-8 of our January 2022 [Statement of Matters Response to Bullet Point One – Alternatives](#) [Redetermination 1.1] summarise the existing information relating to the specific alternative routes discussed at examination. These sections confirm why they were previously discounted and also why there is no new information or changes in circumstances that mean the decision to discount these options needs to be reviewed.

3.6.16 Sections 3 and 4 of the same Statement of Matters response document cover the longer tunnel options of an extension either by cut and cover or by bored tunnel, and summarise the more detailed information presented at examination explaining why longer tunnel options were rejected.

3.6.17 Section 9 of this document provides a summary and conclusion in which we confirm that our position on each of the alternatives remains unchanged since examination.

3.6.18 We also refer to the information provided in our response to question 2 of the Secretary of State's letter of 20 June 2022

3.7 Response - Historic England

3.7.1 National Highways have reviewed the representation from Historic England to identify content where further information and/or assessments are sought. We conclude that we have commented on these parts of their representation in our response to question 6 below in this document.

3.8 Response - Environment Agency

Topic	Matter raised	Response
Geology and soils	We consider that the risks from historic contamination as related to the scheme have not yet been fully characterised and assessed.	The risks from historic contamination were adequately characterised and assessed for the purposes of the 2018 Environmental Statement (the 2018 ES). Potential impacts relating to historical contamination were assessed in the Environmental Statement Chapter 10: Geology and soils [APP-048]. The 2018 ES was robust and contains sufficient information to allow the Secretary of State to determine the Scheme. The Examining Authority's Recommendation Report confirmed that by the end of the examination Wiltshire Council and the Environment Agency had confirmed that they were satisfied with the mechanisms for dealing with contaminated land. The Examining Authority also considered that the measures in the Outline Environmental Management Plan (OEMP) and the consultation and approval process for the future Construction Environmental Management Plan would be adequate to ensure known contamination is managed appropriately, and that Requirement 7 of the draft DCO would secure adequate measures for managing currently unidentified contamination, if encountered (see paragraphs 5.10.15. and 5.10.17).

Topic	Matter raised	Response
		<p>National Highways have made provision for further characterisation and assessment that is appropriate for post-consent Scheme development, with control measures and mitigation secured in the DCO through measures in the OEMP.</p> <p>The Stage 1, Tier 2 Land Contamination Assessment Report [Redetermination 2.17] provided to the Secretary of State in February 2022 provides an assessment of the data available to date from across all the ground investigations completed between 2000 and 2020. A key objective of the report was to identify where data gaps existed and where, based on risk assessment, further assessment and/or investigation would be needed post-consent, including that to be programmed in the further investigation that has been secured through measures PW-GEO4 and MW-GEO8 in the draft OEMP.</p> <p>National Highways agreed the objectives and approach to the Stage 1, Tier 2 Land Contamination Assessment Report with the Environment Agency and Wiltshire Council on 17 June 2021. In the meeting, it was agreed that a key output of the work will be a table highlighting potential land contamination sites within 50m of proposed works where there is currently no ground investigation data. The intention was that this will be used to define the future steps for these sites recognising that for some sites, limited recommendations may be made (e.g. where the contamination risk based on preliminary risk</p>

Topic	Matter raised	Response
		<p>assessment is considered low (i.e. acceptable in LCRM terms) and where planned intrusive construction works are limited or absent within 50m of these potential land contamination sites). Conversely, it may highlight that more assessment may be required where the planned construction works might have a greater interaction with the ground or where unacceptable risks have been defined. This further assessment work is secured through measures PW-GEO4 and MW-GEO8 in the OEMP, with the delivery of the OEMP measures being secured by Requirement 4 of the draft Development Consent Order.</p> <p>Measure PW-GEO4 (relating to Preliminary Works) and MW-GEO8 (relating to Main Works) of the OEMP cover construction on or adjacent to land affected by contamination. Both measures require the implementation of various control measures for construction activities on or adjacent to the land identified as being affected by contamination. Amongst others, these control measures include investigation, both in the pre-construction and construction phases, of proposed work areas located within 50m of potential or known areas of land contamination, as identified in the Environmental Statement. This will be carried out using a risk based approach in accordance with Contaminated Land Report 11, Model Procedures for the Management of Land Contamination (2004). A risk assessment must be produced in consultation with Wiltshire Council and the Environment</p>

Topic	Matter raised	Response
		<p>Agency. Where significant / unacceptable risks are identified, further assessment and/or appropriate mitigation (remediation) to reduce to acceptable levels the potential short and long-term health and safety and environmental risks to sensitive receptors will be identified in consultation with the Environment Agency and Wiltshire Council and implemented.</p>
<p>Geology and soils</p>	<p>A fifth private groundwater abstraction borehole was added to abstraction licence 13/43/023/G/074 (subsequently re-numbered SW/043/0023/010) near Winterbourne Stoke during its renewal in 2018 which was not referred to in the Environmental Statement or supporting Groundwater Risk Assessment. This point should be added to the list of receptors and considered in any risk assessment.</p>	<p>Future risk assessment produced in consultation with Wiltshire Council and the Environment Agency, along with further assessment and/or appropriate mitigation (remediation) where unacceptable risks are identified, is secured by measures PW-GEO4 and MW-GEO8 in the OEMP. A review of the generic quantitative risk assessment will be undertaken to establish if any additional risks are identified.</p> <p>Chapter 8 of the Environmental Information Review [Redetermination 1.4], submitted as part of National Highways' response to the Secretary of State's Statement of Matters on 11 January 2022, considered updated groundwater monitoring and identified no changes to the conceptual model described in the Groundwater Risk Assessment in the Environmental Statement (ES). No significant risk to groundwater supplies were identified in the Manor Farm area, and therefore the new borehole is not</p>

Topic	Matter raised	Response
		<p>anticipated to be affected differently to the existing four boreholes.</p> <p>If future conceptual model reviews following quarterly monitoring reports identified new groundwater behaviour or hydrogeological properties, the risk assessments would be reviewed, as required by the OEMP.</p> <p>The OEMP also contains protection measures around boreholes, including measures MW WAT5, MW WAT6, MW WAT11 and MW COM6.</p> <p>Paragraph 7.3.14 of the Environmental Information Review confirmed that <i>“The assessment of effects presented in the 2018 ES does not change following the outcome of the land contamination risk assessment [that is the Stage 1, Tier 2 Land Contamination Assessment Report (2021)] as the land contamination risk assessment simply represents a more detailed stage of assessment than was presented, and was necessary, for the 2018 ES, as is required by the staged approach to land contamination risk assessment, as defined in LCRM and the now withdrawn CLR11”</i>.</p> <p>Therefore, the addition of the borehole does not change the assessment of likely significant effects reported in the 2018 ES, and the Secretary of State has sufficient information to determine the Scheme.</p>

Topic	Matter raised	Response
Road drainage and the water environment	This paragraph should refer to the Supplementary Groundwater Model Runs to Annex 1 Numerical Model Report [AS-018] rather than the Implications of 2018 Ground Investigations to the Groundwater Risk Assessment which is document reference AS-017.	Noted. The correct report is the Supplementary Groundwater Model Runs to Annex 1 Numerical Model Report [AS-018] , albeit the conclusion of that report is noted in Implications of 2018 Ground Investigations to the Groundwater Risk Assessment [AS-017] .
Land contamination	We recommend that site-specific conceptual models are developed for each of the potentially contaminative sites identified as requiring assessment rather than the generic site type conceptual models presented in the ES and referred to in this report. True site-specific conceptual models are needed to identify and assess specific source-pathway-receptor linkages and determine if adequate ground investigation data has been collected.	The conceptual site models (CSM) developed for the ES are site-specific (albeit sites of common history/use were grouped), and are typical for an LCRM Stage 1, Tier 1 assessment (preliminary risk assessment). These CSM and the approach adopted for the ES were agreed in advance of, and accepted as part of, the DCO Examination. This is confirmed through the signed Deadline 9 Submission - 8.2 (2) – Statement of Common Ground – The Environment Agency [REP9-015] , in particular reference 3.1 in Section 3, in which the Environment Agency acknowledge that the level of detail provided for the Scheme’s design and for the consequent assessment of environmental risks is appropriate for the DCO application. For sites that require further assessment following the Stage 1, Tier 2 Land Contamination Report findings, the OEMP makes provision for appropriate mitigation in consultation with the Environment Agency – see measures PW-GEO4 and MW-GEO8.

Topic	Matter raised	Response
Land contamination	Dividing and assessing the full extent of the scheme into four areas can result in the large number of what might be considered background concentrations diluting and masking localised impacts that require further investigation and/or assessment. Where exceedences of generic assessment criteria have been identified, their relevance should be considered in light of the site-specific conceptual model and assessment at higher tier or proposals for remediation developed in accordance with the Land Contamination: Risk Management guidance.	It was necessary to divide the scheme into four areas for reporting purposes and to provide a logical structure to the report. The division of the scheme in this way was agreed with the Environment Agency in the consultation meeting of 17 June 2021. For the screening of soil, soil leachate and groundwater samples, and within each of the four areas, each potential contaminated land site was assessed separately using only data that was deemed applicable to that site, where available. This was done using site-specific samples, and in some cases incorporating, based on professional judgement relevant adjacent samples. This is presented in detail in Appendices E to G of the Stage 1, Tier 2 Land Contamination Report [Redetermination 2.17]. An additional area-wide screening assessment was also discussed for all samples that were available within the Scheme boundary but not relevant to the site-specific assessments. This was done to provide a level of assessment for this data set given it was available in the Scheme boundary. Reference was also made in the groundwater assessment to regional groundwater monitoring data (for metals and inorganic substances) to assess whether measured concentrations at the site-specific level may be representative of wider background concentrations. National Highways does not consider that this approach could dilute or mask localised impacts.

Topic	Matter raised	Response
Land contamination	<p>We do not consider that a discovery strategy is an acceptable risk management approach in areas that will be disturbed by the scheme construction or operation, and which have been identified as potentially contaminated unless there has been appropriate ground investigation that demonstrates the absence of gross contamination. As well as reducing the risk of contamination being mobilised and causing pollution, adequate ground investigation prior to works will reduce the risk of unforeseen circumstances, potential delays and costs during scheme construction.</p>	<p>In accordance with LCRM, we adopted a risk based approach to arrive at the recommendations in the Stage 1, Tier 2 Land Contamination Report. The assessment made specific recommendations for six potential contaminated land sites plus the area north and south of the Countess Roundabout.</p> <p>In paragraph 8.1.2 of the Stage 1, Tier 2 Land Contamination Report, it is confirmed that these further works, including remediation, identified in Tables 8-1 to 8-4 of the report are those required to meet the requirements of OEMP measures PW-GEO4 and MW-GEO8. Furthermore, that the mitigation measures identified by this report will be included in the relevant Construction Environmental Management Plans (CEMPs) developed at the appropriate point with reference to the construction programme in consultation with the Environment Agency and Wiltshire Council.</p> <p>Other potential land contamination sites have not been identified for further assessment. This is because the assessment has indicated an acceptable level of risk, as defined in LCRM considering land contamination potential, the CSM and proximity and nature of proposed construction works. For the six sites and areas north and south of Countess junction, additional sampling and assessment has been recommended for one site and the area north and south at Countess junction. In addition, and common to all was the</p>

Topic	Matter raised	Response
		<p>need to implement measures to manage potentially contaminated soil, if encountered during the construction works, and for there to be a testing strategy for soil before re-use. This included also for a watching brief by a suitably qualified professional and the application of site-specific re-use assessment criteria. This approach during construction to systematic sampling, testing, and risk review against agreed re-use criteria provides a sampling plan that extends the level of ground investigation throughout the construction phase. Sampling on a per volume basis during construction will provide statistically robust data, much more so than can be obtained from further ground investigation at this stage. This is due to the Contractor being in possession of the land required to construct the scheme, which means land access and above ground constraints are in the most part removed.</p>

3.9 Response - Rachel Hosier

Topic	Matter raised	Response
Stone curlew	We would like to see “disturbance” added to the list of fluctuation of breeding attempts.	The monitoring is carried out by RSPB for Wiltshire Council with the agreement of Natural England. Nesting attempts and nesting success (survival of young to fledging) are recorded. The RSPB monitoring team records additional information if available, for example if there are signs of predation at a nest. This means there is potential for the RSPB to note particular circumstances. It is not clear how RSPB’s monitoring would be able to consistently record “disturbance” nor how this would improve existing monitoring. If the RSPB considered disturbance to be relevant, they would include monitoring of it.
Butterfly and Pollinators	The Applicant seems to have used old desktop surveys for some of their land classifications. Areas on our farm that have been permanent grassland since 2002 have been incorrectly classified as “Other non-grassland habitats”. In addition there are four other grassland areas under Natural England environmental schemes (which belong to neighbouring farmers) that have also been wrongly noted as “other non-grassland habitats”. We agree that the Scheme will add more grassland within this area. However, the real land	Habitat survey was carried out to inform the DCO application using the Phase 1 habitat survey method. At the resolution used for Phase 1 habitat survey carried out in advance of the DCO application, arable field margins were not recorded separately, as they were below the minimum mapping units of the initial habitat surveys. Whilst some updating of the Phase 1 habitat survey has been done, the resolution had not been increased by the time of the surveys referenced in the Environmental Information Review being part of our January 2022 Statement of Matters response [Redetermination 1.4]. This was because it was not required to be increased for the

Topic	Matter raised	Response
	<p>use of this area is not the barren arable land that the Applicant suggests it is.</p>	<p>purposes of the assessment for the 2018 Environmental Statement (2018 ES).</p> <p>Habitat condition surveys are being carried out in 2022 to provide the baseline surveys to support the detailed design to be carried out post-consent. This will take into account the higher value of arable margins managed for biodiversity compared to the cropped areas of arable fields, and will be at a higher resolution. This will however not impact the findings of the 2018 ES, or change the magnitude of impacts which were assessed, and the Secretary of State has sufficient information to determine the Scheme.</p> <p>The habitat condition survey currently underway will cover the areas which will be affected by the Scheme.</p>
<p>Butterfly surveys</p>	<p>The 2020 butterfly surveys were the only butterfly surveys that have taken place. For the Environmental Statement 2018, an invertebrate study with pit fall traps (these wont collect many butterflies) took place in June/July 2017. This consisted of a visit to put out the pitfall traps followed by another to collect the trapped invertebrates a month later. The odd butterfly passing by would have been recorded, however, it was not the main focus or monitored using Wider</p>	<p>These are two different types of survey. The 2017 invertebrate survey provided an assessment of the value for invertebrates of the best areas of habitat within the Scheme study area, covering a wide range of groups. This 2017 survey was what was needed for the ecological assessment of the Scheme reported in the 2018 ES supporting the DCO application. Focusing on value of habitat is appropriate this far in advance of construction. There will be targeted invertebrate survey prior to construction at relevant sites. It will not be a repeat of the 2017 survey, as the aims are different. The pre-construction survey is mainly required to</p>

Topic	Matter raised	Response
	<p>Countryside Butterfly Survey or Pollinator Monitoring Scheme standards.</p> <p>[.....]</p> <p>“...a total of 1347 individual butterflies were recorded which comprised of 23 different butterfly species.” If the surveys had been carried out over the whole season from April to September, the individual butterfly count would have been larger and the number of different species would have been higher. Therefore, the 2020 surveys did not provide a representative base line data for the post scheme surveys to be assessed against.</p>	<p>provide a baseline to monitor against in subsequent years. The data collected during the previous invertebrate surveys is considered to be suitable, robust, and proportionate to inform the likely impacts associated with the Scheme. No further surveys are considered necessary to inform the determination of the Scheme.</p> <p>The Wider Countryside Butterfly Survey and Pollinator Monitoring Scheme are for a different purpose than the invertebrate survey which informed the 2018 ES, less detailed but able to provide landscape-scale information on the target groups over time.</p>
Butterfly Survey - 2020	<p>By effectively only surveying for one month, the results would potentially have picked up only a fraction of the butterflies that would have been present through the season. Furthermore, one of the timetabled survey dates went ahead when the weather app predicted strong wind gusts (not conducive to butterflies). When questioning the suitability of carrying out a butterfly survey in such windy conditions one was lead [sic] to believe that there was no time left to reschedule and that the weather was not as bad as they expected! It is interesting to note within Butterfly and Pollinator</p>	<p>The butterfly and pollinator monitoring baseline surveys undertaken in 2020 are considered suitable to inform a monitoring baseline, as they were undertaken at the appropriate time of year and under suitable weather conditions for the aim of the survey to be realised. The survey is not deficient because it did not carry out weekly butterfly surveys from April to the end of September, as weekly survey visits would not be proportionate to provide the assessment required. Further surveys are being undertaken in 2022, to provide a second year of baseline surveys for the post-construction surveys to monitor against. The survey approach is considered to provide a robust monitoring baseline.</p>

Topic	Matter raised	Response
	<p>Survey Report (2020) Document reference 2.8 that the wind speed was Beaufort scale 4 on these survey days, being just below the acceptable wind speed for surveying.</p>	<p>The results of the butterfly and pollinator surveys were not intended or required to update the information provided within the 2018 ES, but to provide a monitoring baseline. The results of the 2020 surveys do not change the conclusions of the 2018 ES.</p> <p>The further surveys likewise are not required for the purposes of updating the 2018 ES. We confirm that the ecological assessment of the Scheme remains complete and that no further or updated environmental information (including survey reports) is required to be submitted for consideration by the Secretary of State in relation to biodiversity, in order for development consent to be granted for the Scheme.</p> <p>The UK Butterfly Monitoring Scheme (https://ukbms.org/wider-countryside-butterfly-survey) explains that</p> <p><i>“Established in 2009, the Wider Countryside Butterfly Survey (WCBS) generates important data on the abundance of widespread butterfly species from under-recorded habitats such as farmland, plantation woodland, uplands and urban green spaces. Thus, the WCBS compliments the traditional UKBMS ‘Pollard walk’ transects which generally focus on monitoring semi-natural habitats which are rich in butterflies.</i></p> <p><i>The WCBS is both scientifically sound (random sampling of the countryside) and efficient (2-4 visits per year). Its method</i></p>

Topic	Matter raised	Response
		<p><i>is broadly based on the BTO's Breeding Bird Survey (BBS), surveying two parallel 1-km long transects subdivided into 10 sections, located within randomly selected 1-km squares. The surveys' core recording period is in July and August."</i></p> <p>As such, the monitoring for the Scheme, based on the recognised and established Wider Countryside Butterfly Survey method, is expected to complement any UK Butterfly Monitoring Scheme survey carried out intensively over a localised area as part of other initiatives.</p>
Butterfly surveys - future	Will the butterfly surveys be carried out over a whole season or just crammed into a month as per the 2020 surveys?	Multiple transects will be used in accordance with the national monitoring programmes. The monitoring baseline surveys undertaken in 2020 were suitable to inform the first year of pre-construction baseline data. We intend to undertake further surveys to provide a monitoring baseline within 2022, that are planned to commence within June 2022 and progress throughout the season. See our response above on the 2020 Butterfly survey.
Biodiversity - Future Baseline	"Pre-construction updating surveys will be carried out to inform mitigation during the construction phase, protected species licensing and monitoring as stated in the 2018 ES." Will the Applicant only be doing pre-construction surveys in relation to the protected species? Will all of the baseline	Future surveys will not be solely on protected species, although those for protected species will be needed to inform licensing requirements. Other surveys such as those on habitat composition and condition will be used for monitoring, including the Wider Countryside Butterfly Survey and Pollinator Monitoring. Not all of the 2017 baseline surveys will be repeated, and some surveys will not be repeated in all areas, for example where sites were relevant to the

Topic	Matter raised	Response
	ecological surveys be repeated to a more representative standard?	assessment of previous route options. The scope of further surveys will be dependent on the type of survey, consultation with statutory stakeholders – including requirements to support applications for European Protected Species Licences – the requirements identified in post-consent detailed design, and the programmed schedule of works.
Biodiversity - Further surveys	We would urge the Applicant for a reassessment of the impact of construction on the Normanton Down Stone curlews and Great Bustards taking into account the habitat range of the individual groups and associated feeding grounds.	<p>Data on stone curlew nesting was provided by RSPB and this arrangement for monitoring data (to be supplied by the RSPB) will be continued throughout the Scheme construction and post-construction. Similarly there will be liaison with the Great Bustard Group for the latest data on the distribution of this species locally. Ecologists working on site will supplement this data with any other observations in the area.</p> <p>The Normanton Down stone curlew plots are more than 500m from construction, and so it is unlikely there will be any adverse effects from disturbance impacts associated with the Scheme. We do not consider that any reassessment of impact is required at present, but, in accordance with the Outline Environmental Management Plan (measures PW-BIO5 and MW-BIO8) and the draft DCO's Requirement 6 (Protected Species), reassessment of potential impacts and mitigation measures will be made in light of future pre-construction surveys.</p>

Topic	Matter raised	Response
Ecology surveys	Will the 2022 ecology surveys be carried out by walking around the field margins as was indicated in the 2020 surveys?	The coverage of ecology surveys will depend on the type of survey and the aim of the survey, and will be determined in accordance with current good practice and relevant guidance specific to the species / habitat. In many cases this can be achieved by surveying in and from the field margins without the need to walk through the arable crops. During the construction period the survey coverage may change, for example surveillance for badger activity within the Scheme boundary where land is taken out of cropping.
Groundwater	<p>With concern over our continued water supply we engaged an independent hydrogeologist to assess the reports the Applicant produced as a result of their groundwater surveys. He concluded that there was a real risk to our water resource both in quality and supply.</p> <p>The Applicant bases all of its water assumptions on their water modelling programme. Our hydrogeologist has issues with the size of the assessment areas used for the water modelling. The grid used is so large that a small change in one area (ie in the location of the 2 or 3 fissures that supply our boreholes) will not show up as risks over the large grid squares. Our concern is that our water will be compromised and as a result of the</p>	<p>The approach to the groundwater risk assessment was agreed with the Environment Agency. The approach is consistent with modelling for water resources investigations.</p> <p>The Examining Authority's Recommendation Report (see paragraph 5.9.79) confirmed that:</p> <p><i>"Each project is inevitably unique, and the ExA is aware of the variable nature of the geology and the unique nature of the archaeology in the WHS. However, the information provided is sufficient to adequately characterise the nature of the geology and hydrology. This shows that, with mitigation, no significant effect on groundwater would be likely".</i></p> <p>We have regularly reviewed our model calibration against ongoing monitoring and found it to be consistent with the</p>

Topic	Matter raised	Response
	<p>way the Applicant has surveyed the area, they will blame climate change and leave us with no water supply.</p> <p>The Applicant has now started to monitor our private water supply. However, it has not carried out any surveys on the structure of our borehole to determine its character. The monitoring boreholes constructed by the Applicants consultants do have their strata and character assessed and recorded.</p>	<p>hydrogeological conceptual model presented in the Environmental Statement.</p> <p>We do not accept that a ‘real risk’ to your water resource has been determined. In the Examination you proposed fracture mapping, requiring thousands of boreholes, to determine whether a fracture from your borehole was directly connected to the tunnel area. The fracture mapping approach would not be appropriate, because the boreholes intersecting fractures and extracting rock matrix would change the nature of the interactions of fractures and the rock matrix that you are wishing to understand.</p> <p>While the <u>Groundwater Risk Assessment</u> (Appendix 11.4 to the Environmental Statement) provided output of groundwater levels at the grid cell scale to show catchment changes in water levels (Appendix 11.4 Annex 1 Figures 4.1, 4.6, 4.11), the groundwater level changes at boreholes and springs in and near the predicted area of groundwater level impact was taken from the model at the specific point of interest (e.g. Appendix 11.4, Table 6.4), so the cell size does not mean a low level of accuracy as implied. A refined grid would not make any difference unless aquifer properties were changed to a smaller scale.</p> <p>The aquifer properties used in the model based on aquifer testing across different hydrogeological domains have been</p>

Topic	Matter raised	Response
		<p>demonstrated by the calibration and the conceptual model reviews against ground investigation data, see Deadline 3 Submission - 8.23 – Implications of 2018 Ground Investigations to the Groundwater Risk Assessment [AS-017 and REP3-018], and quarterly monitoring data to be appropriate representation of the bulk properties of the aquifer, see Deadline 3 Submission - 8.24 – Groundwater Monitoring 2018-19 Conceptual Model Review [AS-019 and REP3-020] [AS-019].</p> <p>These aquifer properties reflect the interaction of groundwater within numerous fractures and the rock matrix in the model grid cell, and considering that the calibration and quarterly monitoring reviews support the current model setup, we consider the aquifer to be appropriately represented.</p> <p>Protection of private water supplies during construction of the Scheme is secured in the draft Outline Environmental Management Plan (OEMP), specifically measures MW-WAT6, MW-WAT11 and MW-COM6. MW-COM6 requires the provision of Water Supply Statements to landowners / occupiers who rely on private water supplies which could be affected by the Scheme. These statements must include, amongst other information mandated by the OEMP, recorded results from groundwater monitoring undertaken by the main works contractor (as part of the Groundwater Management Plan) that are relevant to those boreholes. The delivery of the</p>

Topic	Matter raised	Response
		OEMP measures is secured by Requirement 4 of the draft Development Consent Order.

4 Stonehenge Alliance

4.1 Question

4.1.1 The Secretary of State notes that Stonehenge Alliance has identified that biodiversity baseline surveys and reports and issues relating to adverse impacts of tunnelling through chalk bedrock have not been provided. The Applicant is asked to respond on the accuracy of this statement, and if the statement is correct, the Applicant is asked to provide the Secretary of State with all relevant information, surveys and reports on this matter.

4.2 Response - Biodiversity baseline surveys and reports

4.2.1 In their response, the Stonehenge Alliance raise matters relating to two types of survey – butterflies and great crested newts. National Highways maintain that the surveys for butterflies and great crested newts are fully adequate for the purposes of the 2018 Environmental Statement, which was robust and sufficient to allow the Secretary of State to determine the Scheme. Moreover, we confirm that the ecological assessment of the Scheme remains complete, and that no further or updated environmental information (including survey reports) have not been provided for consideration by the Secretary of State in relation to biodiversity, in order for development consent to be granted for the Scheme. The Secretary of State has all the information required to determine the Scheme. We make further comment on each of these two types of survey below, answering points raised by the Stonehenge Alliance in this section of their consultation response.

Butterfly surveys

4.2.2 The effects of construction on ecological receptors were assessed for the Scheme and are described in the [Environmental Statement Chapter 8: Biodiversity \[APP046\]](#). There would be loss of farmland habitats and highway soft estate during the construction period and the potential for indirect impacts during construction. Construction impacts would be minimised, in accordance with measures included in the draft [Outline Environmental Management Plan \(OEMP\)](#), including control of dust (measures PW-AIR1 and MW-AIR1). The assessment was based on the Scheme as described in the [Environment Statement Chapter 2: The Proposed Scheme \[APP040\]](#), which in Table 2.2 sets out an indicative construction programme (with the years then anticipated). The ecological assessment took a precautionary approach to impact assessment, based on a 5-year construction period and delay in creating new habitats, without assumptions about timing of phased habitat creation during the construction period and with precautionary assumptions about loss of habitats except for those shown as retained on the [Environmental Statement Figure 2.5 A-S: Environmental masterplan](#).

4.2.3 In practice, the construction work would be phased, with the Winterbourne Stoke bypass constructed first and expected to be open to traffic well before completion of the tunnel. In accordance with the OEMP, planting and seeding would be carried out at the earliest practicable opportunity during the construction period (see OEMP measure MW-LAN4), and habitats would be managed to achieve their purposes during construction and the establishment period (see OEMP measure MW-BIO2). The last areas of habitat creation would be on the existing A303 in the World Heritage Site, because part of the existing carriageway could not be converted to calcareous grassland until traffic flow was transferred to the tunnel. Most of the habitat creation would be completed much earlier. In some areas habitat creation would start in advance of the main construction, notably the construction of the replacement stone curlew plot and the associated grassland translocation at Parsonage Down, plus some other areas with archaeological features where soil would be retained.

4.2.4 In addition, there will be opportunities for biodiversity from temporary habitats created during construction, for example on temporary soil storage areas. These temporary areas would not have the inputs of fertilizers and pesticides used on local arable crops and are likely to provide habitat for butterflies and pollinators. In the [Statement of Common Ground with Natural England \[AS-106\]](#), in section 3.22 it was agreed that management of temporary habitats would be confirmed within the construction phase of the Scheme. In the 2018 ES (Environmental Statement Chapter 8: Biodiversity), construction impacts were assessed assuming a lag between habitat loss and habitat creation. With phased habitat creation and temporary habitats, the extent of habitat in each year in the construction period is expected to be more than that which was assessed in the 2018 ES, i.e. the 2018 ES represents a 'worst case'.

4.2.5 The aim of the [Butterfly and Pollinator Survey Report \(2020\)](#) [Redetermination 2.8] is to provide a baseline for further monitoring surveys when new habitats have been created as part of the Scheme. The results of the surveys do not change any of the conclusions of the Environmental Statement (ES). The results do not change the valuation of the Scheme for invertebrates given in the [Environmental Statement: Appendix 8.11 Invertebrate survey report \[APP-250\]](#) and [Environmental Statement: Appendix 8.1B Baseline valuation \[APP-233\]](#) summarizing the importance of invertebrate assemblages in paragraphs 8.1.2-8.1.6.

4.2.6 The Butterfly and Pollinator Survey Report (2020) does not alter the results of, as it was not needed to support or update, the 2018 ES. The survey transects include a habitat appraisal for key calcareous butterfly species, which shows that the arable field margins in the transects, while they are of some value for the widely occurring butterflies, do not have breeding habitat for the notable butterflies of chalk grassland – see Appendix A3 Key Butterfly Habitat Appraisal of this document. None

of the transects supported horseshoe vetch, the larval food plant for adonis blue butterfly and chalk hill blue butterfly, nor kidney vetch, the larval food plant for the small blue butterfly. The lack of larval food plants for these species means that, although a survey earlier in the year might lead to individuals of some butterflies of calcareous grassland being recorded, these would be vagrant individuals, like the two adonis blue recorded, rather than breeding populations. An earlier survey would not change the habitat appraisal.

4.2.7 There is another pre-construction butterfly and pollinator survey underway in summer 2022, the aim of which is to provide a second year of baseline data for comparison in future monitoring of habitat quality for butterflies and pollinators. It has started earlier in the survey season than the 2020 survey. It will provide additional data on the butterflies using the local farmland contributing to the baseline for future monitoring. By reason of the habitats present there is no need to re-assess the Scheme. The butterfly and pollinator surveys are not needed for or intended to inform the re-determination of the Scheme, because appropriate survey of invertebrates was used to support the ecological assessment in ES Appendix 8.11. This included detailed invertebrate survey and assessment, focused on the habitats of most value and the notable species which needed to be taken into account in the ecological assessment (see ES Chapter 8: Biodiversity). The invertebrate survey and assessment were appropriate and proportionate. It did not need to be supplemented for the re-determination, and the butterfly and pollinator surveys (2020 and 2022) were not intended for that purpose.

4.2.8 The pollinator survey is a national citizen science project intended to give a general indication of the type and relative abundance of invertebrate pollinators in a surveyed site. Pollinator surveys can be carried out in both rural and urban environments. The method deals primarily with the most commonly occurring types of insect pollinator, generally not recorded to species level (unlike the invertebrate survey for the 2018 ES). The limitations stated for the pollinator survey regarding flowers do not affect the ecological assessment report in the ES and do not represent a deficiency in the pollinator survey undertaken.

4.2.9 To simplify analysis of the dataset collected in pollinator surveys under the national monitoring scheme, particular common species of flowers were selected as targets to survey. Where those species are not available by reason of habitat or climatic conditions it is reasonable to use other species. The commonly occurring invertebrate species which are recorded in pollinator surveys switch between flowers to feed according to those available in the area during the growing season. The pollinator survey therefore provides a simple indication of the invertebrate pollinators in the local farmland within the Scheme, which can be repeated during and after construction to see any general effects of temporary and permanent habitat creation in the Scheme. The habitats created will help to provide greater abundance of flowers for pollinators throughout the season and with more area.

4.2.10 The 2017 invertebrate survey presented in ES Appendix 8.11 [APP-250] provided an assessment of invertebrates of the best areas of habitat within the Scheme study area, covering a wide range of groups and prioritising notable species, which were considered to be better indicators of the value of habitats for invertebrates. Common and widespread species were also recorded during the survey, including common butterflies of farmland areas. This 2017 invertebrate survey was sufficient to provide a robust basis for the ecological assessment of the Scheme reported in the Environmental Statement Chapter 8: Biodiversity [APP046]).

4.2.11 The butterfly survey in 2020 was not required for the ecological assessment of the Scheme but is part of a programme of monitoring which is expected to show future benefits from the habitat to be created as part of the Scheme.

4.2.12 The Wider Countryside Butterfly Survey and the Pollinator Monitoring Scheme are able to provide landscape-scale information on the target groups over time. The UK Butterfly Monitoring Scheme (<https://ukbms.org/wider-countryside-butterfly-survey>) explains that:

“Established in 2009, the Wider Countryside Butterfly Survey (WCBS) generates important data on the abundance of widespread butterfly species from under-recorded habitats such as farmland, plantation woodland, uplands and urban green spaces. Thus, the WCBS compliments the traditional UK Butterfly Monitoring Scheme ‘Pollard walk’ transects which generally focus on monitoring semi-natural habitats which are rich in butterflies.

The WCBS is both scientifically sound (random sampling of the countryside) and efficient (2-4 visits per year). Its method is broadly based on the BTO’s Breeding Bird Survey (BBS), surveying two parallel 1-km long transects subdivided into 10 sections, located within randomly selected 1-km squares. The surveys’ core recording period is in July and August.”

4.2.13 The transects used for the butterfly survey in 2020 modified this approach slightly by running through areas which are relevant to the Scheme.

Great Crested Newts

4.2.14 The results of the survey of great crested newts in 2020 in the [Great Crested Newt Survey Report \(2021\)](#) [Redetermination 2.7] is not a material change in the baseline for the Scheme. The conservation status of the population would not be affected by the Scheme. The proportion of the good quality terrestrial habitat which will be affected by the Scheme is small relative to the total area of good quality habitat available to the population – most of such habitat is to the north of the pond and remote from the Scheme.

4.2.15 There would be a slightly greater likelihood of encountering individual newts in terrestrial habitat during site clearance at the edge of the Till valley if there was a large breeding population at the time. This meant a European Protected Species Licence (EPSL) was appropriate, rather than a precautionary method of working without an EPSL. As presence of newts during site clearance was more likely if a large population was nearby, working in accordance with a EPSL would ensure compliance with the legal protection for great crested newts under the Wildlife and Countryside Act 1981 (as amended). The possibility of the requirement for a licence was identified prior to the DCO application. This is why the pre-construction survey was carried out, in accordance with OEMP PW-BIO2, to provide the data to inform an application if required.

4.2.16 The waterbody (Pond 1) in the Till valley is being re-surveyed in 2022 to inform understanding of the population dynamics of the known population of great crested newts and to provide suitable information for the Natural England EPSL requirements, not to inform the re-determination of the Scheme. Whilst the survey has not yet been reported, the results to date indicate a return to a small to medium population (with a peak count <15). This would indicate that the population does indeed fluctuate from year to year, depending on occurrence of flooding from the River Till, drying out in summer and land management. As such, it is not considered necessary to change the magnitude of impact from that described within the initial assessment, and therefore it will not be a change to the 2018 ES.

4.2.17 As there was an increase in the great crested newt population recorded in 2021, it was decided that an EPSL would be needed. This is because an area at the eastern edge of the Till valley found to be used by the newts would be affected by preliminary works. The preliminary works will lead to approximately 0.58 hectares of temporary habitat loss along a field boundary at the edge of the Scheme about 150-250 metres from the pond. The potential risks to newts and the mitigation required were assessed in the 2018 ES, and the details were reviewed after the survey in 2021. Following consultation with Natural England, a EPSL application with details of surveys, impact and mitigation was submitted, in accordance with Natural England's requirements. The application was later withdrawn due to the need to re-determine the DCO; following granting of consent a fresh EPSL application will be required.

4.2.18 Mitigation measures included temporary amphibian fencing to exclude newts from the working areas, site clearance on the boundary bank outside the breeding season for great crested newts and provision of refugia for newts. Land within 250 metres of the pond would be restored to existing land use. In the area 250-500 metres from the pond the creation of habitats in the soft estate of the A303 east of the Till viaduct would increase the area of semi-natural habitat available to great crested newts, as shown on the Environmental Statement Figure 2.5 A-S: Environmental masterplan.

4.2.19 The mitigation requirements for great crested newts will be kept under review and included in a future EPSL application to Natural England as appropriate and at the appropriate time prior to the start of construction.

4.2.20 The great crested newt survey does not leave uncertainty surrounding the protection of the species. Instead, the update from the survey informed the Natural England EPSL application and associated consultation that has been undertaken surrounding the application. Whilst the application had to be withdrawn due to the re-determination of the DCO, there were no outstanding issues from the pre-application consultation with Natural England.

4.2.21 Natural England had previously confirmed the approach through the Statement of Common Ground. The survey and details of preliminary works and mitigation do not change the findings of the 2018 ES, that there would be minor impacts from temporary loss of habitat during the scheme and an increase in favourable habitat after construction. As such the Scheme was rated as having neutral effect, not significant for great crested newts in the [Environmental statement Chapter 8: Biodiversity](#) [APP-046, see paragraphs 8.9.103-8.9.108], and this remains our view.

4.3 Response - Issues relating to adverse impacts of tunnelling through chalk bedrock

4.3.1 National Highways does not agree that there remains outstanding information in relation to impacts of tunnelling through chalk bedrock. We have reviewed the section of the Stonehenge Alliance's (Dr Reeves's) representation covering Geology, Ground Investigation and Groundwater Monitoring, and have identified only points that we already have responded to and provided information for during examination. No new points or evidence have been raised in the April 2022 representation.

4.3.2 The effect of the tunnel on groundwater flow through the chalk bedrock and its effect on potential groundwater receptors was assessed in the DCO application Environmental Statement (ES), specifically in Annex 1 of [Appendix 11.4 Groundwater Risk Assessment](#) [APP-282].

4.3.3 Paragraph 5.1.1 of Annex 1 of the Groundwater Risk Assessment (which is contained within APP-282) explains: "*The EA Wessex Basin model has been used to simulate the effects of a tunnel constructed within the Chalk aquifer. This model was developed between key stakeholders for the groundwater and surface water systems, the EA and Wessex Water, and was signed off as fit for predictive purposes by a technical working group*".

4.3.4 Paragraph 5.2.9 of Annex 1 of the Groundwater Risk Assessment found no significant effects to groundwater receptors: "*Overall the groundwater model predicts negligible changes to river flows, and groundwater levels at spring and abstractor*

locations and at Blick Mead during average summer low levels as well as drought low levels. Increases in groundwater level at peak periods are sufficiently small to not increase the risk of groundwater flooding from the baseline risk to communities in the area”.

4.3.5 National Highways provided the following submissions during examination, which address issues raised by Stonehenge Alliance regarding tunnelling through chalk:

- [Deadline 2 Submission - 8.10.11 - Flood risk, groundwater protection, geology and land contamination \(Fg.1\)](#) – [REP2-031] - Responses to Questions Fg.1.5 and Fg.1.11
- [Deadline 3 Submission - 8.18 - Comments on Written Representations](#) – [REP3-013] - Section 17.3
- [Deadline 3 Submission - 8.23 – Implications of 2018 Ground Investigations to the Groundwater Risk Assessment](#) – [REP3-018] – Section 5.2
- [Deadline 3 Submission - 8.25 – Supplementary Groundwater Model Runs to Annex 1 Numerical Model Report](#) – [REP3-021] – Section 4.1
- [Deadline 4 Submission - 8.30.4 - Written summaries of oral submissions put at Flood risk, Groundwater, Geology and Waste hearing on 11th June 2019](#) - [REP4-032] - Section 5.1
- [Deadline 5 Submission - 8.36 - Comments on any further information requested by the ExA and received at Deadline 4](#) – [REP5-003] - Items 11.1.1 and 11.2.56
- [Deadline 6 Submission - 8.37.10 - Responses to the ExA's Written Questions - Flood risk, groundwater protection, geology and land contamination \(Fg.2\)](#) – [REP6-028] - Responses to Questions including Fg.2.1, Fg.2.38, Fg.2.40 & Fg.2.51
- [Deadline 7 Submission - 8.44 - Comments on any further information requested by the ExA and received at Deadline 5 and 6](#) - [REP7-021] – Paragraph 6.4.17
- [Deadline 8 Submission – 8.49 – Comments on any further information requested by the ExA and received to Deadline 7](#) – [REP8-013] - Section 6.2 (see below for further references to this submission)
- [Deadline 8 Submission – 8.52.3 – Written summary of oral submissions put at Flood risk, groundwater protection, geology and land contamination hearing on 29 August 2019](#) – [REP8-018] - Appendix A

- [Deadline 9 Submission - 8.55 – Comments on any further information received by the ExA and received to Deadline 8 – \[REP9-022\]](#) – Paragraph 16.1.8

4.3.6 With reference to specific points raised by Dr Reeves on behalf of the Stonehenge Alliance, we highlight the following content in our previous submissions to examination that answers these points.

4.3.7 Confidence in geological interpretation and in particular the role of the Whitway Rock and phosphatic chalk:

- Paragraph 6.2.4 in the [Deadline 8 Submission - 8.49 \[REP8-013\]](#)
- Appendix A in the [Deadline 8 Submission - 8.52.3 \[REP8-018\]](#). Appendix A also includes statements from Professor Rory Mortimore, which support National Highways' interpretation. Professor Mortimore has been referenced by Dr Reeves in his evidence to the examination as an expert in chalk geology and hydrogeology.
- Paragraph 16.1.18 in the [Deadline 9 Submission – 8.55 \[REP9-022\]](#)

4.3.8 Vibration as a result of tunnelling and the strength and competence of the rock through which the tunnels would be bored, and confirmation that a 3D model is not required:

- [Deadline 4 Submission - 8.30.4 - \[REP4-032\]](#) - Section 5.1
- [Deadline 6 Submission - 8.37.10 - \[REP6-028\]](#) - Responses to Questions Fg.2.40 & Fg.2.51
- [Deadline 5 Submission - 8.36 - \[REP5-003\]](#) - Items 11.1.1 and 11.2.56

4.3.9 Effects from the use of surface grouting was raised as a concern by the Stonehenge Alliance in their April 2022 representation. This is not a matter newly raised, and was covered extensively in submissions during examination of the DCO, for example in our [Deadline 8 Submission - 8.49 – Comments on any further information requested by the ExA and received to Deadline 7 \[REP8-013\]](#). In item 6.2.5 responding to the points raised by the Stonehenge Alliance, we respond:

“These activities will not threaten yields and groundwater quality. See the Applicant's response to agenda item 5.1 in the Written Summary of Oral Submission from ISH4 regarding Flood risk, Groundwater, Geology and Waste [REP4-032] and the additional information provided in the Post Hearing Note. As noted there, the properties and characteristics of the grout will be carefully selected to limit grout migration, dilution and other effects from groundwater and fissures in the chalk. This would be undertaken in accordance with best practice and as part of the risk management of the tunnelling works and will be controlled pursuant to item MW-WAT9 of the OEMP which requires EA approval of the materials used for ground

treatment when more details of the construction methodology will be known. Also see response in paragraph 6.2.23 of deadline 7 Submission - 8.44 - Comments on any further information requested by the Examining Authority and received at deadline 5 and 6 [REP7-021]".

4.3.10 Measure MW-WAT9 of the [draft Outline Environmental Management Plan \(OEMP\)](#) requires the main works contractor to seek approval from the Environment Agency, prior to use, for the materials used for ground treatment (such as grouting used at the tunnel portals and cross passages) and the main works contractor to maintain a list of the products authorised for use and undertake appropriate monitoring of groundwater quality.

4.3.11 Concerns about risks during tunnelling are ill-founded. We confirm that detailed design will require further ground investigation, the standards for which will be controlled through the requirements in the DCO and the OEMP (see measures PW-GEO1 PW-GEO2, PW-GEO4, MW-GEO2 and MW-GEO8). However, as stated previously under item 6.4.17 of [Deadline 7 Submission - 8.44 \[REP7-021\]](#), a proportionate and staged approach has been undertaken with the current investigation that is considered sufficient to inform the 2018 Environmental Statement and is in accordance with best practice.

4.3.12 Therefore, issues relating to tunnelling through chalk bedrock have been covered in the DCO application, and have been subject to extensive, repeated and detailed consideration at various points during the 2019 Examination. We have provided full and detailed responses to questions, resolving issues, and maintain that no information required to consent the Scheme remains outstanding.

4.3.13 In answer to Stonehenge Alliance's assertion (paragraph 35 on page 13 of their April 2022 representation), with regard to groundwater monitoring data, '*...that there must continue to be serious concerns about the adverse impacts of tunnelling through the Chalk bedrock...*', our ongoing groundwater monitoring conversely has been shown to be consistent with the conceptual model developed for the Groundwater Risk Assessment [APP-282] and the calibration of its associated groundwater model. National Highways submitted an example report on this ongoing monitoring to the DCO examination: [Deadline 3 - 8.24 – Groundwater Monitoring 2018-19 Conceptual Model Review \[REP3-020\]](#).

4.3.14 Therefore, in conclusion, we do not accept that there are 'continuing' or 'serious' concerns with regard to the effect of the tunnel on groundwater.

5 Environmental Statement on heritage matters

5.1 Question

5.1.1 The Secretary of State notes that Wiltshire Council has sought clarification as to how the Applicant reached its conclusion that the updated baseline assessment does not alter the outcome of the 2018 cultural heritage assessment within the Environmental Statement. The Applicant is asked to provide further information on the methodology of approach that was applied to the newly assessed assets so as to allow interested parties the opportunity to consider and provide further responses on whether the outcome of the assessment set out in the 2018 Environmental Statement on heritage matters has changed. The Applicant is asked to provide any additional evidence and documents that are relevant to fully understand any change in the assessment of heritage assets.

5.2 Response

5.2.1 The updated baseline [Archaeological Gazetteer](#) submitted to the Secretary of State in February 2022 [Redetermination 2.1] identifies 100 additional heritage assets that have been added to the Wiltshire and Swindon Historic Environment Record (HER) since publication of the 2018 Environmental Statement (ES). Of the 100 additional heritage assets identified in Redetermination 2.1, four (2018 ES UID 2191/Redetermination 2.1 UID 7052; UID 2019/7054; UID 2164/7090; and UID 2177/7092) were previously considered in the ES, and therefore the updated baseline Archaeological Gazetteer contains duplicate entries for these assets.

5.2.2 Appendix 3.1 of the [Environmental Information Review](#) [EIR; Redetermination 1.4], identifies significant effects on 10 of the 100 heritage assets that would arise due to construction (Table 3.1) and operation (Table 3.2) of the Scheme. Non-significant effects are identified on 7 of the 100 assets due to construction (Table 3.3) and operation (Table 3.4). The new likely significant effects identified in EIR Appendix 3.1 are assessed as Large beneficial effects. The new non-significant effects are assessed as Slight beneficial effects. No new likely significant adverse effects, or non-significant adverse effects, have been identified. No impacts have been identified in respect of the remaining heritage assets identified in the updated baseline Archaeological Gazetteer.

5.2.3 The assessment methodology used in the EIR is explained in section 3.2 of the EIR, and follows that set out in the [EIA scoping report](#) (2017) and applied in the 2018 ES. The 2018 [ES Chapter 6: Cultural Heritage](#) reported significant effects on cultural heritage and archaeology in Tables 6.10, 6.11 and 6.12. Non-significant effects (slight adverse or slight beneficial) were reported in [ES Appendix 6.8](#).

5.2.4 Neutral effects – where no impact is assessed (‘no change’) – are not reported in the EIR. This is consistent with the approach adopted in the ES, where effects not deemed significant were not reported (see [ES Chapter 4: Environmental assessment methodology](#), paragraph 4.5.10).

5.2.5 The level of assessment reported in the EIR is consistent with the baseline assessment included within the 2018 ES. The assessment is presented in full in Tables 3.1 – 3.4 of the EIR, in the same level of detail as that presented in ES Tables 6.10, 6.11 and 6.12 and in ES Appendix 6.8, Summary of Non-significant Effects.

5.2.6 As the assessment of the additional heritage assets already has been presented in the EIR in a way that is fully comparable to the presentation in the 2018 ES, no additional evidence or documents are considered necessary to understand any change in the assessment of heritage assets.

5.2.7 Subsequent to preparation of the EIR, it has come to light that a further 15 additional heritage assets added to the HER since publication of the 2018 ES were overlooked in the updated baseline Archaeological Gazetteer submitted to the Secretary of State in February 2022 [Redetermination 2.1]. All but one of these 15 heritage assets are considered in the 2018 ES under differing HER and/or ES unique identification numbers (UIDs), and/or feature numbers assigned in archaeological evaluation reports submitted to Examination at Deadline 1. The effects of the DCO Scheme on these heritage assets are therefore already reported in the ES.

5.2.8 With regards to the one heritage asset added to the HER since publication of the 2018 ES and not otherwise considered in the 2018 ES, this was due to a change in interpretation of the archaeological feature between compilation of the 2018 ES and completion of the relevant archaeological evaluation report [REP1-052 and 053] submitted to Examination at Deadline 1. The archaeological feature in question [REP1-052, p. 28 feature 132209], situated outside of the WHS north-east of Winterbourne Stoke, and listed as a ‘Saxon pit’ in the HER update received in 2021 (MWI76840, UID 7110 – see tables 3.5A and 3.1A below), is interpreted as a possible ‘sunken featured building’ of Saxon date, and is therefore assessed as of Medium value (a non-designated asset contributing to Regional research objectives) (Environmental Statement Chapter 6: Cultural heritage, Table 6.2). Detailed design development within the Order Limits in relation to a drainage pond is proposed to allow the archaeological feature to be retained in place. With regards to assessment of the effects of the DCO Scheme on this one heritage asset, therefore, there would be ‘no change’ compared to current baseline conditions, and a Neutral effect. It should be noted that, in line with the 2018 ES, Neutral effects – where no impact is assessed (‘no change’) – are not reported in the EIR (see ES Chapter 4: Environmental assessment methodology, paragraph 4.5.10).

5.2.9 Accordingly, we include updates of Table 3.1 and Table 3.5 from those presented in the EIR and in the Archaeological Gazetteer, being Table 3.1A and Table 3.5A below. Table 3.1A includes all effects assessed, both significant and non-significant (and neutral), in terms of permanent construction effects. There would be no temporary construction effects or operational effects on any of the 15 additional heritage assets. We include updated Figures 1.A – 1.E Archaeological Assets within the 500m and 1km Study Areas as a separate document in this submission.

Table 3.1A: Summary of significant effects – construction (permanent)

Table 3.1A includes all effects assessed, both significant and non-significant (and Neutral effects). There would be no temporary construction effects or operational effects on any of the 15 additional heritage assets.

Asset	Name and Description	Asset Value	Impact description Scheme element Description of impact Permanent / temporary	Design and Mitigation Measures	Impact Magnitude (post-mitigation)	Residual Effect
Archaeological assets (identified by UID [7***] and corresponding WSHER [MWI****] references)						
7101 MWI76838	Crouched Beaker burial , Western Portal and approach cutting. Beaker burial uncovered in Trench 260 – Grave 26009	Very High	Human remains 100% excavated and removed in A303 survey. Grave situated beyond footprint of western portal approach cutting. Not impacted.	DAMS Site 39 – PAR: ground will be protected during PW and MW.	No change	Neutral
7102 MWI76837	Tree throw, Western Portal and approach cutting. Tree throw with Beaker pits and neonate burial uncovered in Trench 244 – Grave 24405	Medium	Human remains 100% excavated and removed in A303 survey. Grave situated beyond footprint of western portal approach cutting. Not impacted.	DAMS Site 39 – PAR: ground will be protected during PW and MW.	No change	Neutral

Asset	Name and Description	Asset Value	Impact description Scheme element Description of impact Permanent / temporary	Design and Mitigation Measures	Impact Magnitude (post-mitigation)	Residual Effect
7103 MWI76832	Late Neolithic pits, Longbarrow Junction (North) Pits found in Trenches 437, 438 and 439 (single HER entry). Part of UID 2144	Medium	Pits identified and sample excavated in A303 survey. Features in Trench 439 were 100% excavated (removed) in A303 survey. Features in trenches 437 and 438 outside footprint of A360 northern link road. Not impacted.	n/a	Moderate	Moderate adverse
7104 MWI76834	Early Bronze Age pit , Longbarrow Junction (North) Pit found in Trench 431. Associated with UID 2076/2078	Medium	Features identified and sample excavated in A303 survey. On edge of A360 northern link road. Any related deposits will be removed.	Archaeological investigation in advance of construction – DAMS site 19.1 (AER).	Minor adverse	Slight adverse
7105 MWI76835	Urned cremation burial , Longbarrow Junction (North) EBA urned cremation burial found in Trench 441	Very High	Cremation burial excavated and removed in A303 survey. Burial situated beyond footprint of A360 northern link road. Not impacted.	n/a	n/a	n/a

Asset	Name and Description	Asset Value	Impact description Scheme element Description of impact Permanent / temporary	Design and Mitigation Measures	Impact Magnitude (post-mitigation)	Residual Effect
7106 MWI76833	Early Bronze Age pits, Longbarrow Junction (South) Pits uncovered in Trench 331. Associated with C-shaped enclosure 2072	Medium	Features identified and 100% excavated in A303 survey. On edge of southern roundabout. Any related deposits will be removed.	Archaeological investigation in advance of construction – DAMS Site 16.2 (AER).	Major adverse	Moderate adverse
7107 MWI76842	Bronze Age ditches, Longbarrow Junction (South) Ditches uncovered in Trenches 383 and 1372. Associated with possible enclosure 2167	Medium	Features identified and sample excavated in A303 survey. Extending within landscape reprofiling area west of A360 southern link road, related deposits will be removed.	Archaeological investigation in advance of construction – DAMS Site 16.1 (Trench 383) (AER). DAMS Site X12 – PAR: excluded from construction area (Trench 1372).	Moderate adverse	Moderate adverse
7108 MWI76916	Barrow, Winterbourne Stoke Bypass (east) Barrow among AG05 sampled in Trench 1340	High	Ring ditch sample excavated in A303 survey. Situated beyond fill area: to be retained in situ. Not impacted.	DAMS Site 14 – PAR: excluded from construction area.	Minor	Slight adverse

Asset	Name and Description	Asset Value	Impact description Scheme element Description of impact Permanent / temporary	Design and Mitigation Measures	Impact Magnitude (post-mitigation)	Residual Effect
7109 MWI76917	Barrow, Winterbourne Stoke Bypass (east) Barrow among AG05 , sampled in Trench 1340	High	Ring ditch sample excavated in A303 survey. Situated beyond fill area: to be retained in situ. Not impacted.	DAMS Site 14 – PAR: excluded from construction area.	Minor	Slight adverse
7110 MWI76840	Anglo-Saxon pit, Winterbourne Stoke Bypass (east) Pit uncovered in Trench 1322. Not assessed in ES.	Medium	Feature identified and sample excavated in A303 survey. In area of drainage infiltration pond. Remains to be retained in situ	Detailed design of drainage infiltration area to retain feature in situ.	No change	Neutral
7111 MWI76918	Undated trackway, Winterbourne Stoke Bypass (east) A section of trackway uncovered in Trench 1317, north-east of Winterbourne Stoke. Part of UID 2045.	Low	Feature identified and sample excavated in A303 survey. Within area of fill <1m deep, will be retained in situ.	DAMS Site 15.8 – PAR (fill <1m)	Minor	Slight adverse
7112 MWI76913	Middle Neolithic pits, Winterbourne Stoke Bypass (west) Pits uncovered in Trench 1070, west of Scotland Lodge Farm. Associated with UID 2035.01/02.	High	Pits identified and 50% excavated in A303 survey. To be retained in situ. Not impacted.	DAMS Site X1 – PAR: excluded from construction area.	No change	Neutral

Asset	Name and Description	Asset Value	Impact description Scheme element Description of impact Permanent / temporary	Design and Mitigation Measures	Impact Magnitude (post-mitigation)	Residual Effect
7113 MWI76913	Middle Neolithic pit, Winterbourne Stoke Bypass (west) Pit uncovered in Trench 1219, north of Scotland Lodge Farm. Associated with UID 2038	Medium	Pit identified and 50% excavated in A303 survey. Within area of fill <1m deep.	Archaeological investigation in advance of construction – DAMS site 10.2 (AER).	Major (no change from the ES)	Moderate Adverse (no change from the ES)
7114 MWI76914	Late Neolithic/Early Bronze Age Pits, Winterbourne Stoke Bypass (West) Pits in Trench 717, North of Scotland Farm Lodge. Associated with UID 2038	Medium	Pits identified and 100% excavated in A303 survey. Within / close to high embankment) footprint, any related deposits will be removed.	Archaeological investigation in advance of construction – DAMS site 10.3 (AER).	Major (no change from the ES)	Moderate Adverse (no change from the ES)
7115 MWI76915 MWI76841	Two pits of possible Late Neolithic date, Winterbourne Stoke Bypass (East) Pits in Trench 754 NE of Winterbourne Stoke. Associated with UID 2053	Medium	Pits identified and 100% excavated in A303 survey. Within mainline footprint, any related deposits will be removed.	Archaeological investigation in advance of construction – DAMS site 15.2 (SMR).	Minor (no change to the ES)	Slight Adverse (no change to the ES)

Table 3.5A: Archaeological Gazetteer (Part two)

UID	UID sub-division	Name	Description	Period	Designation	NHLE	HER	Value	Source	Easting	Northing
7101	-	Crouched Beaker burial, Western Portal and approach cutting.	Beaker burial uncovered in Trench 260 – Grave 26009 Not impacted.	Early Bronze Age	N/A	-	MWI76838	Very High	Highways England 2019c & 2019d	410579	141531
7102	-	Tree throw, Western Portal and approach cutting.	Tree throw with Beaker pits and neonate burial uncovered in Trench 244 – Grave 24405 Not impacted.	Early Bronze Age	N/A	-	MWI76837	Very High	Highways England 2019c & 2019d	410395	141461
7103	-	Late Neolithic pits, Longbarrow	Pits found in Trenches 437, 438 and 439.	Late Neolithic to Early Bronze Age	N/A	-	MWI76832	Very High	Highways England 2019e & 2019f	409780	141750

UID	UID sub-division	Name	Description	Period	Designation	NHLE	HER	Value	Source	Easting	Northing
		Junction (North).	Part of UID 2144. Not impacted.								
7104	-	Early Bronze Age pit, Longbarrow Junction (North).	Pit found in Trench 431. Associated with UID 2076/2078.	Early Bronze Age	N/A	-	MWI76834	Very High	Highways England 2019e & 2019f	409660	141620
7105	-	Urned cremation burial, Longbarrow Junction (North)	Urned cremation burial found in Trench 441. Not impacted.	Early Bronze Age	N/A	-	MWI76835	Very High	Highways England 2019e & 2019f	409840	141750
7106	-	Early Bronze Age pits, Longbarrow	Pits uncovered in Trench 331.	Late Neolithic to Early Bronze Age	N/A	-	MWI76833	Very High	Highways England 2019e & 2019f	409410	141170

UID	UID sub-division	Name	Description	Period	Designation	NHLE	HER	Value	Source	Easting	Northing
		Junction (South)	Associated with C-shaped enclosure 2072.								
7107	-	Bronze Age ditches, Longbarrow Junction (South)	Ditches uncovered in Trenches 383 and 1373. Associated with possible enclosure 2167.	Bronze Age	N/A	-	MWI76842	Very High	Highways England 2019e, 2019f, 2019g & 2019h	409880	140740
7108	-	Barrow, Winterbourne Stoke Bypass (east)	Barrow sampled in Trench 1340. Among AG05. Not impacted.	Bronze Age	N/A	-	MWI76916	High	Highways England 2019g & 2019h	408400	141230

UID	UID sub-division	Name	Description	Period	Designation	NHLE	HER	Value	Source	Easting	Northing
7109	-	Barrow, Winterbourne Stoke Bypass (east)	Barrow sampled in Trench 1340. Among AG05. Not impacted.	Bronze Age	N/A	-	MWI76917	High	Highways England 2019g & 2019h	408360	141230
7110	-	Anglo-Saxon pit, Winterbourne Stoke Bypass (east)	Pit uncovered in Trench 1322. Not assessed in ES. Retained in situ.	Saxon	N/A	-	MWI76840	Medium	Highways England 2019g & 2019h	407970	141370
7111	-	Undated trackway, Winterbourne Stoke Bypass (east)	A section of trackway uncovered in Trench 1317, north-east of	Undated	N/A	-	MWI76918	Low	Highways England 2019g & 2019h	407640	141420

UID	UID sub-division	Name	Description	Period	Designation	NHLE	HER	Value	Source	Easting	Northing
			Winterbourne Stoke. Part of UID 2045. Retained in situ.								
7112	-	Middle Neolithic pits, Winterbourne Stoke Bypass (west)	Two pits uncovered in Trench 1070, west of Scotland Lodge Farm. Associated with UID 2035.01/02. Not impacted.	Middle Neolithic	N/A	-	MWI76913	High	Highways England 2019i & 2019j	406746	141058
7113	-	Middle Neolithic pit, Winterbourne	Pit uncovered in Trench 1219, north of	Middle Neolithic	N/A	-	MWI76913	Medium	Highways England 2019i & 2019j.	407137	141740

UID	UID sub-division	Name	Description	Period	Designation	NHLE	HER	Value	Source	Easting	Northing
		Stoke Bypass (west)	Scotland Lodge Farm. Associated with UID 2038.								
7114	-	Late Neolithic/Early Bronze Age Pits, Winterbourne Stoke Bypass (West)	Pits in Trench 717, North of Scotland Farm Lodge. Associated with UID 2038.	Late Neolithic/Early Bronze Age	N/A	-	MWI76914	Medium	Highways England 2019i & 2019j.	407231	141488
7115	-	Two pits of possible Late Neolithic date, Winterbourne Stoke Bypass (East)	Pits in Trench 754 NE of Winterbourne Stoke. Associated with UID 2053.	Late Neolithic	N/A	-	MWI79894, MWI76915	Medium	Highways England 2019g & 2019h	408427	141381

References

Highways England, 2019a. A303 Stonehenge, Amesbury to Berwick Down, Archaeological Evaluation Report: Eastern Portal – Part 1: Text. April 2019. [REP1-047]

Highways England, 2019b. A303 Stonehenge, Amesbury to Berwick Down, Archaeological Evaluation Report: Eastern Portal – Part 2: Figures. April 2019. [REP1-048]

Highways England, 2019c. A303 Stonehenge, Amesbury to Berwick Down, Western Portal and Approach - Part 1: Text. April 2019. [REP1-045]

Highways England, 2019d. A303 Stonehenge, Amesbury to Berwick Down, Western Portal and Approach - Part 2: Figures. April 2019. [REP1-046]

Highways England, 2019e. A303 Stonehenge, Amesbury to Berwick Down, Ploughzone Artefact Sampling and Trial Trench Evaluation: Longbarrow Junction - Part 1: Text. April 2019. [REP1-042]

Highways England, 2019f. A303 Stonehenge, Amesbury to Berwick Down, Ploughzone Artefact Sampling and Trial Trench Evaluation: Longbarrow Junction - Part 2: Figures. April 2019. [REP1-043]

Highways England, 2019g. A303 Stonehenge, Amesbury to Berwick Down, Archaeological Evaluation Report. Winterbourne Stoke East - Part 1: Text. April 2019. [REP1-052]

Highways England, 2019h. A303 Stonehenge, Amesbury to Berwick Down, Archaeological Evaluation Report. Winterbourne Stoke East - Part 2: Figures. April 2019. [REP1-053]

Highways England, 2019i. A303 Stonehenge, Amesbury to Berwick Down, Archaeological Evaluation Report. Winterbourne Stoke West - Part 1: Text. April 2019. [REP1-049]

Highways England, 2019j. A303 Stonehenge, Amesbury to Berwick Down, Archaeological Evaluation Report. Winterbourne Stoke West - Part 2: Figures. April 2019. [REP1-050]

6 Newly assessed assets

6.1 Question

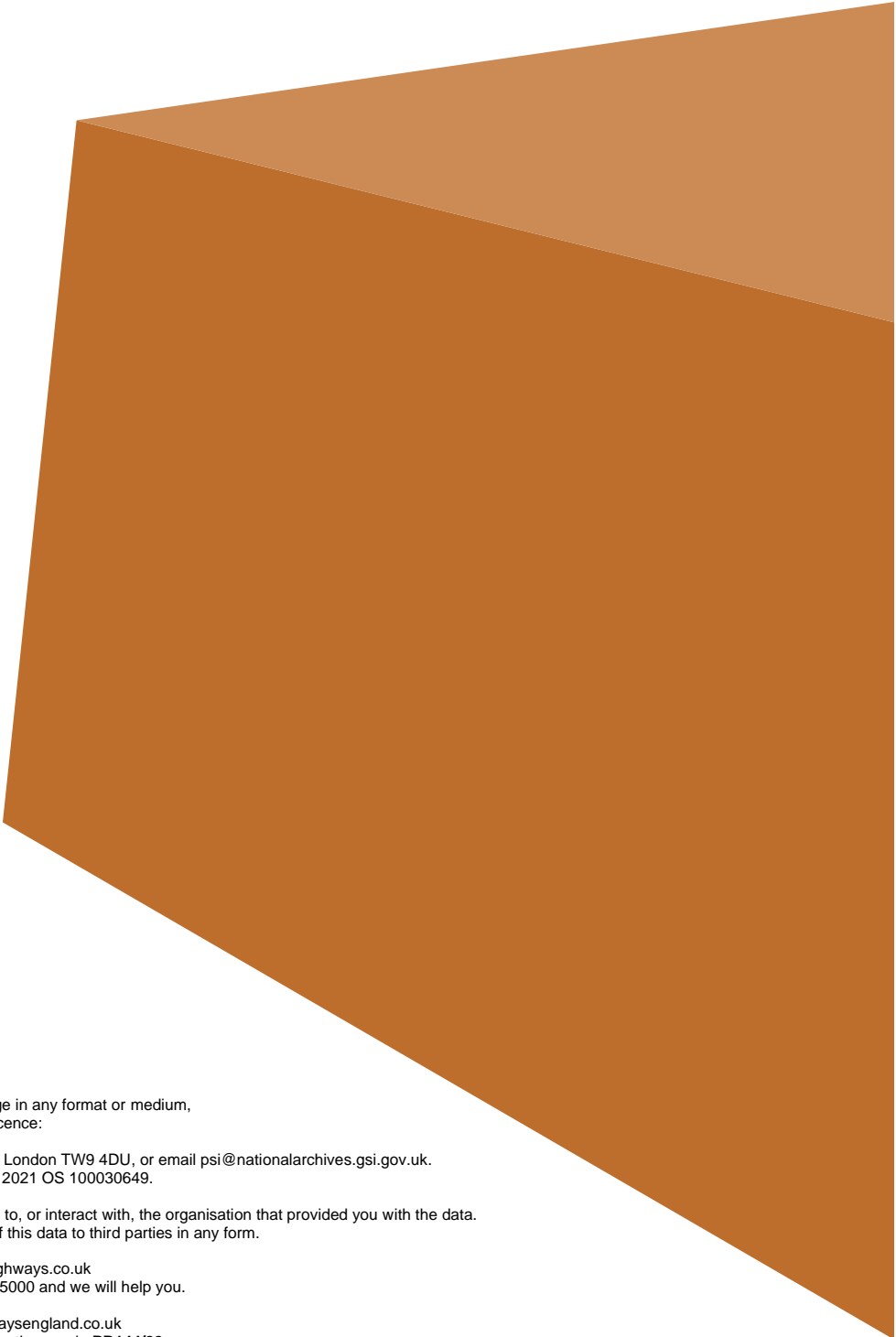
6.1.1 The Secretary of State notes that Historic England in its response to the consultation of 24 February 2022 has asked for clarification on whether the newly assessed assets have been considered where they form part of asset groups. The Applicant is asked to provide clarification on this matter. If the Applicant has undertaken that consideration the Applicant should provide any additional information or documents in relation to that consideration.

6.2 Response

6.2.1 There is no additional information or documents in relation to this consideration. We have reviewed the Asset Groups identified in the 2018 [Environmental Statement: Appendix 6.9: Cultural Heritage Setting Assessment \[APP-218\]](#) and the [Heritage Impact Assessment \[APP-195\] \(HIA\)](#) in light of the new Historic Environment Record (HER) data.

6.2.2 Our review has confirmed that:

- No change is necessary to the definition of the relevant Asset Groups to reflect the new HER data; and
- There is no change to the significance of any of the relevant Asset Groups, the impact of the proposed Scheme on those Asset Groups, or the significance of effect as assessed in the 2018 Environmental Statement (ES) or HIA or the 2020 ES and HIA Addenda arising from the identification in the new HER data of these additional features.



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