

**National Highways: A303 Amesbury to
Berwick Down Project, Development
Consent Order Application**

Scheme Reference: TR010025

Alternatives

**Response to Secretary of State's call for further
representations on his Statement of Matters
Bullet Point 1**

for

**The Stonehenge Alliance
(Reference No. 2001870)**

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1. Introduction

The Stonehenge Alliance campaigns for the protection and enhancement of the World Heritage Site (WHS) and its setting. We therefore consider that road widening options that damage the WHS should be rejected and, should an A303 tunnel be *insisted* upon, that it should be long enough to pass under the whole WHS. The Proposed Scheme would not give that protection and our objection to it continues for reasons given in our representations to the Examination and the Secretary of State's Consultations. We suggest in this paper (at Section 6) ways in which, without further damaging the WHS, traffic flow could be improved; some of them would also address the current Climate Emergency which was not of major concern when the Scheme was announced in 2014.

In commenting on National Highways' (NH) responses to the current consultation, we note that the Proposed Scheme remains unchanged since November 2020 and that no changes are seen in NH's approach to alternatives, apart from the introduction of some ambiguity in its views on a longer bored tunnel. We give, below, objective views on alternatives in terms of their efficacy in protecting the WHS and its Outstanding Universal Value (OUV), bearing in mind that measures other than building a new dual carriageway could prove to be a more satisfactory outcome in the present climate and merit serious consideration.

2. The Context of the High Court Decision

2.1. In [R\(oao Save Stonehenge World Heritage Site Ltd\) v SST \[2021\] EWHC 2161 \(Admin\)](#) the High Court confirmed that the availability of alternatives was a mandatory material consideration for the Secretary of State to take into account. This arises due to the wholly exceptional circumstances of the proposal for the Stonehenge Road Scheme.

2.2. The High Court confirmed well established case law that where a development 'is bound to have significant adverse effects and where the major argument advanced in support of the application is that the need for the development outweighs the planning disadvantages inherent in it' then it will be necessary to consider whether there is a more appropriate site/scheme ([Trusthouse Forte v SSE \(1987\) 53 P&CR 293 per Simon Brown J](#)).

2.3. In [R\(Langley Park School for Girls Governing Body\) v Bromley London Borough Council \[2009\] EWCA Civ 734](#) the Court of Appeal confirmed that the 'starting point must be the extent of the harm in planning terms (conflict with policy etc.) that would be caused by the application. . . At the other end of the spectrum, if a [decision maker] considered that a proposed development would do really serious harm it would be entitled to refuse planning permission if it had not been persuaded by the applicant that there was no possibility, whether by adopting an alternative scheme, or otherwise, of avoiding or reducing that harm.' *Per Sullivan LJ*.

2.4. In reaching his conclusion in *R(oao Save Stonehenge World Heritage Site Ltd) v SST* [2021] EWHC 2161 (Admin), Holgate J noted the following factors which meant that the potential for alternatives falls to be considered in relation to the Stonehenge Road scheme:

1. The designation of the World Heritage Site is a declaration that the site has ‘outstanding universal value’ for the cultural heritage of the world as well as the UK. It is an asset of the highest significance and there is a duty to protect and conserve the asset under the World Heritage Convention ([High Court Judgment](#), para 278);
2. The SST accepted findings of the Panel on the harm to the settings of designated heritage assets and also the harm which would be caused by the western cutting in the proposed scheme. He found that OUV attributes, integrity and authenticity of the WHS would be harmed by the proposal. The Secretary of State found that the overall impact would be significantly adverse (para 279);
3. The harm would be permanent and irreversible (para 280);
4. The western cutting has attracted strong criticism from the World Heritage Committee as well as interested parties in findings from the ExA; those criticisms are reinforced by articles 4 and 5 of the World Heritage Convention (para 281);
5. The SST found that the heritage benefits did not outweigh the harm. (para 282);
6. The proposal would cause significant planning harm (para 283);
7. The view of Highways England that alternatives would provide ‘minimal benefit’ in heritage terms was predicated on its own assessments. ‘The fact that the SST accepted that there would be net harm to the OUV attributes, integrity and authenticity of the WHS . . . made it irrational or logically impossible for him to treat [Highways England’s] options appraisal as making it unnecessary for him to consider the relative merits of the tunnel alternatives. The options testing by IP1 dealt with those heritage impacts on a basis which is inconsistent with that adopted by the SST’ (para 285);
8. The tunnel alternatives are located within the application site (para 286); and
9. ‘Compliance with a requirement to take information into account does not address the specific obligation in the circumstances of this case to compare the relative merits of the alternative tunnel options’ (para 287).

2.5. Therefore, it is clear that the consideration of alternatives falls to be considered against the Secretary of State’s clear finding that the impact of the scheme upon the WHS would be significantly adverse.

2.6. The ‘alternatives assessment’ produced by National Highways in response to the Secretary of State’s statement of matters is not fit for purpose as it neither accepts nor even acknowledges the finding of the Secretary of State that the proposal would have significantly adverse impacts upon the World Heritage Site. This is expanded upon further below.

The Importance of the Alternatives Assessment at this stage

2.7. It is noted that the proposal (or something similar to it) has long been in the planning by Highways England (now National Highways (NH)). However, the assessment of the proposal during its planning and even its inclusion in RIS2 has been fundamentally flawed. This is

because NH has maintained throughout that the proposal would be beneficial for the WHS. This point was highlighted by the High Court judgment wherein Holgate J stated:

‘even if a full options appraisal has been carried out for the purpose of including a project in a RIS, that may not have involved all the considerations which are required to be taken into account under the development consent process, or there may have been a change in circumstance since that exercise was carried out.’ (para 262).

2.8. The High Court further confirmed that the options testing for a RIS may rely upon a judgment by Highways England which the Panel or Secretary of State disagrees with and therefore undermines reliance upon that exercise:

‘In the present case IP1’s assessment that the extended tunnel options would bring minimal benefit in heritage terms cannot be divorced from its judgments that (i) no part of its proposed scheme would cause substantial harm to any designated heritage asset . . . and (ii) there would be a beneficial effect on five attributes of the OUV, only a slightly adverse effect on two attributes and a slightly beneficial effect looking at the OUV authenticity and integrity of the WHS overall. . . ’ (para 263)

2.9. The decision of the Secretary of State (12 November 2020) is the first time where the Government has considered the true heritage impact of the proposal which involves the loss of at least 7ha of the fabric of the world heritage site together with substantial development in the setting of various heritage assets (including the WHS itself). The key findings of the Secretary of State are that:

- a. The Scheme represents ‘the greatest physical change to the Stonehenge landscape in 6000 years and a change which would be permanent and irreversible, unlike a road constructed on the surface of the land’ (para. 258 of the High Court Judgment and Examining Authority’s Report (ExAR) para. 5.7.225 and adopted by SoS at Decision Letter (DL)[10]);
- b. The overall impact to the WHS (i.e. once benefits have also been taken into account) would be ‘significantly adverse’ (para. 279 High Court Judgment);
- c. The scheme would not produce an overall net benefit for the WHS and, in that sense, it is not acceptable *per se* (para. 282 High Court Judgment);
- d. There would be net harm to OUV attributes, integrity and authenticity of the WHS (para. 285 High Court Judgment);
- e. Attributes (3), (5) and (6) of the OUV would suffer ‘major harm’ (para. 97 High Court Judgment and ExAR 5.7.227-229 and adopted by SoS at DL[10]);

- f. 'Irreversible harm would occur, affecting the criteria for which the Stonehenge, Avebury and Associated World Heritage Site was inscribed on the World Heritage List' (ExAR 5.7.326 cited at para. 103 High Court Judgment)
- g. The Longbarrow Junction falls firmly within the settings of the WHS as a whole and of asset groups 12 and 13 (ExAR 5.7.241). Seen from above, the Longbarrow Junction would 'dwarf all other individual features, including the Stones' (ExAR 5.7.243 and adopted by SoS at DL[10]). Further its broad geometric outlines would be evident at surface level and would 'appear at odds with the surrounding smaller scale morphology of rectilinear fields and small groupings of traditional buildings' (ExAR 5.7.244 and adopted by SoS at DL[10])
- h. 'The Junction, together with the cutting leading to the western portal, represents a single, very large, continuous civil engineering undertaking, spanning the western boundary of the WHS. Given the arbitrary nature of the boundary and the underlying expansive and unified character of the cultural landscape, the junction would have effects on the OUV similar to those described for the cutting and western portal.' (ExAR 5.7.245 and adopted by SoS at DL[10])
- i. 'The harm [caused by the Longbarrow Junction] reflects that caused by the cutting on the OUV, including a continuation of the harm to the Wilsford/Normanton dry valley. Also, the harm to the overall assembly of monuments, sites, and landscape through major excavations and civil engineering works, of a scale not seen before at Stonehenge. Whilst the existing roads could be removed at any time, should a satisfactory scheme be put forward, leaving little permanent effect on the cultural heritage of the Stonehenge landscape, the effects of the proposed junction would be irreversible.' (ExAR 5.7.247 and adopted by SoS at DL[10])
- j. The OUV of the WHS would be harmed by 'potentially serious loss of assets...because of the civil engineering excavation works' (ExAR 5.7.308 and adopted by SoS at DL[10])
- k. The Secretary of State has 'serious concerns regarding the effects of elements of the Proposed Development on the OUV of the WHS, and on the cultural heritage and the historic environment of the wider area' (ExAR 5.7.207 and adopted by SoS at DL[10])
- l. The western part of the WHS would be 'seriously disturbed by the intervention of the cutting and the western portal' (ExAR 5.7.217 and adopted by SoS at DL[10]);
- m. The presence and scale of the cutting would be much greater than shown in Highways England's 'Western Cutting Zone of Theoretical Visibility study [REP7-025]' (ExAR 5.7.223 and adopted by SoS at DL[10])
- n. Whilst much harm arises from the effect of existing roads including the A303 'the roads could be removed at any time, should a satisfactory scheme be put forward,

just as the A344 was removed, leaving little permanent effect on the cultural heritage of the Stonehenge landscape.’ (ExAR 5.7.224 and adopted by SoS at DL[10])

- o. The eastern portal and cutting would ‘harm the landscape values of the OUV. In addition, the Countess barrows would be a little nearer the line of the road than at present, having a slight negative effect on the OUV. However, the main danger to Blick Mead would be harm or loss to Mesolithic remains through changes in patterns of ground water, which could give rise to enormous damage...’ (ExAR 5.7.256 and adopted by SoS at DL[10])
- p. The Secretary of State found the following overall effects to each of the OUV attributes (ExAR 5.7.307-313 and adopted by SoS at DL[10]):

‘Attribute 1: Stonehenge itself as a globally famous and iconic monument.

The tunnel would remove the intrusion of trunk road traffic, allow partial reunification of the WHS, and reconnection of the Avenue. However, the recognised importance of Stonehenge would suffer were the major permanent and irreversible engineering works proposed to take place within the WHS and its setting.

Attribute 2: The physical remains of the Neolithic and Bronze Age funerary and ceremonial monuments and associated sites. The tunnel would allow preservation of the monuments and sites under which it would pass and prevent any further traffic damage arising from the surface roads. However, potentially serious loss of assets could occur because of the civil engineering excavation works.

Attribute 3: The siting of Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to the landscape. The removal of the existing road would enhance the settings of sites and monuments, reunify much of the landscape, and reunite the Avenue. However, this would be at the expense of the intervention of major engineering works in the Wilford/Normanton dry valley, both within and to the west of the WHS, which would irreversibly harm the landscape of the WHS including the settings of monuments either side of the valley, the site of the Early Bronze Age route to Stonehenge, flanked by significant arrays of monuments, as well as the wider setting of the landscape.

Attribute 4: The design of Neolithic and Bronze age funerary and ceremonial sites and monuments in relation to the skies and astronomy. The Proposed Development would enhance this Attribute through the removal of surface traffic and light pollution which can interfere with appreciation of solstice events and the night sky.

Attribute 5: The siting of Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to each other. The removal of the road would lead to the reunification of much of the landscape, to an extent restoring the relationships of sites and monuments to each other. However, this would be at the expense of much more fundamental spatial severance and visual disturbance to the relationship of monument groups either side of the Wilford/Normanton dry valley, and the

significant space they create between them, and to the setting of the WHS as a whole caused by the intervention of the Longbarrow Junction.

Attribute 6: The disposition, physical remains and settings of the key Neolithic and Bronze Age funerary, ceremonial and other monuments and sites of the period, which together form a landscape without parallel. The removal of the road and the reunification of much of the landscape, together with the reconnection of the Avenue, would benefit aspects of the landscape assembly of sites, monuments and their interrelationships, whilst the associated engineering works would substantially harm other aspects. In the ExA's view, the benefits would not outweigh the harm arising from the excavation of a deep, wide cutting and other engineering works, within the WHS and its setting, of a scale and nature not previously experienced historically in this 'landscape without parallel'.

Attribute 7: The influence of the remains of Neolithic and Bronze Age funerary and ceremonial monuments and their landscape settings on architects, artists, historians, archaeologists and others. Whilst the present road intrusion would be removed, in the ExA's view, the aesthetic and spiritual damage would be profound and irreversible.'

q. With regard to integrity the Secretary of State found that the proposed development would compromise the opportunity to enhance the integrity or intactness of the WHS 'because of the location of the Longbarrow Junction, an extremely large engineering structure alien to the WHS OUV, at or near an area which might be integrated into the WHS. This would be in addition to the harm to integrity arising from the continuation of the Junction's road system as a cutting into the WHS, introducing irreparable spatial division and harming understanding, into the WHS.' (ExAR 5.7.315 and adopted by SoS at DL[10])

r. With regard to authenticity the Secretary of State found:

'The authenticity of the WHS would be enhanced by the removal of the surface roads which confuse its ability to clearly and credibly express its cultural values through the attributes noted. However, the Proposed Development would bring a deeper and permanent confusion, through fundamentally altering the assembly which conveys understanding of the historic use of the landscape and its relationships of location and setting, and would thereby inhibit access to the spirit and feeling of the WHS.' (ExAR 5.7.319 and adopted by SoS at DL[10])

'The Proposed Development would seriously harm the authenticity of the WHS.' (ExAR 5.7.320 and adopted by SoS at DL[10])

s. Overall the Secretary of State found:

'The Proposed Development would benefit the OUV in certain valuable respects, especially relevant to our present generation. However, permanent irreversible harm, critical to the OUV would also occur, affecting not only our own, but future

generations. The benefits to the OUV would not be capable of offsetting this harm. The overall effect on the WHS OUV would be significantly adverse.’ (ExAR 5.7.321 and adopted by SoS at DL[10])

2.10. The failure of any previous options appraisals to acknowledge or accept these damning impacts mean that they cannot be relied upon. This is particularly the case when the harm is major and the WHS is one of only 31 World Heritage Sites in the UK and the scheme represents a real risk that the site will lose its world heritage status.

2.11. The 2021 World Heritage Committee, in its 2021 [Decision 44 COM 7B.61](#),

‘Reiterates its concern that, as previously advised by the Committee and identified in the 2018 mission report, the part of the A303 improvement scheme within the property retains substantial exposed dual carriageway sections, particularly those at the western end of the property, which would impact adversely the Outstanding Universal Value (OUV) of the property, especially affecting its integrity’ (para. 7);

‘Reiterates its previous request that the State Party should not proceed with the A303 route upgrade for the section between Amesbury and Berwick Down in its current form, and considers that the scheme should be modified to deliver the best available outcome for the OUV of the property’ (para. 9);

‘Notes furthermore the State Party’s commitment to ongoing engagement with the Committee, the World Heritage Centre, and ICOMOS, but also considers that it is unclear what might be achieved by further engagement **unless and until the design is fundamentally amended**’ (para. 10; our emphasis in bold); and

‘Finally requests the State Party to submit to the World Heritage Centre, by **1 February 2022**, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 45th session, **with a view to considering the inscription of the property on the List of World Heritage in Danger if the A303 route upgrade scheme is not modified to deliver the best available outcome for the OUV of the property.**’ (para. 13)

2.12. It can be seen that the views of the WHC as to the impact of the scheme on the WHS chime with the findings of the Secretary of State. Therefore, the WHC’s warning with regards to the status of the WHS must be taken seriously. Moreover, as will be seen below, National Highways has continued to fail to acknowledge or accept these impacts of its scheme. This leads to its options appraisal and alternatives assessment being fundamentally flawed and unreliable.

2.13. It is also important to note, at this stage, that as National Highways’ assessments have been based upon the misapprehension that the scheme would be beneficial for the World Heritage Site ([NH’s response ‘Redetermination-1.1’](#), ‘Summary and conclusion on alternatives’, paras. 9.1.9–10), their assessments of the proposal’s value for money (NH, ‘Case for the Scheme and NPS Accordance’ ([APP-294](#)), Table 5-5) are significantly

undermined. The High Court recognised that the value for money exercise conducted by Highways England was dependent upon what it asserted to be an overall benefit of the scheme (High Court para 236). Now that the Secretary of State has confirmed that there would be significantly adverse overall harm to the WHS, even on Highways England's own case there is no economic justification for the proposal. This is covered further in our parallel response on Transport, Carbon and Economic Issues.

3. National Highways' options appraisal and alternatives assessment

3.1. In short summary, the alternatives assessment provided by National Highways is fundamentally flawed and cannot be relied upon for the following reasons:

- a. It fails to accept or acknowledge the heritage harm of its own scheme as has already been found by the Secretary of State (as set out above);
- b. It fails to include consideration of key issues which are highly material to whether a preferable option exists. These include any consideration of the carbon impact of the various alternatives and also the failure to include key details on each of the proposals;
- c. The document is based in large part upon assertion without providing the Secretary of State or consultees with the evidence behind the impacts which it claims alternatives would have; and
- d. It is based upon a flawed analysis of the likely traffic figures for the A303 (this is addressed further in our parallel response on Transport, Carbon and Economic Issues).

Each of these matters is addressed further below.

3.2. As National Highways' information on alternatives is little more than the confirmation of its previous 'options appraisal' the Stonehenge Alliance continues to rely upon its [Written Representation](#) to the Examination on Alternatives. This set out its concerns about the process of options selection: these concerns remain valid and we refer the Secretary of State to Section 1 of that document in order not to repeat them at length here. We address below statements on Alternatives made in NH's response 'Redetermination-1.1', hereafter referred to as '[NH 1.1](#)'.

3.3. In respect of NH 1.1, para. 2.2.1, we consider the later stages of options appraisal undertaken by NH to be neither comprehensive nor robust in informing consultees, The ExA or the Secretary of State. This remains the situation today. No more than a brief chronology of Scheme development, options considered, and the scheme selection process are given in Chapter 4 of 'Scheme Assessment Report' Vol. 1 ([REP1-023](#)) and Chapter 3 of 'The Case for the Scheme and NPS Accordance' [[APP-294](#)]. Only two options were presented for public consultation, both involving short tunnels through only part of the WHS. Insufficient comparative information was provided on options that would be less expensive and not so

damaging to the WHS, i.e., bypasses to the north and south. Alternatives involving no new road building were not considered. Without more detailed comparative data it was and continues to be impossible for consultees to make full and meaningful comparisons between later-stage routes and those selected for consultation.

3.4. Section 2.6 of NH 1.1 mentions the statutory consultation on the Preferred Route. The Alliance, in its [Written Representation on concerns about the consultation process](#) sets out (in Section 1.3) the inadequacies of the process and points out (in Section 3) that some 79% of respondents were opposed to the proposals at the statutory consultation stage. An overwhelming majority of respondents were objectors at the supplementary consultation stage (83%+) and in Relevant Representations to the Examination (c.90%). The substantial majority of recorded views of consultees on the Scheme is shown to have been disregarded. A petition set up by the Alliance, voicing to the Secretaries of State for Transport and Digital, Culture, Media and Sport that there should be no further damage to the WHS as a result of the road Scheme, has now (4 April 2022) reached a total of 219,380 signatures from citizens of 147 countries around the World. **The project is widely unpopular.**

3.5. Since the WHS is a heritage asset of the highest significance (NPSNN para. 5.131), the impact of any development scheme on the Site and its setting must be a primary consideration. One of the key aims of the Proposed Scheme, 'To help conserve and enhance the World Heritage Site and to make it easier to reach and explore' would, however, not be realised (see [ExA Report](#), para. 7.2.17).

3.6. Further, given the detailed findings of the Secretary of State as to the heritage harm of the proposed scheme, it is imperative that any alternatives assessment takes into account not just the headline conclusion but also the detailed analysis. For example, the Secretary of State made damning comments as to the effect of the Longbarrow Junction upon the WHS and the setting of various assets (see above and see also ExAR 5.7.224, 5.7.245, 5.7.247 all adopted by the SoS at DL[10]). These findings included that the junction would dwarf all other individual features including the Stones from the air. In NH 1.1, NH makes a sweeping assertion that a repositioning of the Longbarrow junction may have the potential for 'worsened landscape and visual impacts from the repositioning of Longbarrow junction' (para. 4.2.22). However, it makes no acknowledgment of the damning findings of the Secretary of State in relation to the location of the proposed junction. There is a complete disconnect between NH's assessment which appears to maintain the misguided positive view of the scheme in heritage terms versus the reality of the Secretary of State's previous findings.

3.7. It can be noted that the Secretary of State recently refused the DCO application for the Aquind Interconnector Order. One of the reasons for this was that there was 'a failure to adequately consider the original alternatives identified by the Applicant' ([DL para 3.6](#)). The continuing failures in NH's alternatives assessment means that there remains a failure to adequately consider alternatives in this case and there is no robust basis for the Secretary of State to conclude that there is no better solution to the traffic issues on the A303.

3.8. In particular, and as expanded upon below, NH bases its 'assessment' on a number of assertions which are not backed up by evidence. NH has not provided any visualisations of

potential alternatives, nor has it assessed those alternatives in relation to the impacts which NH claims they will have. Often, NH refers (in broad-brush terms) to ‘environmental issues’ including, for example, landscape and biodiversity (see e.g. NH1.1, paras. 3.3.5, 4.2.22, 4.3.7) but doesn’t specify what aspect of each issue each alternative is considered to affect. Nor does it state what the magnitude of any effect is expected to be. Nor does it justify any assertions of impact through evidence. This has resulted in an inability of statutory consultees, interested parties and the Secretary of State properly to interrogate NH’s analysis. This is wholly inadequate a context where NH is promoting a scheme which the Secretary of State has concluded would result in permanent and irreversible harm to an asset of the utmost importance. This underscores the Stonehenge Alliance’s representations (in our Covering Note and Legal Submission) that it is imperative that a fresh examination or inquiry is held into the proposal in order to ensure that there is no preferable alternative before NH embarks on a course of such damage to the WHS.

4. Impacts of the Proposed Scheme

4.1. At NH 1.1., para. 3.2.5, the Applicant’s view is that

‘The locations of the eastern and western portals in the proposed Scheme have been identified as the optimum locations when all environmental, technical and economic considerations are taken into account. 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.’

4.2. As stated above, NH has simply failed to accept or even acknowledge the damning findings of the Secretary of State as to the significant harm which the proposed scheme would cause to the WHS, its setting and designated heritage assets. Without accepting this finding and then re-assessing the proposed scheme and alternatives in light of it, the work by NH is fundamentally flawed and cannot be relied upon. Further, any comments upon the relative cost of schemes which does not acknowledge the huge and exceptional harm of the proposed scheme are meaningless. NH’s business case for the proposed scheme was wholly dependent upon there being net heritage benefits (see Highways England, ‘Case for the Scheme and NPS Accordance’ ([APP-294](#)), Table 5-5; and Stonehenge Alliance Written Representation to the Examination on ‘Cultural Heritage Value: Valuing Heritage Impacts’ ([REP2-130](#))). Now that the Secretary of State has confirmed that the proposed scheme would lead to significant harm, the business case is undermined and any conclusions upon relative value for money which fails to take account of this are unsafe.

4.3. Further, NH has selectively cited the advice of the Advisory Missions conducted by ICOMOS/WH Centre. At NH 1.1., para. 3.2.7, we are reminded that the ICOMOS/WH Centre [2018 Advisory Mission](#) (p.6) states:

‘The eastern portal has been positioned in the least impactful location available close to the WHS boundary, given the constraints imposed by the attributes of the WHS, other significant sites in the vicinity, and local topographic and environmental conditions.’

The Mission goes on to say, however,

‘The location of the eastern portal to the east of The Avenue and its siting within a micro valley is an improvement on previous options. However, **a tunnel portal much further to the east, completely outside the WHS, would protect the OUV of the property from the impact of associated dual carriageways.**’ (our emphasis)

4.4. The more forceful [2019 WH Committee \(WHC\) Decision](#), at Item 4, states:

‘Notes with concern, that although the current scheme, which is now subject to the Development Consent Order (DCO) examination process, shows improvement compared with previous plans, **it retains substantial exposed dual carriageway sections, particularly those at the western end of the property**, which would impact adversely on the Outstanding Universal Value (OUV) of the property, especially its integrity, and therefore encourages the State Party to not proceed with the A303 route upgrade for the section Amesbury to Berwick Down project in its current form’ [our emphasis]

The Advisory Mission and WHC were concerned about the impacts on OUV of cuttings on both sides of the WHS.

4.5. The same concern was reiterated at Item 7 of the [2021 WHC Decision](#), indicating, since November 2020, that lengths of exposed dual carriageway at both sides of the tunnel would, in the view of the WHC, impact adversely on the OUV of the WHS, giving rise to the threat of placing of the WHS on the List of WH in Danger, should the DCO be confirmed.

4.6. The ExA also had serious concerns about the impacts of the Proposed Scheme to each side of the tunnel (see [ExAR](#), para. 5.7.207). These concerns were, in large part, accepted by the Secretary of State as set out above.

4.7. Ultimately, as NH has failed to acknowledge and accept the Secretary of State’s findings, its own conclusions upon the relative merits of the proposal vs the alternatives are unsafe and it would be unsafe for the Secretary of State to place any reliance upon them.

5. Alternative routes referred to by the Examining Authority

5.1. Cut and cover tunnel extension to the WHS boundary

5.1.1. The Applicant asserts that

‘The cut and cover extension would offer overall minor beneficial impacts when compared to the Proposed Scheme that would be limited to, Landscape and Visual, Biodiversity and Public Amenity, all in the western section of the WHS.’ (NH 1.1, para. 3.2.17).

Again, this conclusion is fundamentally flawed by (a) a failure to accept or acknowledge the findings of the Secretary of State as to the significant harm caused by the proposed scheme and (b) a failure to provide any evidence of the assertions made. It can be noted that National Highways has not presented (for example) any visualisations of this alternative. Nor has it provided any heritage assessment of this proposal versus the main proposal (despite the fact that it refers to an ‘assessment previously undertaken’ (NH1.1, para 3.3.4).

5.1.2. In light of the damning conclusions of the Secretary of State it is patently not the case that the cut and cover extension would offer ‘minor beneficial impacts [etc.]’ Obvious improvements would be gained for OUV attributes 3, 4 (possibly), 5, 6 and 7 in the western part of the WHS: a significant historic environment benefit in view of the major importance of the WHS. These are beneficial effects to assets that have not been individually quantified or compared by NH with impacts of the Proposed Scheme in this area of the WHS.

5.1.3. While the serious loss of archaeological sites (OUV Attribute 2) within and alongside the cutting, along with the threat to the WHS’ integrity, would be the same or very similar for both the Proposed Scheme and the cut and cover tunnel, in other respects the cut and cover tunnel would bring some advantages. These advantages were, in fact, summarised by NH in response to the ExA’s Written Question AI.1.29, ([REP-024](#)), para. 39:

‘The reinstated ground above the new A303 would provide connectivity between some of the key assets. This has been assessed as having a slightly more beneficial impact when compared to the Scheme. The cut and cover extension would allow re-establishment of the existing landform, within the WHS, along the length of the Western Portal approach cutting benefiting Attribute 5 (The siting of Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to each other). This would increase landscape connectivity between monuments and monument groups, including the AG12 Winterbourne Stoke Crossroads Barrows; AG19 Normanton Down Barrows and the AG13 Diamond Group, as well as isolated heritage assets to the south and north of the main line that contribute to the OUV of the WHS.’

5.1.4. It therefore appears perverse to say, in respect of a cut and cover tunnel, 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.’ (NH 1.1, para 3.4.8)

This is particularly the case where NH has provided no evidence for its bald assertion.

5.1.5. It therefore appears obtuse for the Government to say to the World Heritage Centre:

‘The State Party would welcome the opportunity to explore the commitments and opportunities to continue to refine the scheme’s design in a manner that could reduce the extent and width of the open cut at the western end of the WHS with the World Heritage Centre and the Advisory Bodies.’ (DDCMS, [WHS State of Conservation Report](#) (2022), p. 9)

5.1.6. Additionally, NH claims that the cut and cover tunnel would lead to operational issues (NH 1.1, para. 3.2.9):

‘The cut and cover extension would reduce the distance between Longbarrow Junction and the tunnel portal. This would result in disruption to smooth traffic flow close to the tunnel portal and increase the risk of collisions and incidents in this area.’

Again, this is mere assertion which cannot be interrogated either by interested parties, consultees or the Secretary of State. A more detailed explanation and evidence are needed to demonstrate why this should be so, especially in view of certain advantages in extending cut and cover in comparison with the Proposed Scheme.

5.2. Bored Tunnel Extension to 600m beyond WHS boundary

5.2.1. In respect of the bored tunnel extension, the Applicant again suggests 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.’ (NH 1.1., para. 4.2.5).

Again, this suffers from the fundamental flaw of a failure to (a) accept and acknowledge the Secretary of State’s findings on the harm of the proposed scheme and (b) evidence the bald assertions made. It can be noted that NH has not even done the minimum work of providing visualisations of the alternative or a high level assessment of the effects against the proposed scheme.

5.2.2. In fact, NH set out some of the ‘additional benefits’ in its response to the ExA’s Written Question AI.1.29 ([REP-024](#)), at para. 44:

‘The construction of a bored tunnel would allow the preservation of archaeological remains above the tunnel within the WHS boundary benefiting Attribute 2 (the physical remains of the Neolithic and Bronze Age ceremonial and funerary monuments and associated sites) that conveys the OUV of the WHS. Archaeological remains would also be preserved in situ over a section of the main line stretching 600m west of the WHS boundary. It would also allow the retention of the existing landform, benefiting Attribute 5 (The siting of Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to each other) in the western portal approaches.’

5.2.3. It is frankly obvious that a proposal which does not involve the loss of c.7ha of fabric of the World Heritage Site and therefore no permanent and irreversible harm in this area would result in meaningful additional benefits. It is perverse to say otherwise. Further, this option would, potentially, not risk the WHS losing its status as a world heritage site.

5.2.4. In view of the significant benefits a longer bored tunnel would bring to five and possibly six of seven attributes of OUV, not to mention the WHS itself and parts of its setting, the position of NH must be seriously challenged: a bored tunnel extension with a western portal outside the WHS would clearly bring meaningful and substantial additional benefits to most OUV attributes as well as the maintenance of aspects of Authenticity and Integrity in the western part of the Site although not in the eastern part.

5.2.5. NH has provided no evidence to support its assertion that a longer tunnel would not ‘deliver meaningful additional benefits to the WHS’. The conclusion is frankly irrational in light of the Secretary of State’s conclusions.

5.2.6. Despite acknowledging a number of benefits of a bored tunnel extension at the Examination (see paragraph 5.2.2, above), the Applicant states that, compared with the Scheme, the longer bored tunnel

‘would offer overall minor beneficial impacts that would be limited to, Landscape and Visual, Biodiversity and Public Amenity all in the western section of the WHS. There would also be potential for worsened landscape and visual impacts from the repositioning of Longbarrow junction’ (NH 1.1, paras. 4.2.22 and 4.3.7).

5.2.7. This is patently wrong. There would be obviously substantial benefits through (a) obviating the loss of any of the fabric of the western part of the WHS, and (b) the partial rehabilitation and improvement of the WHS and its attributes – as well as public enjoyment – in this area. Even if NH’s HIA were to be accepted (noting that many of its most significant findings have been rejected by the SoS), Table 1 in the [HIA \(APP-195\)](#) indicates that asset groups in the western cutting area potentially suffering adverse to moderate beneficial impacts from the Scheme would, with a bored tunnel instead of a cutting, gain very large beneficial impacts, as is suggested under the Proposed Scheme for heritage assets benefiting from a bored tunnel: e.g., Stonehenge itself (AG22) and sites recently identified in Stonehenge Bottom (see Appendix 3.1, ‘Summary of significant effects’: Tables 3.1 and 3.2, in NH, ‘[Response to Bullet Point Four – Environmental Information Review](#)’ (NH 1.4)). Dismissal of these benefits as being only minor indicates no serious attempt has been made to evaluate and quantify them for the present exercise in consideration of Alternatives.

5.2.8. Part of NH’s argument against the longer bored tunnel is down to an unexplained constraint (NH 1.1, para. 4.2.19):

‘Relocation of Longbarrow junction for the bored tunnel extension would leave the A360 in its current position. This would remove the benefit to the WHS of removing traffic immediately beside the Winterbourne Stoke Crossroads Barrow Group. The existing proximity of the A360 to this Barrow group has an adverse impact on Attribute 3 (The siting of Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to the landscape) and on Attribute 5.’

There is no evidenced reason as to why the A360 must be left in its current location and therefore no clear reason to mark down the benefits of the longer bored tunnel in comparison with the existing Proposed Scheme.

5.2.9. A longer bored tunnel would also bring significant benefits to wildlife – critically including Annex 1 bird species (Stone Curlew) – since it would reduce the area affected by construction and result in construction disturbance being absent from the western part of the WHS. This, despite mitigation measures, would result in less disturbance, both temporary and permanent, that birds breeding and foraging within the WHS would otherwise be exposed to with the current scheme (see [ExAR](#), para. 5.5.38 et seq.). No assessment of this potential benefit (and other benefits to wildlife and biodiversity) has been made by NH beyond the vague and unevidenced assertion that the proposal would ‘offer overall minor beneficial impacts that would be limited to, Landscape and Visual, Biodiversity and Public Amenity. . . There would also be potential for worsened landscape and visual impacts from the repositioning of Longbarrow Junction’. (NH 1.1, para. 4.2.22)

5.2.10. Revised policy on LVIA (LA 107; 2020) has led to significant increases in landscape receptor and impact values for the WHS (see NH ‘Response to Bullet Point Four – Environmental Information Review’ Redetermination-1.4 ([NH 1.4](#)), para. 3.2.18; Table 4.4, ‘Visual Sensitivity Re-assessment’; and Appendix 4.2 ‘Re-assessment of Visual Effects’). Despite NH’s view that this would make no difference in its landscape assessment overall, these enhanced values now recognize the heightened importance of the historic landscape of the WHS indicating that the landscape and visual impacts on the WHS of a longer bored tunnel would clearly be more than ‘slight beneficial’. (See also, our comments on ‘Landscape and Visual’ at Section 3 of our submission on Environmental Information Review.) Again, NH has made no assessment of the landscape impact of this or any alternative scheme.

5.2.11. In its Environmental Statement, NH considered a longer bored tunnel to be feasible, although ‘discounted on the grounds of a significant increase in Scheme cost as well as an increase in construction period’ (6.1 Highways England, ES Chapter 3: Assessment of Alternatives ([APP-041](#)), para. 3.3.61). The additional costs are apparently owing to the various considerations set out in NH’s answer to the ExA’s Written Question AL.1.29 ([REP-024](#)), paras. 26–36 and include a number of matters, of which heritage is one. Drawbacks in respect of traffic and operational issues (*ibid.*, paras 28–29) are said to be the necessity for a relocated Longbarrow Junction that would ‘require the use of a compact, and consequently lower capacity, junction which would not be compliant with standards for the volumes of traffic which would be using the A303’; and retention of the A360 in its current position. Nevertheless, there is no suggestion that this option would not be viable.

5.2.12. Since the Examination, however, there appears to be some ambiguity in NH’s approach to a longer bored tunnel alternative (see NH 1.1., paras. 4.4.4, 4.4.12 and 9.1.4–5). NH 1.1 paragraph 9.1.5 states:

‘The location of the tunnel portal would require Longbarrow junction to be relocated to the west and to be changed to a compact, lower capacity junction not compliant with the design standards. Traffic forecasts since the previous assessment have

further strengthened the Applicant's reasons for dismissing this option on traffic and operational grounds.'

Despite this assertion concerning traffic forecasts, and the earlier reason for dismissing this option on the ground of cost and a longer construction period, there is no indication that a longer bored tunnel is not viable, simply that there could be operational problems with the solution NH proposes. These problems apparently depend on the volume of traffic involved – a matter over which there is future uncertainty but not without solution via traffic control.

5.2.13. In any event, again, NH's view that the Longbarrow junction would have a lower capacity and would not comply with design standards remains a mere assertion. NH has not produced even indicative plans and visual realisations. Without these it is impossible for the Secretary of State and Interested Parties to judge and comment upon the viability and impacts of repositioning the Longbarrow Interchange further to the west. There can be no doubt, however, of benefits to the WHS and its attributes were the interchange to be located further away from the WHS boundary.

5.2.14. NH's arguments against a longer bored tunnel are therefore unconvincing without drawings for examination by independent experts. The information which NH has provided does not allow for the Secretary of State to interrogate NH's assertions. It should be noted that NH have just advanced one specific long bored tunnel option and that various options for the tunnel length, relocation of the junction and slip roads might be considered.

5.3. F010 Surface route option to the south

5.3.1. Among earlier-considered alternatives, the southern bypass (Corridor F) route options

'would substantially improve the setting of over 100 Scheduled Monuments and would provide significant benefits for the WHS in terms of conservation, access and visitor experience' (Highways England, [Technical Appraisal Report \(TAR\) REP1-031](#) (Vol. 1), para. 7.5.2).

5.3.2. NH acknowledges that route F010 would bring greater benefits than the Proposed Scheme for the WHS:

'For the historic environment, both Route Options D061 and D062 [short tunnel options taken to public consultation] would result in an overall Neutral score compared with a Large Beneficial effect for F010. In terms of the WHS, F010 would also result in a Large Beneficial effect, whilst D061 would result in a Slight/Moderate Beneficial effect and D062 a slightly greater Moderate Beneficial effect. . .' (TAR, para. 18.3.62).

5.3.3. However, it can be noted that the above statement continues to assume that the proposed scheme will not bring the level of harm which the Secretary of State has already found. Route F010 would also be far less expensive than the Proposed Scheme ([TAR](#), Table

11-5), while ongoing operational and maintenance costs for this route were ‘not considered to be substantial as compared with the tunnelled options’ (TAR, para. 7.3.26).

5.3.4. We continue to challenge NH’s suggestion (NH 1.1, para. 2.3.6) that

‘the surface route, F010, would have a much larger footprint and a greater overall environmental impact than the partially tunnelled options. The surface route would also leave higher levels of rat running traffic adversely affecting the quality of life in local communities.’

Apart from the larger footprint, these assertions are not substantiated by any firm evidence. National Highways has failed to provide any assessments which back up its bald assertion of a ‘greater overall environmental impact’. The term ‘environmental impact’ covers a multitude of potential impacts and NH has not even narrowed down this term to identify the category of impacts it expects. The conclusion fails to acknowledge the damning findings by the Secretary of State that the proposed scheme would cause significant permanent and irreversible harm to the WHS which is an irreplaceable asset of the highest significance. As the Stonehenge Alliance demonstrated during the Examination, in answer to Question AL.1.11 ([REP3-063](#), section 3.2), NH’s own assessment showed that the level of rat running through local communities to the north of the A303, on a typical day, would be lower than in the Do Minimum and the overall levels of traffic on these roads is, in any case, relatively low. The provision of a high capacity, uncongested route (whether or not it followed the F010 alignment) would remove any incentive to divert onto slower local roads at busy times. No consideration has been given to measures which could be installed to reduce any remaining rat running.

5.3.5. NH acknowledges that ‘Corridor F options have not been investigated to the same extent as the WHS and there was a higher degree of uncertainty as to what archaeology might be present’ (TAR, para.7.5.48). We are advised by Professor Parker Pearson that

‘The route is known to pass close to three scheduled ancient monuments (SAMs) – two separate round barrows and a site of ‘Tumuli’ (more than one round barrow) at Woodford – but does not otherwise affect them. Otherwise, no known archaeological sites are affected other than areas of field systems (similar to those that are planned for destruction just north of the road between Winterbourne Stoke village and Winterbourne Stoke crossroads). There is no evidence that this Southern Alternative Route can be considered as having any notable archaeological significance at a local or even regional level.’ (Pers. comm., March 2022)

This was the case at consultation stages and remains so today. However, it is clear that this route would not cause any loss of the fabric of the World Heritage Site itself. The proposed scheme involves the loss of over 7ha. Further, it would not be nearly so harmful in relation to the settings of scheduled ancient monuments or the destruction of archaeological remains, some of them forming heritage assets of national importance equivalent to SAMs. In particular, a heritage asset outside the western portal consists of remains of an unusually large settlement and burials from 4,000 years ago that would be substantially harmed (Professor Parker Pearson, pers. com., March 2022).

5.3.6. NH concludes its dismissal of Option F010 in the Scheme Assessment Report with a table which purports to show that it conforms less well with the Client Scheme Requirements compared with the two tunnel options that were taken forward to public consultation (which are broadly similar to the final project in terms of their impact on the WHS). These requirements are:

1. **Transport:** to create a high quality route that resolves current and predicted traffic problems and contributes towards the creation of an Expressway between London and the South West.
2. **Economic growth:** in combination with other schemes on the route, to enable growth in jobs and housing by providing a free flowing and reliable connection between the South East and the South West peninsula.
3. **Cultural heritage:** to contribute to the conservation and enhancement of the WHS by improving access both within and to the site.
4. **Environment and community:** to contribute to the enhancement of the historic landscape within the WHS, to improve biodiversity along the route, and to provide a positive legacy to communities adjoining the road.

The tunnel options were assessed as having strong alignment with the 1st, 2nd and 4th criteria, while having moderate alignment with the 3rd criterion. Conversely Option F010 is shown as having moderate alignment with the 1st, 2nd and 4th criteria, and strong alignment with the 3rd.

The only evidence provided by NH for assigning F010 with a lower alignment with the 1st and 2nd criteria is that the journey time saving would be less (2.75 minutes compared with 4.0 minutes) than with the tunnel options. This is a small impact on the overall journey time for the mostly lengthy journeys on this section of the A303. In addition, Option F010 would fully address the congestion and other problems that NH claims affect the A303 at busy times. It is therefore unreasonable to categorise F010 as being less well aligned to these criteria. In relation to Criterion 3, NH's assessment of the tunnel options was completely inconsistent with the Examining Authority and Secretary of State's findings of harm to cultural heritage. Accordingly, the tunnel options taken forward by NH were not at all aligned with this criterion. In relation to the fourth criterion, insufficient evidence on the environmental impacts of F010 has been provided to assess whether it has been assessed correctly. However, it is implausible to assess the tunnel options as being strongly aligned with this criterion, given its negative impact on 'the historic landscape within the WHS'. This is further evidence that this option was rejected prematurely. Finally, NH has failed to take into account the fact that this option would be significantly cheaper to the public purse.

5.4. The 'Parker' Route

The Parker Route (NH 1.1, Section 6) was brought to the 2004 Public Inquiry into an earlier A303 widening scheme as "Alternative Route 4". It was assessed within the Corridor F route options identification and selection exercise for the current project. Its strategic merits are seen to be avoidance of the WHS and the provision of a northern Salisbury bypass. As with the later-stage option F010 in this corridor, no specific detail has been given on

environmental issues such as archaeology and biodiversity with which to compare the Parker Route meaningfully with the Proposed Scheme.

5.5. New Route to the South of Salisbury

The route would advantageously lie outside the WHS and provide a bypass for Salisbury. Notwithstanding the need for a Salisbury bypass unless traffic management measures can be introduced to deal with city congestion, it seems unlikely that this option would lead to closure of the present A303 through the WHS to vehicular traffic. The nature, extent and largely unknown environmental impacts of this route again preclude meaningful comparisons with the Proposed Scheme.

5.6. New Route to the North of WHS

5.6.1. It is difficult to understand NH's reasoning in this statement:

'Corridor A would reduce severance within the WHS, and could also result in some benefit to the WHS. However, the harm it would cause to the setting of the WHS and key assets within it (e.g. Durrington Walls) mean substantial harm to the OUV of the WHS is probable and, on balance potential harm to the OUV of the WHS would outweigh the benefits associated with the removal of the A303. The corridor may also adversely affect Nationally and Internationally (European) designated nature conservation sites including parts of Salisbury Plain SPA/SAC.' (NH 1.1., para 8.2.2.)

Again, NH has provided no evidence to support its assertions. Further, it has failed to acknowledge and accept the findings of the SoS with regard to the harm of the proposed scheme. It is frankly perverse for NH to suggest that the proposed scheme which involves the permanent and irreversible destruction of over 7ha of WHS would somehow be less harmful than a scheme which sits outside of the WHS itself and involves no permanent loss of its fabric.

5.6.2. Despite some disadvantages to the historic environment of a northern WHS bypass, such a route would obviously benefit the WHS by removing the A303 from the Site and obviating the need for permanent and irreversible harm as a result of the loss of over 7ha of the fabric of the WHS. The established military development in this area, including modern housing that has severely impacted on the newly discovered heritage assets at Larkhill, already adversely impacts the setting of the WHS and nature conservation sites. No costings or detailed analysis of impacts on the historic environment as compared with those of the Proposed Scheme have been provided for meaningful comparisons.

5.6.3. It is frankly perverse for NH to suggest that this option would cause substantial harm to the OUV of the WHS when it does not admit that its own proposed scheme (which includes significant irreversible destruction of the fabric of the WHS itself) would be substantially harmful.

6. Non-Expressway Alternatives

6.1. The last study to undertake a comprehensive assessment of options for improving transport links between London and South West England was the SWARMMS¹ project completed in 2002. This did support the dualling of the A303 throughout, as part of a multi-modal strategy that also included a range of other measures including rail electrification. The later study of options for the A303 by CH2M Hill² was very focused on road-based solutions and did not give serious consideration to non-road options. Clearly, the policy environment has changed radically since then with the commitment to reach net zero carbon emissions by 2050, the targets set in the Climate Change Committee's recommendations for the 6th carbon budget and the Decarbonising Transport White Paper, along with other policy changes. These are discussed in detail in a separate submission on transport, carbon and economics issues³. The Transport Decarbonisation plan⁴ summarises (on page 6) a key aim as follows:

‘improvements to public transport, walking and cycling, promoting ridesharing and higher car occupancy, and the changes in commuting, shopping and business travel accelerated by the pandemic, also offer the opportunity for a reduction or at least a stabilisation, in traffic more widely.’

This demonstrates the need to look beyond purely road-based solutions to transport problems on the A303 and elsewhere.

6.2. Unfortunately NH gave only cursory consideration to non-road alternatives, in the form of a Technical Note included as Appendix 8.5 to the Transport Assessment ([APP-297](#)). This Note correctly identifies rail as the mode likely to offer an alternative for the high proportion of medium and long distance trips using the route and identifies the London – Newbury – Taunton – Exeter and London – Salisbury – Exeter routes as the main rail alternatives. It then sets up a benchmark to establish how many trips would need to transfer from road to rail to remove the need for the road scheme. The measure used is the transfer of trips necessary to reduce the volume: capacity ratio (VCR) on the A303 to the level (0.53) that would apply with the road scheme in place. This is unrealistic and biased against non-road alternatives for several reasons:

- There would be significant spare capacity on the new dual carriageway, as shown by the low VCR (this is a consequence of the capacity enhancement created by building a dual carriageway) and there is no need for an alternative to achieve this level in order to resolve current and projected issues;
- It ignores the potential for local public transport, walking and cycling to remove *some* trips (albeit probably a minority);

¹ Government Office for the South West, “London to South West and South Wales Multi-Modal Study: SWARMMS Final Report”, 2002

² CH2M Hill, “A303/A30/A358 Feasibility Study”, Highways Agency, 2015

³ Stonehenge Alliance, “Transport, Carbon and Economic Issues”, submission on the Secretary of State’s SoM Bullet Pts. 2-4, April 2022

⁴ Department for Transport “Decarbonising Transport: A Better, Greener Britain”, 2021. The commitments referred to below are set out on pages 9 to 13

- It ignores non transport solutions; and
- As set out in the transport planning and economics submission, the traffic forecasts are themselves very uncertain and may well be over-stated.

The Appendix then argues that an additional three trains an hour would be needed to accommodate the extra rail demand. A realistic figure would be lower for the reasons above. It should also be noted that most trains between Salisbury and Exeter are currently only three cars in length and their capacity could be increased without running more trains. The Appendix then provides a simplified assessment of the proportion of journeys in the corridor that could transfer to rail. This is based on restrictive assumptions about the proportion of trips that could potentially transfer and very dated research on the interventions that would be needed for this to occur. Accordingly, NH has not provided robust evidence that non-road alternatives can be dismissed.

6.3. Since the Examination, Network Rail has published its Traction Decarbonisation Network Strategy, which includes electrification from Newbury to Exeter, Plymouth and Penzance as well as the route from Basingstoke to Exeter via Salisbury. Electrification makes rail journeys faster, smoother and more attractive, as well as more competitive for freight. The overarching Transport Decarbonisation White Paper states that ‘we will deliver an ambitious, sustainable, and cost effective programme of electrification guided by Network Rail’s Traction Decarbonisation Network Strategy’, so there is strong policy commitment to this strategy. In addition, new trains have been introduced on the route via Taunton.

6.4. In the past, a barrier to increasing train frequency has been the high level of utilization of rail routes into London during peak commuter periods. In future this will be less of an issue as more people work from home reducing the need for so many commuter trains – a trend that was emerging before COVID and has been accelerated by the pandemic. This offers more potential for additional longer distance trains without requiring expensive investment in the approaches to London. As rail becomes less dependent on commuters and more reliant on revenue from other journeys, the importance of encouraging more rail trips on routes such as to the South West becomes greater.

6.5. Capacity constraints also exist on the rail network further west. Most of the route between Salisbury and Exeter was reduced to single track in 1967 and capacity was reduced elsewhere in the second half of the 20th century. By reducing the journey time differential between fast and slow (stopping passenger and freight) trains, electrification helps ease capacity constraints. However, it is likely that capacity enhancements would also be needed, especially between Salisbury and Exeter.

6.6. In view of the above, alternatives to building a new Expressway should be seriously considered. It is likely that they would mainly focus on rail investment, including increased track capacity, but may also include complementary measures to improve local public transport and encourage active travel. These alternatives would be far more consistent with the Government’s Net Zero strategy, the need to re-build and expand rail ridership and the Bus Back Better policy. They could also deliver additional benefits to communities along the rail routes, as well as reducing traffic on the A303. The implementation of improved rail services would also encourage more use of rail for journeys that do not currently use this

section of the A303 and would support the government's overall ambition to increase rail ridership and reduce car use.

6.7. Any long term infrastructure solution (whether road or rail based) will take a considerable time to implement. Meanwhile, one of the great ironies is that traffic congestion close to Stonehenge is increased by 'rubbernecking' as drivers and their passengers choose to slow down to appreciate the view, instead of keeping their minds fixed on getting to their destinations as quickly as possible. So a short term coping strategy would be to adopt a speed limit of 20mph or 30mph through the WHS between the Countess and Longbarrow roundabouts which would facilitate those treasured free glimpses of Stonehenge from the road. This would probably reduce congestion by better regulating the traffic flow; it could help in alleviating the current situation and could form part of a longer term non-road based solution.

6.8. The climate emergency, subject of COP 26 in 2021, demands urgent reduction in carbon emissions. Transport is the highest carbon-emitting sector, while concrete manufacture also produces high carbon emissions – both key elements of the Proposed Scheme. (See: [The Sixth Carbon Budget: The UK's path to Net Zero](#) (December 2020), Fig. 2.1; and "[Concrete needs to lose its colossal carbon footprint](#)", *Nature* **597**, pp. 593-594 (2021). The 2021 Appeal Decision to refuse the Tulip tower development in London, impacting on the Setting of the Tower of London WHS, was partly owing to the high level of carbon emissions arising from construction of the central lift shaft. See para.44 of the decision letter which states:

'...However, overall the Secretary of State agrees with the Inspector, for the reasons given at IR14.99 to 14.102, that the extensive measures that would be taken to minimise carbon emissions during construction would not outweigh the highly unsustainable concept of using vast quantities of reinforced concrete for the foundations and lift shaft to transport visitors to as high a level as possible to enjoy a view.'

6.9. It is widely recognised that, without tax changes, the electrification of the road vehicle fleet will lead to a substantial drop in Government revenue from motor fuel duty and Vehicle Excise Duty. Although not current policy, road user charging is widely seen as the most effective way of plugging the gap. Almost any realistic user charging regime will be distance based and will therefore provide a disincentive to making long distance journeys by car, including on the A303. There is also considerable potential for the system to apply differential charges to further discourage car travel where congestion is expected, for example for peak period travel into city centres and on the A303 on summer weekends. In order for it to be fair and effective, a road user charging regime would need to work alongside investment in public transport and active travel. Charging would strengthen the case for the types of alternatives suggested above, as well as further weakening the case for expressway options.

7. Costs

7.1. Costs are mentioned under para 7.3.24 of the [TAR](#). The value of the Proposed Scheme is substantially bolstered by an inherently unreliable heritage contingent valuation survey (CVS) which only just allows the project to be financially viable, if at all (see [ExAR](#), paras. 5.17.108–110, 114, 117). A presentation in July 2021 by leading transport specialist Phil Goodwin (<https://stonehengealliance.org.uk/presentation-by-professor-phil-goodwin/>) recommends, for sound reasons, that the CVS should be re-run to obtain a more accurate result: we hope the Secretary of State will ensure this is done for all alternative options. It is noted that no comparative heritage CVS was undertaken for other, later-stage routes considered.

7.2. The Proposed Scheme was costed at £1.5bn to £2.4bn at 2016 prices ([National Audit Office Report \(20.5.19\)](#): Key Facts, p.4). The same NAO Report records, at para. 3.8: *“Highways England expects operation, maintenance and renewal costs of the project to be £524 million (2016 prices) over 60 years”*, a sum equivalent to £8.7m p.a. at 2016 prices. These cost estimates are now likely to be much higher. NH does not appear to have published an update to the likely costs. This should be published in order for the Secretary of State to take this into account when considering alternatives.

8. Summary and conclusions

8.1. The Applicant states, at NH 1.1., para 9.1.2, that

‘The alternatives 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.’

This exercise has not been convincingly undertaken in respect of the heritage and environment, including archaeology, landscape and visual impacts, since comparative details on these key aspects have not been provided to the ExA, the SoS or Interested Parties. Common sense indicates that there would be advantages over the Proposed Scheme to the WHS of longer tunnels, a bypass or a non-road engineering solution.

8.2. We are advised (NH 1.1., para. 9.1.3) that

‘The cut and cover tunnel extension was rejected on the grounds that the [unspecified] balance of benefits and disbenefits would not justify the significant additional cost, over and above the cost of the Proposed Scheme.’

And, at NH 1.1., para 9.1.4, in respect of a longer bored tunnel,

‘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.’

Although it is said, at NH 1.1, para 9.1.5, that

‘The location of the tunnel portal would require Longbarrow junction to be relocated to the west and to be changed to a compact, lower capacity junction not compliant with the design standards. Traffic forecasts since the previous assessment have further strengthened the Applicant’s reasons for dismissing this option on traffic and operational grounds.’

It is clear, however, that the above statements are not substantiated concerning benefits to the WHS. Furthermore, an applicant would not normally expect to obtain planning permission involving a poor outcome for a heritage asset of the highest significance because a better one is unaffordable.

8.3.. Bypass and longer tunnel options have been dismissed without comparative data despite the benefits they would bring to the WHS in comparison with the Proposed Scheme. Nor have non-expressway alternatives been adequately considered.

8.4. NH’s confidence that

‘the Proposed Scheme is an effective solution to the traffic problems along this notoriously congested section of the A303 and addresses a longstanding threat to the Integrity of the WHS by the removal of the intrusive sight and sound of traffic from much of the WHS landscape’ (NH 1.1, para.9.1.10)

is unjustified in respect of the threat the Proposed Scheme poses to the WHS, as understood by the World Heritage Committee ([2021 WHC Decision](#)) and by the Secretary of State in his Decision published on 12.11.20 (see [High Court Judgment](#), para. 279).