

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

Scheme Reference: TR010025

**Summary of the Stonehenge Alliance's Case
(Reference No. 2001870)**

contributions by

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Examination of the A303 Stonehenge Road Widening Scheme

Stonehenge Alliance's Summary of Case 25 September 2019

1. Introduction

1.1. The Stonehenge Alliance has submitted Written Representations by specialists to the Examining Authority on the following issues:

- Concerns about consultation on the Scheme
- Alternatives, planning policies, international obligations and legal considerations
- Heritage and the historic environment
- Traffic and transportation and value for money
- The cultural heritage value report
- Landscape and visual aspects of the landscape visibility impact assessment
- Flood risk, groundwater protection, geology and land contamination
- Biodiversity, biological environment and ecology
- Vibration effects
- Tranquillity
- Carbon impact

1.2. Our specialists made oral submissions at Issue Specific Hearings and provided written summaries of them. We have answered the Examining Authority's Written Questions as relevant and responded to Highways England's comments on our various submissions.

1.3. We find no reason to alter our case for objection to the Scheme as a result of matters raised and discussed at the Examination, both overall and on specific issues. Our principal outstanding concerns are set out below.

2. Consultation

2.1. Our evidence showed flawed consultation on the scheme, notably for the following reasons:

- lack of adequate options presented for consultation;
- lack of sufficient data for informed responses (e.g., on archaeology and ecology);
- misleading statements about the Scheme made repeatedly, saying incorrectly that it would protect and enhance the World Heritage Site (WHS) and preserve its outstanding universal value (OUV) for future generations; also that the A303 would be removed from the WHS;
- misleading images of the Scheme in promotional and consultation material;
- non-compliance with planning policy and World Heritage Convention obligations to preserve and protect the WHS;
- the large majority of respondents objected to the Scheme outright.

3. Alternatives, planning policies, international obligations and legal considerations

3.1. Serious consideration was given only to a short tunnel Scheme said to be “affordable, achievable and value for money”. The advice of UNESCO/ICOMOS advisory missions to seek a longer tunnel or a bypass to protect the WHS and its OUV has been disregarded.

3.2. Our Written Representation on Alternatives (REP2-134) was not specifically rebutted by Highways England. We listed local and national planning considerations with which the Scheme conflicts, including the absence of a Strategic Environmental Assessment (SEA); non-compliance with international obligations under EU Directives, the World Heritage and other European Conventions (*cf.* Planning Act 2008, S.104); and the UK Habitats Regulations.

4. Heritage and the historic environment

4.1. We highlighted the inadequacy of Highways England’s Heritage Impact Assessment (HIA), noting that the impacts of the scheme on the WHS as a heritage asset of the highest significance, and its setting, had not been properly considered. We agree with UNESCO’s World Heritage Committee’s 2019 Decision that the Scheme would impact adversely on the OUV of the WHS (possibly warning that the WHS might lose its designation, should the Scheme go ahead).

4.2. We also agree with specialists in the archaeology of the WHS in objecting strongly to the inadequate methodologies proposed for archaeological investigation and mitigation ahead of Scheme construction; the impacts of major engineering on the archaeological landscape; and the lack of sufficient monitoring of groundwater at Blick Mead where damage to Mesolithic environmental evidence is feared.

5. Traffic, Transportation and Value for Money

5.1. The case for intervention presented by Highways England is weak. The evidence does not support their contention that the existing route suffers from high levels of congestion and journey time unreliability, except on a limited number of days – primarily summer weekends. Traffic volumes on the route have not increased significantly in the last 15 years and there is much uncertainty about whether, and by how much, they might grow in future. Evidence that conditions on the A303 are holding back economic growth is weak and is based – in part – on biased survey work.

5.2 The economic case for the project is particularly weak. According to Highways England, each £1.00 of expenditure generates £1.08 of benefits, compared to an average of more than £4.00 for all their major schemes. Nearly three-quarters of the total asserted benefits derive from the flawed cultural heritage valuation study (see below). The conventional transport economic benefits are low, confirming the weakness of the case for intervention. It is doubtful if they would be sufficient to exceed the costs, even without the expense of the proposed tunnel. The economic case seeks to value certain impacts of the project in monetary terms and it is therefore an important part – but only part – of the overall assessment of whether the benefits of the project exceed its negative impacts.

5.3 The A303 Stonehenge project is one component of an overall programme to create a continuous Expressway between the M3 and M5 motorways. Yet Highways England have failed to provide a programme-level business case or Strategic Environmental Assessment. As evidence presented in the recent National Audit Office report indicated, there is great uncertainty about the business case.

6. The cultural heritage value report

6.1. Our critique of the Simetrica cultural heritage value assessment was wide-ranging across many detailed issues, but the core argument against its validity as a supporting document for the current Stonehenge tunnel scheme comes down to three related points:

- i. Used in the context of monetised benefits and costs, the Willingness To Pay (WTP) methodology is fallacious in that it invites a theoretical WTP valuation that never has to be paid to be set against real hard engineering and other costs in a Benefit Cost Ratio (BCR) evaluation. There is nothing in the Simetrica evaluation to suggest that the monetised benefit derived bears any resemblance to real-life values that people might assign.
- ii. The doubts over the validity of the WTP cultural heritage valuation are exacerbated because the economic viability of the tunnel scheme is so heavily dependent on the monetised cultural heritage benefit, which alone accounts for almost 75% of total scheme benefits in the BCR, and swings the scheme from hopelessly unviable to having a marginally positive BCR. The cultural heritage assessment is not a peripheral issue where a margin of error would make little difference to the outcome.
- iii. Worse still, almost 95% of the purported cultural heritage value is attributed to the 'general population' of the UK, who have never been in the vicinity of Stonehenge and are unlikely ever to be so, but who supposedly think it would be nice to hide the A303 from the stones and would be prepared to pay money for this to happen. This approach depends on almost 60% of the adult population of the UK giving on average £43 as their WTP for the scheme. No amount of methodological justification can convince that this is a realistic assessment. Doubts are further heightened by the fact, belatedly acknowledged by Highways England, that almost 25% of the total population of the UK as represented in the survey sample, live within 50 miles of Stonehenge.

6.2. The cultural heritage valuation does not merit the prominence it has in the overall scheme justification and should be treated with the caution it deserves.

7. Landscape and visual aspects of the landscape visibility impact assessment

7.1. The acknowledged "landscape without parallel" would be irreparably damaged by the Scheme and permanently altered in character. Contrary to established guidance, the applicant's Landscape and Visual Impact Assessment (LVIA) failed to take the WHS landscape with its interrelated monuments and sites properly into account, downplaying its significance to meet Scheme requirements. Landscape effects were incorrectly balanced to suggest that a tunnel in one part of the WHS could offset major impacts of deep cuttings, tunnel portals and highway interchanges affecting the WHS elsewhere.

7.2. Photomontages provided fail to give visualisations of the experience of people walking through the WHS on Scheme completion. Viewpoints are primarily focussed on public rights of way rather than on the impacts of the scheme on the WHS landscape and its monuments.

8. Flood risk, groundwater protection, geology and land contamination

8.1. The key areas of concern have been identified by our specialist as:

- Poorly understood fissured Chalk rock with potential solution effects, especially in the Phosphatic Chalk horizons with possible contamination of groundwater from grout used in tunnelling.
- Lack of accessible 3-D interpretations of combined geoscientific data from Site Investigation results.
- Refusal to release all available relevant published and unpublished drilling, geological, hydrogeological and geophysical data.
- Inappropriate and inadequate groundwater modelling, both in detail and in adequate depth and lateral extent, especially relevant to the scale, depth and detail of the proposed tunnel route.
- Lack of accurate and adequate predictions of future groundwater conditions and effects on springs, private and agricultural abstractions from boreholes and wells, and the River Avon Special Area of Conservation (SAC), especially if dewatering is necessary, and extensive grouting is required to stabilise both poor rock and invasive groundwater conditions during tunneling.

8.2. All the above major geological, hydrogeological and geotechnical “unknowns”, could lead to very significant amounts of downtime, cost over-runs and significant contractual claims and escalating costs, if this project goes ahead.

9. Biodiversity, biological environment and ecology

9.1. Concerns remain about the impact of untreated A303 runoff via Blick Mead into the River Avon Special Area of Conservation (SAC) which is already over-polluted and over-abstracted. Furthermore, no firm assurance has been given that tunnel and cross-passage boring will not require some dewatering; nor is it certain that grouting ahead of and in association with the tunnel boring machine will not result in contamination of groundwater and the SAC. There is no assurance, to the legal standard required (beyond reasonable scientific doubt) that the SAC would not be adversely affected by the Scheme.

9.2. Measures to avoid disturbance of nesting, feeding and autumn gathering Stone Curlew during Scheme construction and operation (apparently including absence to date of formal agreements for provision of compensatory plots) have not been satisfactorily established; nor are proposed measures adequate to provide certainty beyond reasonable scientific doubt of no adverse effects, as required by the Habitats Regulations. Similarly, there is no certainty that measures proposed and not detailed for the protection of Great Bustard (the only UK breeding area for this Annex I protected species) will be effective.

10. Vibration effects

10.1. Despite repeated requests, Highways England has suggested no convincing monitoring method for vibration from the tunnel boring machine that might impact on archaeological remains; indeed, it is admitted that no such method exists. Furthermore, Highways England can provide no assurance that known and unknown archaeological remains above the tunnel can be adequately protected from the impacts of vibration and settlement. The risks are obvious, given the unstable geological conditions, including faults, fissures and voids in the bedrock.

11. Tranquillity

11.1. Highways England claims the Scheme would bring tranquillity to Stonehenge. However, its own evidence, as well as that of our acoustic specialist, shows that this would not occur, since visitor-numbers preclude a tranquil experience. While the tunnel would make part of the WHS more tranquil, other parts would be made less so, owing to tunnel portals, cuttings and interchanges.

12. Carbon impact

12.1. In their 2019 Progress Report to Parliament, the Committee on Climate Change stated that “UK action to curb greenhouse gas emissions is lagging far behind what is needed, even to meet previous, less stringent, emissions targets”, and “Transport is now the highest-emitting sector and must be a key contributor towards the reductions in greenhouse gas emissions needed over the period to 2030.”

12.2. Parliament and many local authorities have declared a Climate Emergency and a target for net zero emissions by 2050 has been put into legislation. The decision on the Stonehenge Scheme sits squarely within this frame. If built the extra speed and volume of traffic created would have a high carbon impact, assigned a negative value of £86 million by Highways England – very likely underpriced and in any case a substantial amount given that the total calculated economic benefit of the scheme amounts only to £102 million.

12.3. The applicant argues that the emissions from operation of the Scheme are acceptable because by itself they are only a very small percentage of the overall carbon budget. However, the approach of slicing up the road building programme into sufficiently small pieces so that each on its own appears to be of little account does not do justice to the response now required in a climate emergency. Given the scale of the transformation required, and the shortfall of existing policy levers to achieve it, we should no longer be committing billions to projects such as this that move us further away from the prospect of rapid emissions reduction and achievement of net zero.

Conclusions

The Stonehenge Alliance believes it has shown key elements of the A303 Scheme not to have been fully or properly presented from the start. Choice of the route was limited to a short tunnel through the WHS when other, less damaging options should have been included. The project appears to conflict with a number of UK policies and Regulations as well as European Conventions and Directives.

Considerable gaps remain in information on numerous crucial issues, such as geology and hydrogeology, ecology, and the heritage impact of the Scheme on the WHS and its setting.

Uncertainty remains about the practicality of tunnelling through the unique Chalk geology and the impacts it could have on private water supplies, the River Avon (protected by law as a Special Area of Conservation), disturbance of and damage to archaeological remains from the effects of vibration and settlement, and so on. There are concerns about protected bird species and the adequacy of measures to ensure they would not be disturbed during Scheme construction and operation.

The case for the scheme on road transport and economic grounds is weak and there are serious problems with Highways England's Cultural Heritage Valuation study. The Scheme is agreed to be low value for money and, with inevitable unforeseen costs ought not to be considered economically viable.