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

Scheme Reference: TR010025

Response to Highways England's "Comments on any further Information Requested by the ExA and Received at Deadline 4", REP 5-003, Inquiry Reference TR010025-001319

for

The Stonehenge Alliance (Reference No. 2001870)

by

Dr. Kate Fielden, Dr. Simon Temple, Clive Bentley,
Andy Norfolk, Rupert Thornely-Taylor, and Alan James

N.B. Dr George Reeves' comments for the Stonehenge Alliance are submitted in a separate document.

1. Overview

- 1.1 This document provides The Stonehenge Alliance's response to Highways England's document "8.36 Comments on any Further Information Requested by the ExA and received at Deadline 4" (Rep 5-003). We focus on responding to Section 11 of the document, which comments on The Stonehenge Alliance's submissions, but also comment on Section 15, which relates to Devon County Council's position, and Sections 18 and 28 in relation to Stone Curlew and Great Bustard. The absence of a comment on a particular issue does not imply that we agree with Highways England on this point.
- 1.2. Dr George Reeves' response to Highways England's REP5-003 is submitted separately.
- 1.3 We note that there are numerous paragraphs in the various documents on which Highways England are commenting, that they have chosen not to challenge in their submission. It is important that these sections are not overlooked by the Examining Authority in considering the evidence submitted to them.
- 1.4 Highways England's document is set out in tabular form with a paragraph number, a summary of the point on which they are commenting and then their comment. In this document, we quote their paragraph number to which we are responding, a brief summary of the subject matter and then our response. For clarity, this document should be read alongside Highways England's submission.

2. Section 11.1. WRITTEN SUMMARIES OF ORAL SUBMISSIONS TO ISHS

2.1. ISH 2: Cultural Heritage

Comments by K.Fielden

Agenda Item 6: Effect of elements of the scheme on cultural heritage assets and their settings (in response to our REP4-055)

11.1.6.ii. Winterbourne Stoke Longbarrow junction. Our requests for photomontages have not been satisfactorily answered. We suggest a reasonably accurate or at least indicative night-time image (ideally of the lighting impacts at the new Longbarrow Junction) could be supplied by the Applicant, including the impact of shrouded traffic lights. The number of traffic lights here has not been specified but we assume that it is in the region of 6 sets/pairs, at least.

The glare from vehicle lights would be magnified by reflection from the cutting walls, while there would be shafts of light projected upwards from cars travelling up the slip roads at Longbarrow Junction.

2.2. ISH 4: Flood risk, groundwater protection, geology etc.

Comments by K.Fielden

Agenda Item 5.2.vii. Monitoring and remediation (in response to our REP4-055)

11.1.7. The information requested from the Applicant has not been supplied. We continue to consider it inappropriate, given the exceptionally sensitive archaeology of the WHS and the unique and unpredictable geology through which the tunnel would be bored (all agreed by the Applicant and still not fully known), for methods of monitoring as well as prevention of any archaeological damage arising from vibration and settlement to be left to the contractor to decide upon. It is difficult to envisage how treatments suggested for *prevention of damage* would be effective.

2.3. <u>ISH6: Traffic and transport</u> (Highways England's comments in response to our REP4-055)

Comments by Dr Simon Temple

Agenda Item 3.1. Reliability and validation of local transport model

11.1.10 relating to DIADEM modelling. Highways England assert that they have provided "a suitable level of further detail of the calibration and validation of the model" in CoMMA Appendix B [App 300]. In fact, the only reference that we can find to the calibration of the model is in paragraph 12.1.2 of this document which states that "Calibration of the VDM was undertaken across all five of the RTMs and the resultant calibration parameter values justified at the total RTM level. The VDM has not therefore been re-calibrated as part of the 'A303 Stonehenge SWRTM (DCO)' model refinement." At the Hearing, Mr Hanson confirmed that calibration of the Variable Demand Model was undertaken at a national, rather than regional or local level. In The Stonehenge Alliance's view this is a totally inadequate explanation and, in effect, Highways England are asking the Inquiry to take on trust their assertion that the model is appropriate, without any opportunity for independent technical review by ExA or Interested Parties.

Agenda Item 8.1. Reliance on monetisation of cultural heritage benefits to achieve positive BCR

11.1.11 relating to monetisation of cultural heritage impacts. The Stonehenge Alliance continues to believe that the Maddison and Mourato report should be provided officially to the Inquiry, given the importance of the alleged cultural heritage benefits to Highways England's case. As far as we are aware, at no point previously has Highways England asserted that the 1998 study collected individual, as well as household, values of Willingness to Pay. If this is the case it is very strange that Appendix B to the Simetrica Report (which attempts to make the case that the results of the two studies are comparable) makes no reference to this. Instead it simply multiplies the 1998 results by a ratio of individuals to households.

11.1.12 relating to monetisation of cultural heritage impacts. The Stonehenge Alliance continues to consider that the results of the cultural heritage assessment are flawed, as we have set out in previous submissions. Highways England state "The value of the scheme cannot be expressed as a limited sub set of monetised benefits as asserted by SHA [Stonehenge Alliance]". This is not our position. We have never asserted that the value of the scheme can be assessed solely in monetary terms. There a number of major negative impacts of the project which cannot be valued in money terms, and should be taken into account in conducting the Planning Act test of whether the adverse impacts of the project exceed its benefits. We address the issue of whether the monetary valuation of cultural heritage benefits should be included in the assessment in our comments on Highways England's response to the Examining Authority's questions.

3.1. ISH4: Noise and vibration (in response to our REP4-095)

Comments by Clive Bentley

Agenda Item 4 concerning tranquillity

11.1.14–18. The applicant claims that their landscape architects have considered "sound levels" in their consideration of tranquillity, pointing to a large table of numerical data which has been reviewed. We asked the Applicant's landscape architect to explain how he had used this at the hearing, and he provided no answer. The fact is that such a large table of figures provides very little useful information, even to an experienced acoustician, to enable a determination of tranquillity to be carried out. We do not accept that sound has been properly considered. It is not just the level, but also, critically, the character of sounds which determine the tranquillity rating of a location. This is reflected in the recent revisions to government guidance (found at https://www.gov.uk/guidance/noise--2) and revised on 22 July 2019. In this, under the heading, "What factors are relevant if seeking to identify areas of tranquillity?", it now states:

'For an area to justify being protected for its tranquillity, it is likely to be **relatively** undisturbed by noise from human sources that undermine the intrinsic character of the area. It may, for example, provide a sense of peace and quiet or a positive soundscape where natural sounds such as birdsong or flowing water are more prominent than background noise, e.g. from transport.

Consideration may be given to how existing areas of tranquillity could be further enhanced through specific improvements in soundscape, landscape design (e.g. through the provision of green infrastructure) and/or access.' (Paragraph: 008 Reference ID: 30-008-20190722; our emphasis)

It is not possible to tell from simple tables of figures whether the measured level is from human sources or natural sources. Hence, the consideration of tranquillity has failed to consider the most important factors which affect tranquillity, when judged against government guidance.

To add to this point, Table 9.26 of the noise and vibration chapter states that the change in noise level at Stonehenge (meaning the henge itself) would result in a significant beneficial effect. This is not so. This presentation of the data in the Environmental Statement, allied with the subjective opinion expressed in the heritage chapter (para 6.11.2) that "The A303 currently has a major negative impact on the setting of Stonehenge, the integrity of the WHS and visitor access to some parts of the wider landscape. The harmful impacts of roads and traffic on the WHS include visual intrusion, noise and air pollution ..." and the presentation in Table 7.7 of the landscape and visual chapter which states that there would be a "large beneficial" effect at the henge, all points to the applicant making a claim (in their application documentation) that the tranquillity at the henge would be significantly improved. They have now changed their position, stating in their response in 11.11.16 that, "... the improvement in tranquillity due to the major reduction in traffic noise will be less at the Stones than other locations in the wider WHS ...". However, despite the evidence to the contrary, they continue to attempt to claim that the sounds at the henge would be improved, stating "... the major reduction in road traffic noise, combined with the removal of the sight of road traffic due to the tunnel, cannot have anything other than a beneficial effect on tranquillity at the Stones."

We would not argue that the removal of the view of the road may not have some beneficial effect, but (as confirmed in the recent revision to government guidance) it is the sound level and character which determines how tranquil somewhere is felt to be and this would not change. The continuing attempts to try to suggest that there may be some (even, perhaps, slight) improvement in tranquillity at the henge have no validity and are contrary to the factual evidence presented by all sides in evidence.

<u>Please note</u>: our comments on Highways England's response (para.15.1.1) to Devon County Council's Oral Submission (REP4-061) appear below, under "Comments on written representations report", at the end of the section on Transport Planning and Economics, after our comments on para. 11.2.54.

Our comments on Highways England's responses to the Oral Submissions of M&R Hosier and the Great Bustard Group in Sections 18 and 28, appear at the end of this submission, following Alan James' comments on Cultural Heritage Value.

- **3. Section 11.2 of Highways England's REP5-003: COMMENTS ON WRITTEN REPRESENTATIONS REPORT** (Highways England's responses to our comments on their responses to our Written Representations)
- **3.1.** <u>Landscape and Visual</u> (in response to our REP4-056) Comments by Andy Norfolk

11.2.1-24

I have read the comments made by Highways England in response to the points I had made. I have considered them carefully and conclude that they do not adequately deal with the

issues I have raised. Indeed, there appears to be deliberate obfuscation, misrepresentation of my comments, avoidance of questions and an unwillingness to engage with the important matters affecting the World Heritage Site.

One example of a specific area of concern is the failure by HE to properly identify landscape receptors and describe effects upon them. This is given as an example and is not intended to be an exhaustive list of issues and, for others, reference should be made to my comments in previous submissions.

GLVIA3 defines landscape receptors in its glossary as "Defined aspects of the landscape resource that have the potential to be affected by a proposal". In Paragraph 3.21 of GLVIA3 it says that "In LVA there must be identification of (both) landscape receptors, including the constituent elements of the landscape, its specific aesthetic or perceptual qualities and the character of the landscape in different areas."

The HE LVIA does not identify and discuss the effects on the constituent elements of the landscape. It does not properly address the specific aesthetic and perceptual qualities of the landscape. It only deals, and then superficially, with potential effects on the landscape character of the landscape in different areas. Because it does not properly define landscape receptors the assessment on potential landscape effects is fundamentally flawed.

An examination procedure can only reach a proper conclusion if all parties engage properly and transparently in the process. I do not believe that Highways England have done so in respect of my deep concerns about the landscape and visual impacts of the imposition of very large engineering structures and landforms on a very sensitive landscape.

3.2. <u>Heritage and Historic Environment</u> (in response to our REP4-056) Comments by K. Fielden

11.2.25. Obligations under the World Heritage Convention

We do not agree with the applicant's position that the Scheme is compliant with the Government's obligations under the WH Convention. Please see the Stonehenge Alliance's response to WQ G.1.1. in our REP3-063, item 2; and, more recently, our comments in para.11.1.1 of our REP5-022, responding to Highways England's Document REP4-036, para.11.1.1. The Decision of the WH Committee in July 2019 validates our position.

11.2.26. Balancing damage to one area of a cultural landscape and enhancement to another

The Applicant continues to misunderstand the advice of the Advisory Missions, the wording of the World Heritage Convention re protection of the WHS, as well as ICOMOS Guidance on HIA etc.

11.2.27. The key statement in the **Vision of the WHS Management Plan** is "The primary aim of the strategy is to protect the Site to sustain its OUV as agreed by UNESCO". The

Applicant's Scheme would not fulfil that aim, as confirmed in the 2019 Decision of UNESCO's WH Committee.

11.2.31. HIA Scoping Report

We did not refer to the Scoping Report but to the 2018 Advisory Mission's opinion on the methodology used by the Applicant for the HIA undertaken in respect of the "Proposed Scheme" which was given in the published Mission's Report (2018):

"The 2011 ICOMOS Guidance on Heritage Impact Assessment for Cultural World Heritage Properties should continue to guide Heritage Impact Assessment. This Guidance allows for positive impacts to be considered but the relevant objective remains that there is no major impact on OUV." (Final Report on the joint WH Centre/ICOMOS Advisory mission to Stonehenge, Avebury and Associate Sites, 5-7 March 2018, p.36)

In respect of the Mission's disagreement with the conclusions reached on HIA for the Scheme, please see Mission Report, *ibid.*, pp. 6–7, 20 and 35.

OUV, attributes of OUV and heritage assets

We found and continue to find the Applicant's comments to be muddled. We had not hitherto heard of the term "convey or express Attributes of OUV" (which also appears in paras. 12.3.26 and 12.3.34 of REP3-013). Attributes of OUV convey or express the OUV of the WHS: they include designated or non-designated heritage assets, as we stated in our earlier comments on the Applicant's response.

Highways England's statement that "A heritage asset is not an Attribute in itself: however, it may convey an Attribute" serves further to underline the Applicant's continuing muddled understanding of the difference between Attributes of OUV and OUV and, indeed, what Attributes of OUV are.

Resolving the issues associated with the existing A303

We stand by our statements and agree with most of the Applicant's comments – except in the case of "busy main roads". The SoOUV was agreed at a time when there were several "busy main roads" going through the property: the A344, A303, A4 and A3461. The A344, which was a particular concern at the time of the WHS' designation and at agreement of the SoOUV, has now been *partially* removed. Neither at designation nor in the SoOUV is there any commitment to removal (or partial removal) of the A303 from the WHS. The emphasis is on "busy", i.e., the effects of traffic and reducing its impact.

Balance adverse and positive impacts of the Scheme

We see no explanation in the HIA undertaken by the Applicant following ICOMOS' guidance of how adverse impacts on the WHS and its OUV have been balanced against the public benefit. Since ICOMOS confirms that the Scheme would have an adverse effect on the WHS, the Applicant's conclusion on its HIA must be questioned.

Integrity as a foundation of OUV

We agree that integrity is a requirement for a WHS to be designated nowadays. It is one of the foundations of *designation* and *management* of a WHS property, not of its OUV, as the document to which the Applicant refers makes clear.

11.2.32. Balancing damage to one area of a cultural landscape and enhancement to another Please see our response under 11.2.26, above.

Balancing in NPSNN - balancing of harm to heritage assets against public benefit

It appears to us that the applicant is attempting to "have it both ways" in terms of the balancing exercise. Please see our comments under 11.2.31, above, under "Balance adverse and positive impacts of the Scheme".

In terms of the ICOMOS guidance on HIA, Highways England undertook a balancing exercise between perceived adverse and positive impacts on OUV attributes, sidestepping the issue of balancing impacts of the Scheme on attributes of OUV against the public benefit. Having followed ICOMOS guidance on data assessment incorrectly (by not according sufficient value to protection of the WHS, its OUV and integrity), the Applicant arrived at a "Slight beneficial" outcome for the WHS, which differs from the assessment of ICOMOS as member of Advisory Missions and co-reporter to the WH Committee who all consider the Scheme to adversely affect the WHS.

Using a 'slight beneficial' but unsound HIA conclusion to bolster any overall balancing assessment of the Scheme is, we submit, not acceptable. In view of the 2019 Decision of the WH Committee, that overall balance should, in our view, now be reassessed.

Stakeholder reference group

Whatever Highways England's interpretation of the meaning of "conserve and enhance" may be, the 2019 Decision of the UNESCO WH Committee makes it obvious that the Scheme would not meet the aim of the Technical Group that the OUV of the WHS is conserved and enhanced by the Scheme.

Focus on attributes in HIA

Please see, e.g., our comments under 11.2.31, above at "OUV, attributes of OUV and heritage assets"

11.2.38. Ground stabilisers

We note that the Applicant has so far provided no information on the appearance of ground stabilisers. It is understood that, depending on ground conditions, ground stabilisers can be very substantial indeed in both functional design and appearance.

3.3. Transport Planning and Economics (in response to our REP4-056)

Comments by Dr. Simon Temple

- **11.2.44** on whole corridor assessment. Highways England refers to WebTAG Guidance as mandating the process to be followed in assessing the project. According to the WebTAG Unit on Forecasting and Uncertainty¹, projects that are "near certain" and possibly those that are "more than likely" should be included in the Reference Case scenario. On this basis, two projects in the corridor are included. Given that the A303 Sparkford to Ilchester project application has yet to be decided and the A358 Taunton to Southfields has yet to have a Development Consent Order application submitted, this seems to prejudge the process. More importantly, the same WebTAG Unit recognises (paragraph 5.1.1) that other scenarios (in addition to Core, High Growth and Low Growth) "may be required to test the impacts of significant sources of local uncertainty. These scenarios should also be subject to a full appraisal." In The Stonehenge Alliance's view, testing the impact of the full A303 corridor programme is certainly required, as it is likely to have a major impact on the proposed project.
- **11.2.45** on assessment of alternative modes. Highways England have simply referred back to their previous response and have added nothing new in response to our comments on it.
- 11.2.46 on assessment of alternative modes. Highways England state that the Technical Note on Assessment of Alternative Modes" (Appendix 8.5 to the Transport Assessment) did not test the public transport alternative against the requirement that it reduced the stress level on the A303 to the level forecast in the Do Something scenario (0.53), although they concede that the heading of Section 3.6 "Public Transport Requirements" might imply this. In fact, Section 3.6.2 estimates the number of people who would need to transfer to rail to achieve a stress level of 0.53 in the Do Minimum scenario. Paragraphs 3.6.3 and 3.6.4 convert this into the number of trains required to accommodate them. This then feeds through to Paragraphs 6.2.2 and 6.2.3 where the public transport alternative is assessed against the criterion "what impact would a modal alternative require in order to relieve the problem to the same degree". This is defined as transferring the number of passengers required to achieve a stress factor of 0.53. Highways England's consultants conclude "Realistically, rail investment could not achieve the same level of impact as the road scheme in alleviating the problem. Therefore, the road scheme is the most viable, and only option." From this it is extremely hard to avoid the conclusion that this was the criterion against which the public transport alternative was assessed. Clearly 0.53 is a lower stress level than would normally be expected. Highways England have argued elsewhere that this is a consequence of the increments in which highway capacity can realistically be increased. However the same step change increments do not necessarily apply, or apply at the same points, for other modes and it appears that an excessively high requirement was applied to the public transport alternative.
- **11.2.47** and **11.2.48** on Option F010. In their comments set out in both paragraphs, Highways England restate their position that "The longer distance and alignment of F010 make this option less attractive for local movements than D061 / D062 and it is more likely

9

¹ Department for Transport "TAG Unit M4: Forecasting and Uncertainty", paragraph 3.2.4

that trips making local movements, including HGVs, will use the local roads north of the A303". This contradicts their own modelling which shows a reduction in flows on local roads north of A303. It also shows that flows are relatively low in the Do-Minimum scenario. As we have argued in our comments on Highways England's response to the Examining Authority's question AL.1.11, the risk of rat running in response to incidents on the A303 would also be lower with this option.

- **11.2.49 on CO₂ Emissions**. In their response on this point, Highways England concede that the project will result in an increase in carbon emissions, although they seek to minimise its significance. In view of the recent declaration of a climate emergency and the Government's commitment to a zero net carbon economy by 2050, The Stonehenge Alliance's position remains that future infrastructure investment projects should seek to reduce CO₂ emissions and it is inappropriate to approve projects that are forecast to increase them.
- 11.2.50 on traffic flows. The Stonehenge Alliance does not accept that the use of national travel data in our original Written Representation (REP2-129)) was inappropriate. As we explained at considerable length in that document, there is an increasing body of evidence that demonstrates that traffic growth has largely stalled, in the UK and elsewhere, and this preceded the 2008/9 recession. We acknowledge that there has been some recent growth on inter-urban trunk roads, partly in response to Government policy that has held down excise duty on motor fuel, while increasing rail fares above the Consumer Price Index measure of inflation. However this has been exaggerated by Highways England by quoting growth since 2000, rather than 2004, which appears to be the point at which traffic growth stalled nationally. We also noted in our Written Representation that the available data for A303 near Stonehenge does not show sustained growth after the early years of this century.
- 11.2.51 on driver information. The discussion on this issue arises from the statement in The Stonehenge Alliance's original Written Representation (REP2-129) that "improved driver information systems – both on-line and through roadside signage – would assist drivers to avoid any blockages. Improved information systems would also give drivers greater certainty and might assist in reducing rat-running." (para. 3.6.2). This was in the context of a discussion about network resilience. Highways England responded that improved information would "by definition" increase rat-running. Their latest response appears to withdraw that assertion by stating that "a large proportion of the population currently have the ability to access online route planning tools that would show when there is congestion on the A303 and can indicate alternate routes including appropriate routes further away from the A303." If drivers are already well informed, then it is implausible that making them even better informed would result in them making more use of inappropriate local roads, which would quickly become congested, where better options are available. Highways England now seem to be saying that the impact would be a small positive, rather than negative, as they said previously. While the Stonehenge Alliance agrees that a large proportion of the population have access to on line route planning tools, we continue to believe that there is potential for improved information to prompt those with these tools to make use of them, and to provide advice to those without them.
- **11.2.52** on induced and diverted traffic. It appears that Highways England now accepts that The Stonehenge Alliance's assessment on this point is correct.

11.2.53 on modelled journey times. The Stonehenge Alliance has raised concerns about the capacity of the motorways at each end of the A303/A358 to accommodate future demand, especially if the full corridor programme is implemented. Highways England has not responded to this concern but has, instead, argued that the approach they have taken is consistent with WebTAG. In our comments on 11.2.44, we have set out the reasons why a full corridor appraisal is essential, and this should include assessment of the capacity of the connecting motorways to cater for the increased traffic which would result from it. Highways England also repeat statements that they made in their Summary of Oral Submissions at the Hearing on Traffic and Transportation (REP4-034). The Stonehenge Alliance responded in detail to these statements in our comments on this document at Deadline 5 (REP5-021)

11.2.54 on emissions. The Stonehenge Alliance considers that it is essential to consider the impacts – including the emissions impacts – of the whole A303 programme as well as the impacts of the Amesbury to Berwick Down scheme in isolation. The reasons for this are set out in our comments on 11.2.44 above, and further comments on the importance of emissions are given on 11.2.49.

15.1.1. Highways England's comments on Devon County Council Oral Submission (REP4-061)

Highways England welcome the support they received from Devon County Council. However the Council were very clear in their evidence that they consider that the full A303 programme needs to be implemented in order for the benefits, which they believe to exist, to be unlocked. This further emphasises the importance of a full appraisal of the corridor programme as a whole, as discussed in relation to 11.2.44. While we agree with Devon County Council on this point, we do not agree that implementation of the full A303 programme would unlock major benefits for the South West peninsula. Our views on this point are contained in Section 3.7 of our original Written Representation on Transport Planning and Economics (REP2-129).

3.4. Noise and Vibration (in response to our REP4-056)

Comments by K. Fielden and Rupert Thornely-Taylor

11.2.57 on impacts of TBM. It is not the stability of the archaeological remains as they currently stand in situ that is of primary concern but their potential disturbance arising from vibration and/or settlement owing, possibly, to migrating voids in the ground rock beneath caused by operation of the TBM. We note that that no measures to <u>protect</u> such archaeological remains have been described in the revised OEMP at Deadline 6 (REP6-012, ref. PW-NO14, MW-NO15, PW-CH1 and PW-CH8) and that such measures are to be provided by the main works contractor. There is no certainty at the present time that any such measures could either be devised or would be effective. (Comment by K. Fielden)

Rupert Thornely-Taylor, vibration specialist for the Stonehenge Alliance, comments as follows.

- 1) To do a proper assessment of a significant effect, it is necessary to (a) predict the effect using a competent method, and (b) assess it against an appropriate signifiance criterion.
- 2) Highways England say, effectively, that they do not know what the significance criterion should be, and that they have used a prediction method which overpredicts and is therefore inappropriate.
- 3) In the light of (1) and (2) monitoring serves no purpose.
- 4) In the light of (1) and (2) assessment on a "case-by-case basis" has no meaning.

It follows inescapably that 'a full and correct assessment of the risk of damage to archaeological remains.....has not been carried out"

3.5. Cultural Heritage Value (in response to our REP4-056)

Comments by Alan James

Introduction This is a very brief response to the comments by Highways England (HE) on Cultural Heritage Value in their REP5-003, Sections 11.2.58-11.2.65. HE's comments largely re-iterate previous positions and do not add to the debate, and there seems little point in prolonging such exchanges. I do however have a few comments and clarifications, using the HE section numbers for reference.

11.2.58. Heritage value accounts for 75% of PVB

1. HE comment that

"Enhancing the cultural heritage of the Stonehenge World Heritage Site, through the delivery of the A303 Amesbury to Berwick Down Road Scheme, formed an integral part of the Client Scheme Requirements and, therefore, is a core objective for this scheme. It is because of this core objective it is not surprising that cultural heritage is part of the assessment of value for money of the Scheme."

My point was that it was surprising, not that cultural heritage was part of the assessment, but that it accounted for **such a large proportion** of the scheme benefits (and is responsible for a large proportion of the costs) on what is primarily a highways project delivered by a highways agency.

2. HE state that:

"The CV method of monetising heritage benefits is an accepted standard method of assessing intangible benefits in assessment of value for money in publicly funded projects. The assessment of value for money – and its conclusion - is therefore sound."

The use of an 'accepted' methodology is self-evidently no guarantee that the assessment and its conclusion will be sound. The methodology is hypothetical and riddled with caveats and uncertainties, and has produced implausible results.

11.2.59. 94% of the heritage value derives from the general population who are unlikely to experience the site

HE have come up with a novel definition of existence value:

"In this context, the term 'existence value' does not refer to the existence of Stonehenge, but to the existence of the improvement in the visual amenity, noise and landscape severance."

Existence value is a well understood concept in landscape perception, dating back at least to the foundation of national parks in America in the 19th century, that the existence – and by extension protection – of special places or icons of nature has a value to people who would probably never actually see them. Yellowstone has a value to some citizens of New York who would never venture there, especially 150 years ago when wilderness was still feared to a significant extent.

HE's interpretation of existence value in this context is so wide of the mark that it discredits their case to the point of absurdity. Apart from anything else, if existence value as discussed by Simetrica was meant to be about the existence of the purported improvements and not about the attributes of OUV in the WHS, it is no different from the rather more dubious concept of altruism.

11.2.60. Bias

HE attempt unconvincingly to defend actions to minimise bias, but do not respond to my comment that minimising bias is not enough when the outcome is such a frail BCR. They then ignore the fact that my comment was about BCR by referring to the incorporation of non-monetary values in the value for money assessment. Without a positive BCR the scheme would not go any further, and the (barely) positive BCR relies overwhelmingly on the input of only one aspect of heritage value.

11.2.61. Representativeness of 'general population' sample

HE summarise their 'response' here by stating that:

"There is no empirical evidence to suggest reassigning survey respondents between groups creates bias as the sample characteristics broadly reflect those of the population."

It is simply wrong to say that the general population sample as used in the CV assessment has characteristics that broadly reflect those of the (general) population, given that **23.4% of the sample 'general population' study group lived within 50 miles of Stonehenge**. 23.4% of the population of the UK do not live within 50 miles of Stonehenge. It is completely untenable to suggest that this geographical bias will have no significant effect on perceptions of Stonehenge by the general population

11.2.62. Scenario testing

1. HE's comments here are largely repetitive, based on a reluctance to accept that the basic unit of measurement – theoretical willingness to pay for something, knowing that the payment will never have to be made – is suspect, no matter how honestly the respondent tries to address the question. In travel planning we used to operate a 'rule of 4' for questions like willingness to cycle to work if improvements to the cycling experience were made: the rule, derived from empirical experience, was that whatever percentage of respondents said they would be willing to cycle should be divided by four to give a reliable estimate of how many would actually do so. There is almost certainly a similar effect in WTP, that respondents want to feel generous when they are not actually being asked to stump up the money, but in practice the amount they would actually be willing to pay is less than the amount they state. Perhaps the only way a genuine WTP could be established is by something akin to a crowd funding exercise: the scheme will go ahead if 60% of UK taxpayers are willing to pay an average of £45 each, but not otherwise. Other than this, a useful comparator is WTP for toll roads, for which the vastly underused M6 toll road in the Midlands provides an instructive answer.

2. It is notable that HE are moving away from the BCR as justification for the scheme, claiming that VfM is the important assessment and it includes non-monetary elements. HE claim here that:

"the balance of non-monetised impacts in the assessment is positive so the scheme's VfM category would be unchanged. The results therefore show that the category of VfM of the Scheme therefore has a low degree of sensitivity to the values in the CV study"

Leaving aside that it is hotly disputed whether the balance of non-monetised impacts is positive, this is a non-sequitur. If the BCR of the overall scheme falls below 1 it is far more likely that it would not proceed at all; but in any case if the BCR falls it is not proven that the VfM category would remain unchanged. A negative BCR is a serious impediment to a road scheme in these times of limited funding, and HE should be wary of attempting to shrug it off.

11.2.63. Disparity between 2001 and 2016 CV studies

HE's comments serve to increase the confusion and contradiction, by coming up with figures for WTP between 1998 and 2016 that are completely at odds with the overall values quoted by me, which indicate that using HE's multipliers there is a significant disparity between the values for the two studies.

11.2.64. No consideration of options outside of the WHS

HE acknowledge and apologise for previous statements about the tunnel portals being outside the WHS, but my comment was that this erroneous statement was being repeated (at 13.1.57) in the document to which I was responding. None of this alters the case made by Stonehenge Alliance that there was bias in the CV exercise, even if there were plausible reasons why it happened, because respondents were given precise information about the

purported visual benefit of removing the road from the vicinity of Stonehenge, but did not have an equivalent level of knowledge about the tunnel portals, the visual impact of the road either side of the tunnel and within the WHS, or the potential negative impacts on archaeology.

11.2.65. Monetisation of a single aspect of cultural value, when there are other intrinsic values to the cultural heritage

HE's comment appears to concede the case I was making. HE now suggest that "In the economics literature intrinsic value has a specific meaning and this is what was referred to in the previous response": I am not aware what this 'specific meaning' is, but there seems to be a broad acceptance of the points I raised.

3.6. Submissions on Stone Curlew and Great Bustard made for M&R Hosier and the Great Bustard Group (GBG) (in response to their REP4-091 for M&R Hosier and REP4-050 for the GBG (records of oral submissions); and REP4-092 (M&R Hosier comments on written reps.))

Comments by K.Fielden

18.1.1–18.1.4 and 28.1.1 (records of Oral Submissions); and **18.2.22–31** (Comments on Written Representations Report)

The Stonehenge Alliance supports the comments made by and on behalf of M&R Hosier and the Great Bustard Group in respect of the threats posed by the Scheme to Stone Curlew and Great Bustard. and non-compliance with the Habitats Regulations.

These matters are raised again by M&R Hosier in their documents REP5-014: "Deadline 5 Submission - Comments on Deadline 4 Submissions" and REP5-033: "Deadline 5 Submission - Late Submission accepted at the discretion of the Examining Authority - Response to document 8.31 - Comments on any further information requested by the ExA and received to Deadline 3".

Our concerns are not alleviated by the responses given by Highways England to the matters raised for these organisations to date (including in the revised OEMP (REP6-012, ref. MW-BIO8), specifically in respect of:

- protection of both bird species during Scheme construction over the nesting and chick-raising seasons;
- protection of Stone Curlew over the autumn roost period;
- provision of sufficient alternative Stone Curlew nesting sites in mitigation (which should not include the "legacy" site at Winterbourne Downs); and
- the impacts on birds using the Normanton Down reserve post-construction.

Furthermore, Highways England continues not to mention or assess the in-combination (recreation) effects of c.1000 new Army dwellings and increased use of Byways 11 and 12 impacting on the SPA, despite our having raised it in our original Written Representation.