

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

**Scheme Reference: TR010025**

**Comments on Highways England's Deadline 4 Submissions:**

**Written Summaries of oral submissions at Issue Specific Hearings:**

**ISH 2: Cultural Heritage (REP4-030)**

**ISH 3: Landscape and Visual (REP4-031) *and***

**views requested under WQ LV.1.9(i) (REP4-009 to REP4-017)**

**ISH 6: Traffic and Transport (REP4-034)**

**and**

**ISH 7: Biodiversity and Ecology (REP4-035)**

**by Dr Kate Fielden and Dr Simon Temple**

**for the Stonehenge Alliance  
(Reference No. 2001870)**

**Comments on Highways England Deadline 4 submission REP4-030: Written Summary of oral submissions at Issue Specific Hearing 2: Cultural Heritage**

by Kate Fielden

**Highways England's Appendix A to REP4-030: Applicant's response to points raised in relation to interpretation of the World Heritage Convention and the Tasmanian Dam Case**

1. The Stonehenge Alliance notes the points made by Highways England concerning these matters and asks the Examining Authority to take into account the comments made for the Stonehenge Alliance on the same subject in our Response to Question G.1.1. in our "Comments on responses to Examining Authority's Questions submitted by Deadline 2" (REP3-063, Item 2).

**Comments on Highways England Deadline 4 submission REP4-031: Written Summary of oral submissions at Issue Specific Hearing 3: Landscape and Visual; and views REP4-009–017 requested under WQ LV.1.9(i)**

by Kate Fielden

**1. Agenda item 4. ENVIRONMENTAL STATEMENT CHAPTER 7 – ASSESSMENT METHODOLOGIES**

**v. Range of photomontages and choice of receptors**

1.1. Highways England agreed at the ISH to look at the possibility of providing montages and dynamic views, including 360-degree visualisations and some additional views suggested by Interested Parties. In the event, only 360-degree visualisations were produced to Deadline 4.

1.2. In respect of 360-degree views produced at Deadline 4 involving the visual impact of the A303 on the WHS, it is only too obvious that the viewpoints chosen are those that would show minimal impact of the Scheme in operation. At the same time, since the viewpoints are largely distant from the current A303, they provide ample evidence that the present A303 has little impact in views from the wider WHS landscape, for example:

REP4-012: view from N end of Winterbourne Stoke Barrow Group

REP4-013: view from pedestrian access gate to Winterbourne Stoke Barrow Group

REP4-015: viewpoint located where the Avenue crosses King Barrow Ridge

1.3. We note that no 360-degree visualisation has been produced of the view of the Scheme across the road cutting from the southern end of Winterbourne Stoke long barrow, to which public access is permitted. Nor, as we had requested, is there a dynamic view for a person walking along the planned A303 byway looking southward over the cutting and western portal and, travelling the other way, towards the green bridge: such views ought to be possible, ideally accompanied by the simulated sound of traffic emerging from the portals and green bridge and passing through the cutting. Perhaps Highways England may be working on production of these visualisations.

## **Comments on Highways England Deadline 4 submission REP4-034: Written Summary of oral submissions at Issue Specific Hearing 6: Traffic and Transport**

by Dr. Simon Temple

### **1. Overview**

1.1 This short note provides comments on Highways England's document "8.30.6 - Written Summaries of Oral Contributions Put at Traffic and Transport Hearing on 13<sup>th</sup> June 2019" (Inquiry Reference TR010025-001144; REP4-034). This supplements Stonehenge Alliance's own written summary of the evidence that we presented at this hearing (included in Inquiry Reference TR010025-001193; REP4-055). We have not sought to repeat this evidence and have focussed on points where there is new information, or where Highways England have misunderstood Stonehenge Alliance's views. The absence of a comment on a particular issue does not imply that we agree with Highways England on this point.

### **2. Agenda Item 3: Methodology and Modelling**

#### ***Extent of Modelling***

2.1 Highways England incorrectly state that Stonehenge Alliance claim that congestion "is predicted on the M3 by 2020". We do not have this information. Instead we referred to Road Investment Strategy 1, which contains diagrams showing "regular" congestion east of Basingstoke in 2010, rising to "severe" congestion by 2040<sup>1</sup>.

2.2 Highways England quote current journey times on the M3 in support of their argument that congestion would not have a significant impact on route choice. However this is not necessarily the case if congestion levels rise as predicted in Road Investment Strategy 1. In particular, they focus on delays which currently occur at peak periods. With higher overall levels of congestion, one would expect delays to both become more severe at these times and to extend over a much longer period of the day. Although we consider that forecasts of traffic growth are much more uncertain than Highways England claim, these are an essential underpinning of their case for the scheme, so it is important that the wider implications are understood.

2.3 Highways England set out evidence on the proportions of traffic accessing the M3 from different directions. We do not have access to their traffic model so cannot comment on the accuracy of these data. It would be very helpful for the ExA and interested parties to have access to the model, so that all parties could understand traffic patterns better and the model's sensitivity to a range of assumptions. In any case, Highways England state that one third of traffic using the A303 between Amesbury and Berwick Down also travels on the M3 east of Farnborough. This directly contradicts Mr Hanson's

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<sup>1</sup> Department for Transport, "Road Investment Strategy: for the 2015/16 to 2019/20 Road Period", 2015, pages 34 and 35

contention at the Hearing, that traffic from outside the area modelled in detail is of minimum relevance. They state that 20% of traffic originates or destines to the north and east of the M3 and could potentially switch to the M4/M5.

2.4 Highways England estimate that only 2% of current traffic might switch to the M4/M5 based on their assessment of current congestion on the M3. However a much higher percentage could switch if congestion continues to increase on the M3, as predicted in the Road Investment Strategy. In addition, some of the 12% of traffic from the south east of the M3 might switch to other roads, though not necessarily the M4/M5 if the M3 becomes more congested, resulting in drivers not using the A303 near Stonehenge. As is well established, the relationship between traffic flow and delay is not linear so that even a relatively small reduction in traffic flow can lead to a significant reduction in delay, impacting on both the need for the project and its – already very weak – economic case.

2.5 In summary, Stonehenge Alliance continues to consider that the extent of the modelled area is a matter of concern, which affects the reliability of the traffic forecasts.

### ***Variable Demand Modelling***

2.6 Stonehenge Alliance has previously expressed concern that the coefficients in the Variable Demand Modelling element of the model have not been made available. Our initial concern was that model coefficients calibrated over the whole of the South West Regional Traffic Model area might not accurately represent the responses of users of the A303 at Stonehenge. From the evidence presented at the Hearing by Mr. Hanson, and the additional information provided by Highways England, we now understand that calibration was undertaken at a national level. This only increases our concerns about the relevance of the model coefficients for this project.

### ***Traffic Growth Forecasts***

2.7 In our Written Representations and at the Hearing, Stonehenge Alliance has set out strong arguments that the traffic growth forecasts used by Highways England are subject to much greater uncertainty than they accept, and may well be over-stated. Highways England's approach is not consistent with the Department for Transport's move to scenario-based forecasting, or with current Government policy to create a zero carbon economy by 2050. While their approach may have been in line with the letter of Guidance at the time their application was submitted, Stonehenge Alliance considers that the Examining Authority should challenge Highways England to demonstrate the robustness of their case in the light of these changes.

### ***Frequency of Busy Days***

2.8 We are pleased that Mr Hanson agrees with us that the Trafficmaster data used to assess the level of delay on different days of the year "uses observations of journey times related to free-flow conditions and follow the pattern of delay as traffic increases". However we remain concerned that this does not provide a reasonable basis on which to base an assessment of the number of days on which significant

problems occur. As stated previously, it is unrealistic to expect any road that carries significant volumes of traffic to experience free flow conditions throughout the year. The absence of free flow conditions is not, in itself, sufficient to demonstrate the need for intervention. In order to provide greater clarity on this issue, it would be helpful if Highways England could set out its assessment of the average journey time for each day of the year. This would promote an informed debate about the definition of severe congestion and how often it is experienced.

### **3. Agenda Item 7: Assessment of Other Suggested Routes**

#### ***Route F010***

3.1 Paragraph 4.27 of the National Policy Statement for National Networks<sup>2</sup> does state, as Mr Taylor asserted, that the Examining Authority does not need to re-open the option assessment process. However it should be satisfied that this has been carried out in an objective and proportional way. It should also be satisfied that adequate public consultation has been undertaken, in line with Guidance. As stated in our Written Representations, Stonehenge Alliance has a number of serious concerns about the option identification and assessment process undertaken by Highways England.

3.2 In relation to options for a dual carriageway “Expressway”, Highways England’s own assessment identified three options - D061, D062 and F010 – which were considered worthy of a full WebTAG appraisal<sup>3</sup>. However Option F010 was not taken forward to public consultation despite a similar economic performance in the evaluation to the other options, lower costs and the absence of any “show stoppers” that would prevent its implementation. In the Stonehenge Alliance’s view, the reasons for not taking F010 forward are questionable and unconvincing.

3.3 Specifically in relation to the traffic assessment, Highways England state “the modelling also indicated that the longer F010 route option would lead to more long-distance traffic using the local road network (rat running), more than doubling the volume of traffic currently diverting through the villages of Durrington, Larkhill and Shrewton. This would lead to increased noise, worsened air quality and a greater likelihood of accidents along the unsuitable local roads and through the local communities.” (Scheme Appraisal Report, para. 4.5.7). This then feeds through to the social impact, distributional and safety assessments. In fact, Highways England’s own modelling shows the forecast levels of traffic on the local road network are not very high and that they would reduce with Option F010 (Technical Appraisal Report, Figures 10.2 to 10.5). The quotation above is, at best, highly misleading.

3.4 Rat running is not defined by Highways England. In principle this could cover two impacts:

- drivers regularly selecting an alternative route to avoid predictable congestion, and
- spontaneous re-routing to avoid unexpected delay due to incidents or day to day variation in traffic volumes.

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<sup>2</sup> Department for Transport, “National Policy Statement for National Networks”, 2014

<sup>3</sup> Highways England, “Scheme Appraisal Report”, September 2017, para.4.5.5, page 86

The first impact should be included in the modelling, which shows that Option F010 would reduce flows. Highways England claim that improved journey time reliability is a key benefit of the project, thereby reducing any incentive to rat running due to unexpected delay. In any case, Option F010 takes the A303 further away from communities such as Larkhill and Shrewton, making it less likely that the route through them would be used for rat running. We have made this point previously and not received any response. Accordingly we do not agree with the above quotation.

#### **4. Agenda Item 8: Economic and Benefit Cost Ratio Assessment**

4.1 We note that Highways England did not seek to defend the methodology used for the Contingent Valuation Study verbally at the Hearing. This contrasts with the traffic modelling, where Mr. Hanson gave verbal evidence. Stonehenge Alliance finds this surprising given that the results of the Contingent Valuation Study account for the great majority of the claimed monetary benefits of the project.

4.2 We also note that Highways England have not sought to defend the overall economic case.

4.3 We are puzzled by Mr. Taylor's statement that "the contingent valuation study does not seek to say that its results are the economic benefits deriving from the Scheme, but instead seeks to quantify the heritage benefits for valuation purposes". We are not clear what the difference between "economic benefits" and quantified "heritage benefits" is in this context. In any case, the results of the Contingent Valuation Study are used as the main contributor to the economic benefits of the project in the cost benefit appraisal.

4.4 Stonehenge Alliance strongly disagrees with Mr. Taylor's assertion that the monetary evaluation of the costs and benefits of the project is not relevant to consideration of whether the adverse impacts of the project would outweigh its benefits. Economic appraisal is a technique for assessing the benefits and costs of a project in monetary terms and is therefore highly relevant to considering whether the negative impacts outweigh the benefits, independently of any decision on funding.

4.5 As we argue elsewhere, the inputs to the monetary appraisal are subject to considerable uncertainty and the benefits may be over-stated. This is supported in the recent National Audit Office report on the project<sup>4</sup>. This highlighted both that "the economic case relies on heritage benefits that are uncertain" (page 6) and "the current range of capital costs of the project including VAT, is £1.5 billion to £2.4 billion (2016 prices)" (page 8). These issues should be included in the Examining Authority's overall assessment.

4.6 Furthermore, this project has major negative impacts, for example on archaeology, which cannot be expressed in monetary terms. Accordingly, the monetary evaluation cannot be simply taken in isolation as measuring whether the negative impacts outweigh the benefits, but it is an important element of the overall assessment of whether the project complies with Section 104 of the Planning Act.

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<sup>4</sup> National Audit Office, "Improving the A303 between Amesbury and Berwick Down", May 2019

4.7 We note that the Examining Authority has asked Highways England to provide further justification for their position, and we may wish to comment further when this is available.

## **Comments on Highways England Deadline 4 submission REP4-035: Written Summaries of oral submissions at**

### **Issue Specific Hearing 7: Biodiversity and Ecology**

by Kate Fielden

1. The Stonehenge Alliance makes the following comments on Highways England's written summary of ISH 7 under relevant agenda headings.

#### **2. Agenda item 3. EFFECTS ON STONE-CURLEW AND ADEQUACY OF PROPOSED MITIGATION MEASURES**

***Agenda Item 3.4. Effectiveness of provisions within the Outline Environmental Management Plan (OEMP) [APP-187, PW-BI05] to prevent disturbance to nesting birds by construction activity. Response to the Environment Agency's concern that PW BI05 measures are 'unreliable'.***

2.1. Highways England records the following summary statements:

*"Dr Peay explained that details of physical screening could not be provided at this point, and that this was a matter to be finalised in the Construction Environmental Management Plan prepared by the contractors (pursuant to the OEMP)."*

*"Mr Taylor QC also explained that works would be undertaken pursuant to a method statement, and confirmed that the whole process of control was covered by these detailed OEMP provisions."*

*"Mr Taylor QC further confirmed that the OEMP provides for the monitoring and reporting arrangements to be made in consultation with Natural England, and for the arrangements proposed by the Contractor to be approved by Highways England."*

*"Mr Taylor QC did, however, note that the OEMP is still under discussion and that Highways England would consider whether any further changes were required as a result of the comments made."*

#### **2.1.2. Stonehenge Alliance comments**

The decision-maker will need to have certainty that there will be no adverse effects on the Stone Curlew population "beyond reasonable scientific doubt". It is therefore not satisfactory to leave important decisions concerning the well-being and safety of the birds during construction to the contractors: these matters should be fully detailed within the DCO so that the decision-maker may have the required certainty in accordance with the demands of the Habitats Regulations. We trust that the finalised OEMP will contain all the measures necessary for the required level of certainty.

### 3. **Agenda item 4. EFFECTS ON GREAT BUSTARD**

#### ***Agenda Item 4.1 Current status of great bustard in the UK and Salisbury Plain area.***

3.1. Highways England records the following:

*“Mr Taylor QC confirmed that the measures in the OEMP to protect Stone Curlew were intended to extend to Great Bustard.”*

*“Dr Peay confirmed that at Longbarrow Junction, the main construction sites would be surrounded by bunds to avoid visual intrusion which would help to screen activity from Great Bustards that may be using the area.”*

#### **3.1.2. Stonehenge Alliance comments**

Measures to protect Stone Curlew and Great Bustard may need to differ in view of what was said about the habits of these birds at the ISH. The proposed bunds would be unlikely to deter birds in flight.

### 4. ***Agenda Item 4.3. Whether any additional specific measures are required to mitigate effects on great bustard.***

4.1 Highways England records:

*“With respect to the applicability of provisions PW-BIO5, PW-BIO4 and MW-BIO8 of the OEMP, Mr Taylor QC noted that the intention that those provisions apply to the Great Bustard was not yet reflected in the drafting of the OEMP, and confirmed that the next version of the OEMP would explicitly include reference to Great Bustard. With respect to consultation with the Great Bustard Group, Mr Taylor QC noted that Highways England would consider this for inclusion in the next draft of the OEMP.”*

#### **4.1.2. Stonehenge Alliance comments**

We suggest that measures for protection of the Great Bustard in the OEMP would need to provide certainty for the decision-maker of no adverse effects.

### 5. **Agenda item 5. EFFECTS ON THE WATER ENVIRONMENT – RIVER TILL AND RIVER AVON SAC**

#### ***Agenda items 5.2. Effectiveness of measures to avoid adverse impacts during construction phase; and 5.3. Need for greater certainty that construction de-watering will not be necessary, to inform Habitats Regulations Assessment (HRA) conclusion of no likely significant effects on the River Avon SAC and Appropriate Assessment if required.***

5.1. Highways England records:

*“Mr Taylor QC explained that if dewatering was required, in line with the OEMP, consents would be required from the Environment Agency in order to carry out the dewatering. That consent process would have to ensure that there would be no adverse effects on the River Avon SAC. The Environment Agency therefore has control over this process, and there is a process in place to ensure compliance with the*



*appropriate Habitats Regulations. In response to a question from the Examining Authority, Mr Taylor QC confirmed that any dewatering would not take groundwater levels below average levels."*

#### **5.1.2. Stonehenge Alliance comments**

We note there is no certainty that dewatering would not be required. Furthermore, no mention is made by Highways England of the potential for bentonite grouting (used in conjunction with tunnel boring) to cause contamination of the groundwater and subsequently the SAC. It is our view that certainty on these matters is not something to be left until after any DCO might be granted, since it is the decision-maker who is responsible for ensuring that there will be no adverse effects on the SAC arising from the Scheme.

### **6. Agenda item 8. ANY OTHER MATTERS**

6.1. We note that the issue of increased recreational activity close to Normanton Down reserve has not yet been resolved. There was no mention, in relation to matters raised about increased recreation in the southern part of the WHS, of the in-combination effects of increased recreational use of Salisbury Plain owing to new Army housing for which there is at present no convincing evidence to indicate that there will be no adverse effects on the SPA. The decision-maker will need assurance that the in-combination effects of these recreational activities will give rise to no adverse effects on the Stone Curlew population associated with the SPA: we hope that the Statement to inform the Appropriate Assessment will be amended accordingly, once measures to ensure no adverse effect have been decided upon.