

PLANNING INSPECTORATE REFERENCE: TR010025

ICOMOS-UK

Comments on Examining Authority's Second Written Questions: HW 2.1, LV 2.1, LV 2.4, NS 2.7, and NS 2.8

HW 2.1 Health and Well-being

Loss of the casual encounter with the Stones as you pass on the A303 is referenced by numerous RRs as an important part of the cultural experience of the area. The WHS Management Plan recognises there has been routes through the landscape for significant periods of time and the location of the road has opened this up to artists, poets, musicians etc which has further developed the cultural significance of the site.

- i. *Whilst there will remain views from rights of way would you agree the casual encounter by the commuter will be lost?*
- ii. *What significance do you consider this has on the OUV for the WHS?*

ICOMOS-UK acknowledges that what is now the A303 road has provided visual access to the main henge since the early 1800s and that today some motorists appreciate fleeting glimpses of the henge as they travel west.

This is one way of viewing the henge. There are many other ways of viewing this monument. And it is also the case that the monument is only part of an exceptionally large pre-historic landscape. The henge may be the major standing remains but it is the 'icing on the cake' in terms of how it relates to the many earlier ceremonial structures across the landscape for which it appears to be a focal point.

The view from the A303 of the henge is not part of the OUV of the site: that does not mean it is not of local value.

LV 2.1 Integrity of landscape and cultural heritage

The integral nature of the landscape, astronomy, the skies, and the monuments of Stonehenge is of enormous importance. The Stonehenge landscape has changed and developed spatially, visually, and emotionally into an enormously significant setting of ceremonial and cultural importance over many thousands of years.

In the Examination, some have argued that this aspect, of paramount importance, has been underappreciated in the ES and the HIA. Criticisms have been made of the failure to consider emerging evidence which might give rise to new theories on the significance and history of the Stonehenge landscape. Also, criticism has been made of the absence of a precautionary approach, which might prevent the Scheme destroying evidence or disrupting ancient topography and important spatial interrelationships within and beyond the WHS.

Please comment, particularly in the light of:

- i. *HIA, page 23, penultimate paragraph, re: second Attribute (the physical remains in relation to the landscape), ‘The Scheme has been developed to avoid known concentrations of archaeological remains...’ [APP-195].*
- ii. *Josh Pollard and colleagues’ 2017 publication, which identified not only the area adjacent to the western approach, but also a substantial area to the north, several kilometres long, with a remarkable density of Beaker associated material. A risk exists of sterilising this evidence with the construction of the western approach and the Longbarrow junction. (Noted in Part 1, paragraph 9 of the 5/6 June ISH written summary of the Consortium of Archaeologists and Blick Mead Project Team [REP4-047]).*
- iii. *The discovery of two longbarrows to the south in 2017 adding to the remarkable concentration of Neolithic monuments dating from before the construction of Stonehenge. These appear to form a circular array focussed on the top of a dry valley (Wilsford Coombe?), which the western approach cutting would disturb. (Noted in Part 2, paras 11 and 12 of the same written summary [REP4-047], and elsewhere including Dr David Field’s Written Representation [REP2-163]).*
- iv. *A much later array dating from the Early Bronze Age is suggested in Section 4 of Paul Garwood’s paper, Winterbourne Stoke Crossroads, Early Bronze Age funerary complex. He notes the clustering of monuments in large complexes with linear arrangements, within sight of Stonehenge and its wider environs. Whilst their central focus is Stonehenge they relate in a complex spatial and visual relationship to each other.*
- v. *The failure to make use of viewsheds from particular monuments to gauge the visual connectedness of features within the overall landscape.*
- vi. *Operational Guidelines for the Implementation of the World Heritage Convention (WHC.17/01) notes at paragraph 100 that, for properties nominated under criteria (i) – (vi), boundaries should be drawn to include all those areas and attributes which are a direct tangible expression of the OUV of the property, as well as those areas which in the light of future research possibilities offer potential to contribute to and enhance such understanding.*
- vii. *HIA paragraph 5.10.4 [APP-195] and Highways England’s response to ExQ1 CH.1.58 [REP2-025] note that, in the forthcoming WHS boundary review, mooted changes include extension of the existing boundary to the north and west. This suggests extreme caution should be exercised with regard to the Longbarrow junction works. The junction, with its motorway scale partially sunk into the landscape, has the potential to fundamentally alter the ancient topography integral to the above points, interfere with the connected monument arrays, and disturb archaeological remains.*

This question cuts to the heart of what the public Examination is considering: whether the Stonehenge WHS should be considered as a single entity for which integrity is crucial, or an ensemble of discrete assets, between which spaces have little or low value.

ICOMOS-UK offers the following comments on the points raised:

Attributes

The HIA [APP-195] on pages 5-6 makes reference to the attributes that convey OUV as set out in the MP, as follows:

- The physical remains of the Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to the landscape.
- The siting of Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to the landscape.
- The design of Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to the skies and astronomy.
- The siting of Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to each other.

- 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 influence of the remains of the Neolithic and Bronze Age funerary and ceremonial monuments and their landscape setting on architects, artists, historians, archaeologists and others.’

ICOMOS-UK fully supports this over-arching list of attributes. We would like to point out, though, that attributes are not formally defined or approved by the UNESCO World Heritage Committee. It is recommended that they should be broadly defined in the Management Plan as a guide to protection and management, following which more specific definitions could be made according to need.

For any HIA, it is normally necessary for these broad attributes to be more specifically defined in relation to potential impacts. This more detailed definition has not taken place in the HIA that is now being considered. For instance, there has been no attempt to define what is meant by the siting of the Neolithic and Bronze Age funerary and ceremonial sites and monuments in relation to each other, in relation to the landscape, or in relation to the skies and astronomy, and nor has any attempt been made to consider how the landscape without parallel is composed¹.

The England Heritage website² notes that the ‘remarkable ancient landscape of early Neolithic, late Neolithic and early Bronze Age monuments’ contains ‘a vast source of information about the ceremonial and funerary practices of Neolithic and Bronze Age people’ and ‘can also help our understanding of regional and international contacts from the 4th to 2nd millennia BC, and shed light on how prehistoric society was organised’. This ‘vast source of information’ should have been used to inform an understanding of how the landscape without parallel was organized which could then have been used as a basis for a detailed definition of attributes to underpin the HIA.

Asset Groups and Discrete Assets

Having accepted that the list of attributes from the Management Plan conveys OUV, the HIA text moves on to identify what are called ‘asset groups and discrete assets’ on pages 9-12 that confusingly are seen to ‘convey attributes of OUV’. These asset groups are listed as 32 separate groups within the WHS and a smaller number beyond the boundaries. The 25 discrete assets are said to be considered where the scheme impacts on them or their setting. But no links have been provided between these asset groups/ assets and the attributes.

¹ During the public examination, in response to comments by Highways England that the phrase landscape without parallel should not be taken too literally, ICOMOS-UK pointed out that the phrase ‘landscape without parallel’ was used by the SP in its nomination dossier, and then included in the approved Statement of OUV. This comment by ICOMOS-UK was not recorded in the notes that have been supplied. ICOMOS-UK also stated that the phrase landscape without parallel has not proved to be an exaggeration, as in the thirty years since inscription no other prehistoric landscapes have been inscribed that could be said to be as extensive or as well preserved as the Stonehenge landscape, nor are there any on Tentative Lists.

² <https://www.english-heritage.org.uk/visit/places/stonehenge/history-and-stories/history/significance/>

The potential impact of the scheme on the ‘asset groups and individual assets’ is set out in Tables 1 and 2 of the HIA. Following that a further Table 3 sets out impact on the attributes of OUV without a clear explanation as to how one has led to the other. If impact has only been assessed on individual asset groups or assets, it is then impossible to draw a conclusion as to the potential impact on the attributes of OUV that relate to spatial arrangements between monuments and sites, or between these and the landscape, or to the overall landscape without parallel.

The texts in paragraphs 2 and 3 on pages 23-4 attempts to do this and mentions confusingly impact on the ‘setting’ of asset groups as in adverse impact on ‘the setting of and relationships between monuments and the A303 Amesbury to Berwick Down Heritage Impact Assessment 25 landscape including, amongst others, the Winterbourne Stoke Crossroads Barrows, the Diamond Group and the Normanton Down Barrows, and wider relationships between Neolithic longbarrows in and beyond these Asset Groups’. Although this adverse impact is not related specifically to OUV, the overall conclusion drawn is that ‘the Scheme would have a Negligible Negative impact on this Attribute of OUV, resulting in a Slight Adverse effect’.

Moreover it is asserted that damage to one part of the WHS can be offset by benefits elsewhere. For instance, the detrimental impacts of partially severing physical relationships between important Asset Groups such as the Winterbourne Stoke Crossroads Barrows (AG16) and the Diamond Group (AG17) and dividing the Wilsford/Normanton dry river valley in the western tunnel approaches east of the existing A360, are seen to be offset by advantages elsewhere such as in connecting parts of the Avenue.

As ICOMOS has already pointed out in its original submission[REP2-195], positive gains in one part of a WHS cannot outweigh negative impacts in other parts of the site.

Recent archaeological evidence

A further aspect that is conspicuously absent from the HIA is the idea of the landscape revealing more than was known at the time of inscription and thus the need to protect areas related to recent discoveries. New information has now revealed new evidence for sites and monuments relating to the Neolithic and Bronze Age periods and strengthened interlinkages between the various parts of the whole and the potential huge significance of ‘ancient topography’. The HIA should have acknowledged the recent new evidence and how it strengthened certain attributes of OUV. This was not done; impact was only assessed on ‘known’ assets and asset groups.

Other discoveries relate to earlier periods than Neolithic. The discovery of new evidence for earlier remains than those identified at the time of inscription is a regular phenomenon for WHS. While at Stonehenge there may be no clear links between the Paleolithic evidence at the later Neolithic materials, the possibility of finding further evidence to support such links cannot be discounted. The new earlier evidence should be considered as supportive of OUV rather than part of it. The precautionary principle should apply to allow further evidence to emerge that might provide a more detailed chronology or context.

Archaeologically sensitive areas

These new finds that either add to our understanding of OUV or are supportive of it are in areas that should have been identified as archeologically sensitive areas. A requirement to protect such areas 'which in the light of future research possibilities offer potential to contribute to and enhance such understanding' is set out in the Operational Guidelines. The key issue of the Stonehenge part of WHS is the extent of such areas as none have been defined. Given the new evidence that has emerged from recent non-invasive and invasive studies, it is becoming clear that the spaces between 'known' monuments and sites are far from empty, and the potential for finding the remains of or evidence for new 'monuments' is very high. It is also a possibility that the spaces between may in the future reveals evidence for why they were deliberately left as open areas. They are many examples around the world of sacred landscapes where the spaces are as significant as the above ground remains, in terms of alignment, visual interlinkages or simply that some spaces were deliberately kept empty for ceremonial uses, One such example is the World Heritage site of Petroglyphs within the Archaeological Landscape of Tamgaly, Kazakhstan³, where a large space, surrounding the main ensemble of prehistoric rock art, remains uninhabited and unused to the present day.

In ICOMOS-UK's view the whole Stonehenge component site should have been declared an archeologically sensitive area as the essential context for known sites and to preserve the potential for future discoveries or future understanding of the meaning of spaces. And this is supported by the justification for criterion (ii) in the SoOUV which states that 'The monuments and landscape have had an unwavering influence on architects, artists, historians, and archaeologists, and still retain a huge potential for future research'.

The site has not been declared as an archeologically sensitive area and is clearly not considered to be one as the approach being put forward to justify the length of the tunnel is based on the idea that areas between known asset group/assets can be sampled (at a very low level as has already been discussed) and where nothing is found considered suitable for major excavations. Such an approach mitigates against the idea of an overall sacred and ceremonial landscape that is 'without parallel' and which holds huge potential for research.

Integrity

All of the above relates to integrity. The WHS as a whole should satisfy conditions of integrity as should the two individual component sites. Integrity relates to the idea of completeness and intactness of the attributes that convey OUV. As set out above, the attributes do not just relate to asset groups and assets but to the inter-relationship between them and their spatial arrangements within the overall landscape. And completeness and intactness refer to the ensemble of attributes that together convey OUV, not just to individual attributes. It is ICOMOS-UK's view that the HIA has not adequately considered integrity.

³ <https://whc.unesco.org/en/list/1145>

Stonehenge was inscribed as an area or landscape⁴ not a collection of sites. Bulldozing a large cutting through the site will remove evidence for sites that clearly are part of the overall ensemble of attributes which will in turn impact highly adversely on the integrity of the overall landscape.

Boundaries

In the 2006 Periodic Reporting⁵, the State Party acknowledged that the boundaries of the site were ‘inadequate’, that no buffer zone has been defined, and that further work was needed to define the buffer zone. In the subsequent 2013 Periodic Reporting, it was reported that the boundaries ‘could be improved’ and that ‘whilst a buffer zone is not thought to be the most effective approach, it is intended to develop a setting study to help planners and developers further understand how any future development will affect the WHS and its OUV’.

The straight line western boundary has long been identified as being particularly inadequate as the attributes of OUV appear to extend well beyond this boundary. So far no setting study or detailed assessment has been made of the area to the west of the boundary that could inform either a new boundary or detailed protection and management of the immediate setting of the current boundary – which would be a buffer zone if one were approved.

If there is no buffer zone, this does not remove the obligation to protect the immediate setting and indeed the wider setting for the way they both support OUV. The 2013 Periodic Reporting acknowledged (somewhat confusingly) that although ‘An adequate legal framework exists for the area surrounding the World Heritage property and the buffer zone [sic], but there are some deficiencies in its implementation which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and / or Integrity of the property’.
(Presumably the text should have referred to the immediate setting rather than the buffer zone.)

Impact of scheme on the setting of the property

The first ICOMOS Advisory mission identified the need for a landscape ‘perspective’ or approach to be adopted that continued outside the boundary of the property, particularly to its west, to reflect links between what lies inside and outside. As the role of a buffer zone is to support the OUV of the property, in the absence of a buffer zone, protection of the immediate setting should have a similar aim.

The HIA should have considered in detail the potential impact of the Longbarrow scheme on the immediate setting of the property in terms of impact on its support for OUV. This has not been done with the result that there is no assessment of the proposed Longbarrow junction on the OUV of the property. In ICOMOS-UK’s view, had a proper assessment been undertaken, based on

⁴ Not a cultural landscape as this category was not introduced until 1992 but as a ‘site’, which can be ‘areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view’ as set out in Article 1 of the World Heritage Convention.

⁵ Every six years, the States Parties are invited to submit to the World Heritage Committee a Periodic Report on the application of the *World Heritage Convention* in their territory as set out in Article 29 of the *Convention*.

clear identification of the assets within the immediate setting that support the OUV of the property, a highly negative impact would almost certainly be identified.

LV 2.4 Tranquility

The OED defines tranquillity as serenity, calmness; Chambers Dictionary as calmness, peacefulness; the GLVIA glossary as a state of calm and quietude associated with peace. Tranquillity is considered within ES Chapter 7: Landscape and Visual [APP-045], where the IAN 135/10 definition of tranquillity is adopted, as remoteness and sense of isolation [...] often determined by the presence or absence of built development and traffic. The analysis then relates largely to the perception of noise, although it touches on the perception of vehicles and settlements, and the panoramic extent of views. Figure 7.5 illustrates existing tranquillity across the study area as mapped by the CPRE.

- i. How is the CPRE analysis derived? Is it based on noise measurement or on other factors?*
- ii. Have attempts been made to map projected tranquillity with the Scheme in place?*
- iii. Have attempts been made to analyse tranquillity in terms of serenity, calmness, and peace rather than the impact of noise, qualities which might be affected by the proximity to major road cuttings or junctions, whether or not accompanied by noise?*
- iv. Has the connection between tranquillity and the feeling of completeness of the landscape and the interconnectedness of its features been considered?*

ICOMOS-UK would like to comment on the connection between tranquility and the feeling of completeness of the landscape and the interconnectedness of its features in relation to authenticity.

Authenticity relates to the ability of a site to convey its value credibly and truthfully through a variety of attributes. While a site could have the potential to convey its value through identified attributes, there may be other factors that come into play that could constrain its ability to convey its value in an optimal way. Light or the lack of it, noise, and other nuisances such as pollution, lack of access, over-visiting, and lack of safety may all hinder the way a site conveys its value.

In the case of Stonehenge, authenticity is related to the way the site is able to evoke an extensive, integrated, prehistoric sacred landscape. The right conditions need to be in place to provide a sense of connection with the prehistoric past in order to allow for a full appreciation of the scope of the landscape as well as its inter-relatedness and sacredness. Tranquility can provide those conditions.

In ICOMOS-UK's view while visual connections can be made across the western cutting, there is no way that the cutting can be anything other than detrimental in terms of authenticity. Traffic will have been lowered but not removed; there will be a sense of loss at what has been destroyed in the making of the cutting, while burial barrows will be left disrespectfully near to portals and motorway embankments. Above, all the necessary condition, tranquility, for full engagement with the overall prehistoric landscape will not be in place.

NS 2.7 Vibration effects on archaeology

In light of the comments made by the different parties to date can you advise on the latest position in respect of:

- i. *An agreed methodology for measuring vibration and what standards could be used to safeguard archaeological remains.*
- ii. *The level at which significant effects might occur.*
- iii. *How any vibration will be monitored to protect archaeology.*
- iv. *Mechanism/ mitigation to avoid potential adverse effects including any agreed positions of monitoring locations.*

and

NS 2.8 Settlement effects on archaeology

In light of the comments made by the different parties to date can you advise on the latest position in respect of:

- i. *An agreed methodology for measuring settlement, and what standards could be used to safeguard archaeological remains.*
- ii. *The level at which significant effects might occur.*
- iii. *How the settlement will be monitored to protect archaeology.*
- iv. *Mechanism/ mitigation to avoid potential adverse effects including any agreed positions of monitoring locations.*

ICOMOS-UK would like to comment briefly on the subject of a methodology for measuring vibration and settlement to safeguard archaeological remains.

Although there is a considerable body of literature on vibration/settlement monitoring for standing structures, there is no agreed method of monitoring buried archaeology. While the main henge monument itself, which has seen quite a few uplifts and repositioning, structurally resembles a standing building, the other recorded monuments, causeways, mounds etc. pose different challenges, and as-yet unidentified archaeological remains, raise yet further challenges. While a methodology could be developed, a key issue would be how to determine criteria to monitor against, and what level of change is acceptable for both temporary and permanent impacts of potentially damaging vibrations, both in terms of the cumulative or ‘delayed’ nature of potential damage (fissures, sinking, soil movements), and the possibility of their stabilisation over time.

For most of this, we are in the realms of the unknown. The main issue thus becomes one of evaluating risk: what degree of risk would the tunnel pose in the short, medium and long terms. In addressing these questions, we attach as an Annex a short paper by structural engineer, Alan Baxter, CBE, which ICOMOS-UK fully endorses.

26th July 2019