



Reference: A303 / Stonehenge

Project No: 1918808

Date: 9th July 2019

Technical note

Re: A303 Stonehenge tunnel scheme: Written summary of oral submissions in relation to tranquillity on 12th June 2019

This note summarises notes concerning the assessment of tranquillity made by myself, Clive Bentley, on behalf of the Stonehenge Alliance and by the applicant at the Issue Specific Hearing on Noise and Vibration, Health and Wellbeing held on Wednesday 12 June 2019.

1. The applicant confirmed that tranquillity had been assessed with reference to IAN 135/10 by their landscape architect. IAN 135/10 deals with tranquillity as a landscape feature and does not require any proper assessment of other factors which affect tranquillity, the most important of which is sound level and character. This may mean that there are areas in the vicinity which are currently important for their quiet or tranquil character which, if the Scheme is implemented, would experience an increase in road traffic noise and which would no longer have that character. This is an important omission.
2. The applicant's landscape architect stated that he used measured sound levels provided by the applicant's acoustic consultant in his assessment of tranquillity but was not able to state how this was done or what criteria or approach were used to evaluate these. It is therefore evident that no consideration of natural and man-made sound has been made, and sound has not been properly considered, contrary to relevant planning policy and guidance. This is set out in Table 1 below for ease of reference:

Table 1: Planning policy requirements in relation to tranquillity assessment

Document	Reference	Requirement
National Policy Statement for National Networks (NPSNN)	Para 5.186	"Excessive noise can have wide-ranging impacts on the quality of human life and health (e.g. owing to annoyance or sleep disturbance), use and enjoyment of areas of value (such as quiet places) and areas with high landscape quality."
	Para 5.188	One of the factors affecting noise impact is: "... the proximity of the proposed development to quiet places and other areas that are particularly valued for their tranquillity, acoustic environment or landscape quality such as National Parks, the Broads or Areas of Outstanding Natural Beauty ..."
		The applicant's noise assessment should include:

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Document	Reference	Requirement
		"... identification of noise sensitive premises and noise sensitive areas that may be affected. the characteristics of the existing noise environment ..."
	Para 5.193	"Due regard must have been given to the relevant sections of the Noise Policy Statement for England, National Planning Policy Framework and the Government's associated planning guidance on noise."
Government's website, ".GOV"	Natural beauty assessment criteria for National Parks and Areas of Outstanding Natural Beauty	Describes relative tranquillity as being found where: "... natural sounds, such as streams or birdsong are predominant".
National Planning Policy Framework (NPPF)	Para 180	"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should: ... identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason."
Planning Practice Guidance (PPG)	Paragraph 12: Reference ID: 30-012-20140306 "What factors are relevant to identifying areas of tranquillity?"	States: "There are no precise rules, but for an area to be protected for its tranquillity it is likely to be relatively undisturbed by noise from human caused sources that undermine the intrinsic character of the area. Such areas are likely to be already valued for their tranquillity, including the ability to perceive and enjoy the natural soundscape, and are quite likely to be seen as special for other reasons including their landscape."

3. At the hearing, the applicant refocussed their statements in relation to tranquillity away from claims about improvements at the henge to improvements in the surrounding area. All parties agreed that tranquillity in much of the surrounding area covered by the tunnel would be improved as a result of the proposed tunnel. Crucially, however, the tranquillity at the henge would be unaffected.
4. Although the road traffic noise levels at the henge would be reduced, the actual reduction in sound level at the henge would be, at best, from 62 to 61 dB, according to the applicant's own data. The applicant's acoustic consultant agreed that these values were correct. If a dominant sound at 61 dB had a minor, unnoticed sound removed from it, there is unlikely to be any perceived difference in level or character. This was illustrated at the hearing by listening to the road traffic audible within the hearing venue when no other sound was present. I explained that if that road traffic noise was removed entirely, it would make a negligible difference to the sound level or character in the hearing hall. This is exactly the situation at the henge. With the road traffic removed, there would be no change to the tranquillity experienced there.
5. The applicant claimed, prior to the hearing that noise from the A303 is a significant problem at the henge and that the change in noise level which would result from the proposal would result in a large beneficial effect at the henge. Both of these points have been shown to be incorrect. Since the improvement of tranquillity at the henge is one of the benefits claimed for the proposed development, this should be discounted, when considering the scheme, in my opinion.

6. As pointed out in the hearing, the statement in 3.21 of my evidence that the Natural Tranquillity Method, "... has been found to correctly predict the tranquillity score for about a third of the time ..." is incorrect. Figure 1 below shows the difference between predicted and actual reported tranquillity scores for 1,600 locations, based on the method in order to illustrate this.

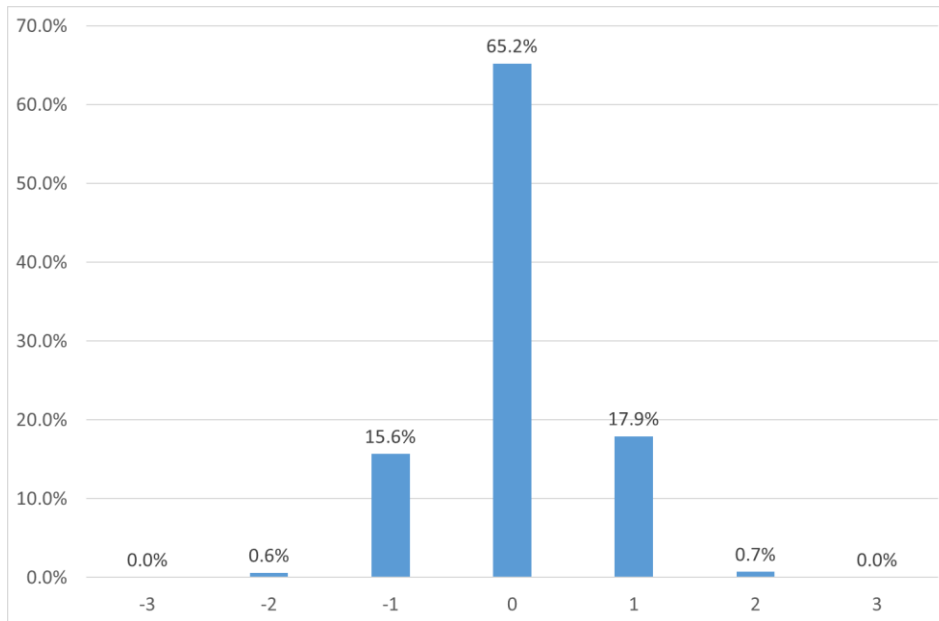


Figure 1: Difference between predicted and actual reported tranquillity scores using the NTM