A303 Stonehenge Public Examination 2019

Written Representation by Barry Garwood

"Couldn't find the freeway, had to take a backstreet called the M5."

US Tourist explaining why they had arrived late for dinner in the *Waldorf Salad* episode of the classic comedy series *Fawlty Towers* (BBC 1979).

Outline

For many years the A303 east of Amesbury has been a bottle-neck for traffic, as the road reduces to a single carriageway past Stonehenge and through the village of Winterbourne Stoke.

I agree that Winterbourne Stoke needs a bypass, as the current level of traffic on the A303 divides and disrupts the community. However the proposal to tunnel through the Chalk aquifer under Stonehenge, with tunnel portals within the World Heritage Site, is cause for considerable concern.

As such I am opposed to the scheme because the act of tunnelling risks detrimental changes to the hydrology of the aquifer and loss of important archaeology. The positioning of tunnel portals and approach roads close to important monuments within the Stonehenge landscape will detract from the outstanding universal value of the site in the widest possible sense of the expression. I am also opposed to the loss of access to public highways and the fine views of Stonehenge.

Background

Stonehenge, as we know it today, was rebuilt as a twentieth century tourist attraction by English Heritage and predecessor organisations, from a pile of old stones found laying in a field beside the A303.

However, it is clear the site has a much older heritage, with the original stone circle dating back over four thousand years and the wider area showing signs of continuous habitation, uniquely in this country, for as at least as long again before that.

The Chalk aquifer on which Stonehenge is built has provided a source of water for people dating back to around the end of the last ice-age. The stone circle is constructed with cosmic alignments to mark solstice events and has been a central meeting point for people from throughout the land at such times.

By the time of construction of Stonehenge, the wider site had itself been in use for thousands of years, as evidenced by recent archaeological discoveries at Blick Mead. It can be regarded as the cradle of British civilisation.

The delicate hydrogeology of the Chalk has helped preserve archaeological evidence dating back thousands of years. Tunnelling through it will alter the hydrogeological characteristics of the area, with the potential to destroy as yet undiscovered archaeological evidence that could shed further light on our early civilisation.

Far from restoring the World Heritage Site, these proposals are likely to destroy the foundations on which it was originally built.

History of the Stonehenge Landscape

Stonehenge was built around 4-5 thousand years ago, but the wider site had been in use for thousands of years before that. Archaeological excavation, led by the University of Buckingham, suggests that nearby Blick Mead has been inhabited from as long ago as 8500 BC and post holes discovered in the old car park suggest that the Stonehenge site was used from around that time.

Blick Mead is a low-lying waterlogged area with a spring, that has preserved evidence of continuous human habitation, uniquely in this country, dating back almost to the end of the last ice-age. The damp nature of the ground has doubtless aided the preservation of evidence and it is highly likely that further archaeology remains to be discovered in the area.

The stone circle we see today appears to have stood the test of time well, but has in fact been subject to considerable restoration. A good account of the modern works, along with the image below, is given in the article: Restorations at Stonehenge, by Austin Kinsley, available at: https://www.silentearth.org/restorations-at-stonehenge-2/

It informs us that, following the falling of two stones in a gale on 31 December 1900, an early attempt at restoration was begun by the Antrobus family, who owned the site:

"Lady Antrobus observed the restorations at Stonehenge carried out in September 1901, resulting in an article she authored being published in the Saturday October 19th, 1901 edition of Country Life, in which she observed:

"'The most dangerous and intricate piece of work to be undertaken was the raising to an upright position of the great monolith called the Leaning Stone, the king of the mystic circle and the largest in England, Cleopatra's needle excepted. This stone was one of the uprights of the great trilithon which stood behind the Altar Stone, and the Duke of Buckingham is said to have caused its fall by his digging and researches in 1620. The fallen upright is broken in two pieces and its lintel lies, as it fell, across the Altar stone.'"

Following the death of the main heir, Edmund Antrobus, during the first world war, the site was sold to Cecil Chubb, who gave it to the nation in 1918. Since then there has seen considerable further work, with a major programme of re-erecting fallen stones carried out with the aid of an RAF crane, in 1958. The Stonehenge we see today is very much the product of the modern heritage industry, with much of the circle having been re-erected and aligned in recent times.

Hydrogeology of Stonehenge

Chalk Hydrogeology – an Introduction

Stonehenge is built on a Chalk aquifer that underlies much of southern England. Chalk retains water in a network of fine pores, which define the porosity, or amount of water it can hold. The pores are interconnected in such a way as to allow water to flow through it, making it permeable. Generally, the pores are small and lead to a fairly low permeability, but where cracks are present the transmissivity increases leading to a higher level of permeability, as is the case with major aquifers.

A useful summary can be found in the article: The Aquifers of the UK, produced by the British Geological Society © and available from the UK Groundwater Forum website at: http://www.groundwateruk.org/downloads/the_aquifers_of_the_uk.pdf

"An aquifer is defined as a permeable rock that stores groundwater and allows it to flow readily into a well or borehole. The water flows through the voids, or pore spaces, in the rock. The total volume of the pore space is referred to as the porosity and represents the total volume of water that the rock can store. This may be in the minute spaces between the grains of a sandstone, when it is referred to as intergranular porosity, or in the small cracks and fractures that are more usual in limestones and older compact rocks, which is termed fracture porosity. The pore spaces in an aquifer must be interconnected so that water can flow through the rock, in other words an aquifer must be permeable.

"An aquifer's primary functions are to store and transmit water. Most groundwater in an aquifer is slowly circulating in the upper 100 to 200 metres of the saturated zone. But fresh water can penetrate to depths of more than 2 kilometres although at such depths groundwater is generally mineralised with solutes, particularly sodium and chloride, and is too saline for potable use.
The principal aquifers of the UK are found in the lowlands of England. The most important are the Chalk, the Permo-Triassic sandstones, the Jurassic limestones and the Lower Greensand."

"The Chalk, which is a soft, white limestone traversed by layers of flint, underlies much of eastern and southern England. It is a unique rock because it consists of minute calcareous shells and shell fragments of plankton. These impart high porosity to the matrix, but are so fine grained that the water contained in the pore spaces of the rock's matrix is virtually immobile, being held by capillary forces. Consequently the specific yield (the water a rock yields when it drains naturally or is pumped) is low, of the order of 1%. The Chalk owes its prominent role as an aquifer to a network of fine cracks that impart a high permeability. Individual boreholes in the Chalk can yield more than 10 million litres per day (Ml/d), sufficient to provide for the needs of about 70,000 people at 150 litres per person per day."

Further useful information can be found in: Fluid flow in the Chalk of England by Michael Price, Geological Society, London, Special Publications, 34, 141-156, 1 January 1987, a summary of which is available at: http://sp.lyellcollection.org/content/34/1/141

Summary
"The Chalk aquifer of England can be thought of as a multi-porosity medium. The matrix is a fine-grained limestone which generally has high porosity but small pore throats, so that its permeability is typically only 0.1 to 10 millidarcys (10-4 to 10-2 m day-1). A fairly uniform fracture system imparts a secondary permeability, which appears to be about 100 to 1000 mD (0.1 to 1 m day-1). Where the Chalk forms a major aquifer, most of the transmissivity results from the enlargement of fractures, by solution, to form a few highly permeable zones." *© 1987 The Geological Society*

Applicants Environmental Assessments

This section notes points relevant to my representation made in the applicants documentation and refers to the Preliminary Environmental Impact Report (PEIR) of the 2018 consultation, as well as the Environmental Statement (ES) produced for the current application.

A principal concern is that a tunnel under the Stonehenge site will affect the hydrogeology of the Chalk aquifer on which it is built. The applicants literature informs us:

The Chalk which underlies the study area is classified by the Environment Agency as a principal aquifer (ES 11.6.31) of high and intermediate vulnerability (PEIR 10.5.15).

Phosphatic Chalk is known to be present within the Stonehenge Bottom area and likely to be encountered during tunnelling (ES11.6.28),(PEIR 10.6.2, 10.8.2).

The higher phosphate content is a potential source of degradation of water quality in the rivers Avon and Till (PEIR 10.8.3).

There should be no unacceptable detrimental effects on the water quality of the area, including the River Till, River Avon or the hydrology of Blick Mead spring (PEIR 11.2.2).

The Environment Agency believes impacts on groundwater could extend beyond 5 km (PEIR 11.2.3).

The permeable part of the Chalk aquifer extends to around 50 m AOD (30 m depth) at Stonehenge Bottom and around 55 m AOD elsewhere (PEIR 11.5.40). This suggests groundwater is likely to flow towards Stonehenge Bottom, as the permeable section is lower at this point. It is noted that at low groundwater levels a certain amount of dewatering of the Avon and Till rivers to the aquifer may already occur, with the flow towards Stonehenge Bottom (ES 11.6.41, 11.6.42).

The winter transmissivities at Stonehenge Bottom in structured chalk are estimated in the region of 11 Ml/d to 19 Ml/d, with a peak flow of around 30 Ml/d. (PEIR 11.5.41). The figures of 1,430 to 2,650 m^2/d are also estimated from tests carried out in structured Chalk between 2002 and 2004, the higher figure being for winter (ES 11.6.46).

Phosphatic Chalk, as found at Stonehenge Bottom, is anticipated to have higher transmissivity, but no tests have been made (PEIR 11.5.42). It is also stated that there is no strong evidence within the literature reviewed that the phosphatic Chalk could form a preferntial flow pathway. A pumping test was carried out in July 2018 specific to phosphatic Chalk which will be able to inform the detailed design stage (ES 11.6.48).

Permeability testing undertaken in borehole RX502A during the 2017 site investigations in the Coneybury Hill area to the northeast of Spring Bottom Farm, showed slightly lower hydraulic conductivities than elsewhere, indicating this interfluve could be limiting flow from the upper reaches of Stonehenge Bottom eastwards towards the River Avon (ES 11.6.49).

Springs: A seasonal spring is found at Spring Bottom Farm and a groundwater fed lake at Lake, both below Stonehenge Bottom. There is also a spring at Blick Mead, adjacent to Vespasian's Camp (ES 11.6.50),(PEIR 11.5.44, 11.5.49).

There is significant flow increase at Stonehenge Bottom between 69m and 73m AOD indicating a possible zone of fracturing in this area of seasonal watering (ES Appendix 11.4, 3.6.31).

Groundwater levels at Blick Mead are generally over 68m but could drop below the upper level of mesolithic deposits towards 67.5m during a natural drought (ES Appendix 11.4, 4.1.3).

Schematic views of the proposed scheme show tunnel sections and foundations for the Countess flyover below both the level of groundwater and of nearby Blick Mead (ES Appendix 11.4, figs 5.3 & 5.4).

The eastern portal will be constructed down to 73.5m AOD, with the retaining walls down to 64.3m AOD. Groundwater levels in the vicinity are given as 76.88m peak and 71.86m average. Local dewatering at this location is noted as part of the scheme. (ES Appendix 11.4, Table 6.1).

All groundwater effects were found to be non-significant for both constructional and operational phases (ES 11.9.7).

Potential permanent impacts identified include:

Physical and hydromorphological impacts from watercourse crossings and other hydraulically linked surface water features (ES 11.7.3).

The presence of underground structures that could cause interference to groundwater flow in close proximity to the groundwater-fed Rivers Avon and Till that could affect habitats and/or species (ES 11.7.3).

There are a number of springs in the area below the hydraulic gradient of the tunnel including the spring system around Amesbury Abbey (including Blick Mead), which could be affected (ES 11.7.3).

Impacts caused by lengths of the tunnel below the groundwater level in the Chalk interfering with groundwater flow (ES 11.7.3)

Any pumping of surface water and groundwater required due to the presence of the tunnel, which could cause changes in flows and groundwater level (PEIR 11.6.3).

The Tunnelling Proposal Discussion

The Environmental Statement suggests that the scheme could lead to a rise in groundwater levels on the northern, upstream side, which could cause additional groundwater flooding, and a reduction of groundwater levels on the southern, downstream side.

The application does not appear to give consideration to the possibility of increased groundwater levels on the southern, downstream side of the proposed tunnel. However, the structure of Chalk gives rise to the possibility that construction of a tunnel could see an increase in groundwater level at some points on the downstream side, particularly in the vicinity of Stonehenge Bottom where the lowest point of tunnelling occurs.

The act of tunnelling is very likely lead to fracturing of the Chalk in the vicinity of the works, given the rather fragile nature of the rock. This would lead to localised increases in the transmissivity, or rate that water can flow through the rock. Although the tunnel may form a physical barrier to flow from north to south across the route, fracturing would increase hydraulic mobility along the direction of the tunnel but outside it, channelling water towards the low point in the Stonehenge Bottom area.

Also the physical barrier of a tunnel holding water back on the north side will likely lead to increased flow across the lower part of the tunnel around Stonehenge Bottom, as it will result in a groundwater level rise behind the construction as noted in the ES.

There is currently a region of lower hydraulic conductivity identified at Coneybury Hill which acts as a partial barrier to flow from the eastern end of the proposed tunnel towards Stonehenge bottom. Localised fracturing associated with tunnelling would create additional channels through the Chalk at this point and hence increased hydraulic conductivity towards Stonehenge Bottom.

Phosphatic Chalk is known to be present at Stonehenge Bottom and thought to have increased permissivity. Increased groundwater here, along with constructional disturbance may lead to higher phosphate levels ending up in the local river systems, particularly the Avon, by way of the local springs and groundwater feed. The application considers the high phosphate levels in the Avon to come from the Greensand rather than the Chalk but there doesn't seem to be any direct evidence of this.

There is strong evidence that the geology of the Chalk is complex, with faults running north-south at Stonehenge Bottom and numerous stepped faults in the region of unique phosphatic Chalk immediately to the west. These are described in the paper produced by R.N. Mortimore et al., Stonehenge-a unique Late Cretaceous phosphatic Chalk geology: implications for sea-level, climate and tectonics and impact on engineering and archaeology, Proc. Geol. Assoc. (2017), available from: http://dx.doi.org/10.1016/jpgeola.2017.02.003

See Mortimore et al., Fig. 15 and associated discussions for a description of what is known of the geology around Stonehenge Bottom. This paper was produced to inform any proposed tunnel and is Crown Copyright. It would be helpful if a copy could be attached to the Public Examination as a core document.

There are thought to be voids in the phosphatic Chalk, some of which may have been filled with less permeable material. Although the application states that there is no strong evidence in the literature reviewed that phosphatic Chalk could form a preferential flow pathway, this remains an unknown unless a tunnel is actually bored through it. Equally it can be said that there is no strong evidence that the phosphatic Chalk will not form a preferential flow pathway.

Mortimore et al., Fig. 25 depicts typical cross-sections of the Chalk that would be encountered during tunnelling and notes potentially unstable tunnel crown conditions with overlying phosphatic Chalk. Tunnelling would very likely disturb unstable phosphatic Chalk, creating additional voids, or channels at such locations.

Mortimore et al., Section 6.3, on groundwater hydrology, notes suprising groundwater behaviour at Stonehenge, where groundwater rose to previously unrecorded levels during 2001, predating the applicants data where this is even available. The section concludes by noting *"tunnel risk related to phosphatic Chalk is, therefore, a combination of enhanced groundwater flows and weak to no cementation and an extensive network of fracture flow related to both the channels and the faults and valleys"*.

It is extraordinary that Highways England consider all groundwater effects to be non-significant, but perhaps not surprising given the presumption that the scheme should go ahead.

It is noted that an additional pumping test was carried out in phosphatic Chalk in July 2018, which will inform the detailed design stage. However, the fact remains that the key feature of the application, the tunnel itself, has no detailed design at this stage. Instead it is proposed that details should be determined by the as yet unknown contractor. As such I find myself trying to comment on a proposal for which no clear method of construction exists.

What is clear is that the geology and hydrogeology of the proposed route is complex and not fully understood. Details should be included in the proposed application, as if no satisfactory method of tunnelling can be determined then the application should fail and other considerations of the scheme are academic.

A possible outcome of the tunnelling as proposed will be to create hydraulic gradients away from the eastern end of the scheme and hence the region of aquifer close to Blick Mead. A similar argument also applies to the western end of the proposed tunnel, with increased hydraulic gradient towards Stonehenge Bottom having implications for groundwater abstraction.

The eastern end of the tunnel and associated works would be below groundwater levels, as would the foundations for the Countess flyover. It seems inevitable that such constructions would affect the hydrology in the vicinity, particularly during any constructional dewatering but also potentially permanently by creating additional fracturing in the Chalk during construction.

Blick Mead has a groundwater level above the construction level of the tunnel retaining walls and flyover foundations and as such its hydrology is likely to be affected. There is a concern that alterations to groundwater levels and hydraulic flows could have a detrimental effect on the preservation of archaeological remains in the area, including the very likely possibility of remains that have yet to be discovered.

Given the vague nature of what is included from the assessments and proposed mitigation, the huge cultural significance of the wider Stonehenge area and the likelihood of as yet undiscovered archaeology, I am not yet assured that adequate safeguards are in place to protect the wider cultural heritage of the site.

The rush to build a South-West Freeway along the route of the A303 could result in the destruction of evidence of the civilizations that built the wider Stonehenge complex, by drying out the damp ground that has helped to preserve it at Blick Mead.

At worse, the tunnelling could destroy parts of the site that it purports to protect and in any case will result in the presence of wholly out-of-place concrete portals and approach roads within the World Heritage Site, which will detract from the wider setting of Stonehenge.

Alternative Routes and Need for the Scheme

Earlier consultations looked at various route options, before they were dismissed in favour of a tunnel through the Chalk aquifer. It isn't clear why this is the applicants preferred option, or why other routes have been dismissed.

Consideration should be given to alternatives, including:

1) A route entirely to the north of the World Heritage Site by diverting the eastern part of Winterbourne Stoke bypass further north to connect with the A360 giving access to the Stonehenge visitor centre, or directly to the Packway through Larkhill, with a new road from the Durrington roundabout running south of Bulford to reconnect with the A303 further east. Although this would bring extra traffic through Larkhill, it is an army camp and could be relocated at least in part. This route would be cheaper to build and add little to the length of road.

2) Building the Winterbourne Stoke bypass as planned as far as just west of the Longbarrow roundabout and then leaving the A303 as it is past Stonehenge. Although the road is busy and traffic bunches up as drivers slow down to view the stones, it generally keeps moving. As the application notes, delays are usually due to congestion and are normally fairly short, rather than the much longer delays that result from collisions on the M4/M5 alternative route. Again this would be cheaper and not really any longer than the current route.

3) A longer tunnel running from west of the Longbarrow roundabout to to east of the Countess roundabout. Although this would remove the concrete portals and approach roads from the WHS, it would be considerably more expensive and likely to require a concrete ventilation shaft within the WHS. It would undermine the Blick Mead area leading to potentially catastrophic changes to the hydrogeology of the underlying Chalk aquifer and subsequent loss of important archaeology. As such I am not in favour of it.

4) A route to the south such as the one called AR2 in the document TR010025-000652 Objectors Alternative Routes, or similar. This would utilise Boscombe Down runway, or alternatively the access runway allowing the main runway to remain open. It crosses the Avon to the north of the Woodfords and to the south of Great Dunford without needing to be particularly close to either settlement before linking south of Stapleford onto the existing A36 which could then be dualled as far as the junction with the A303 to the west. An alternative would be to head north-west from the Avon crossing, with a river Till crossing between Winterbourne Stoke and Berwick St. James to link in with the existing dual A303. Such a route would have the added advantage of bypassing Amesbury. I understand that the applicants have discounted such a route on the basis of disturbing the tranquility of the Avon valley in the vicinity of the Woodfords, but I do not consider the disturbance would be so great as to discount the route completely, when compared with the disturbance to the WHS of the tunnel proposals.

5) A route even further south as presented to the preliminary meeting in document form by Graham Parker as part of the Balfour Beaty assessment. It would be very helpful if he could attach a copy of at leaast this route to the examination. It also bypasses Amesbury to the south using Boscombe down airfield before following the A345 south almost to Old Sarum before crossing the Avon valley to the south of the Woodfords. From here it can either follow the A360 north before bypassing Winterbourne Stoke to the south, or link back to the A303 by way of the A36. Such a route would have the added advantage of being able to link with the A30 to form a Salisbury northern bypass.

In all such cases the A303 could remain open for local traffic and for those who wish to enjoy the view of the stones, which is arguably the most iconic view from a road anywhere in England. Traffic could be managed by signposting other routes for the A303, reducing the speed limit to say 40 mph and imposing a weight limit of say 7.5 tonnes past Stonehenge.

The dualling of the A303 will add a lane to the main routes between London and the south-west. Experience shows that traffic volume expands to fill the capacity available. Along with the significant carbon emissions that will result from construction, the increased traffic will have a negative effect on the environment, contributing to the ongoing climate emergency.

As such consideration should be given as to whether increasing road capacity is really the way forward. Improvements to public transport including the rail network could improve connectivity with a much lower impact on climate change.

Improvements to the A303 should concentrate on bypassing congested communities such as Winterbourne Stoke. If the road reducing to a single carriageway past Stonehenge has a traffic calming effect, this may be no bad thing.

Other Considerations

The main driving force seems to be the desire for a 'Mile-a-Minute Freeway' of the kind refered to in the Waldorf Salad episode of the classic comedy Fawlty Towers, with its supposed economic benefits to the south-west region. However, unlike Fawlty Towers, this proposal is no laughing matter.

The closure of the A303 and Byways in the vicinity of Stonehenge will doubtless provide economic benefit to English Heritage, as most people wishing to see Stonehenge will be virtually forced into buying tickets, or walk miles across Salisbury Plain, rather than being able to view the site from the A303 or the adjacent Byways that are currently open to all traffic.

The proposed Byway closures and other changes to the Public Right of Way network will cut off north-south access in a number of places, disadvantaging those that currently use them.

The criteria chosen by Highways England for deciding upon the tunnel route appears somewhat illogical. While avoiding any further crossings of the river Avon may be desirable, it does not outweigh the desirability of preserving the wider Stonehenge landscape as far as possible as it is.

Nor does the proposal to link the part of The Avenue to the south of the A303 justify the very high desirability rating given by the applicants. Of much greater desirability is the avoidance of large scale building work within the Stonehenge landscape as proposed, which will have huge impact on the setting of elements such as the Longbarrow roundabout group and Blick Mead.

If restoring the Stonehenge landscape to how it would have been seen in the past were really the main motivation for the proposals then much could be done by removing the miles of barbed wire fencing, ugly concrete infrastructure associated with the former visitor centre and car park which intrudes on views of Stonehenge from the north and even removal of the buildings at Larkhill that intrude on views to the north.

Security guards in yellow jackets with walkie-talkies seem out of place and a uniformed English Heritage staff member feeding a tame corvid perched on the fence near the heel stone on the occasion of my visit on April 1st 2019 left me wondering if they were confusing Stonehenge with the Tower of London.

Having rebuilt Stonehenge in the twentieth century, the heritage industry would now seek to exclude the majority from seeing it without paying unless they are prepared to walk miles across Salisbury Plain, very much in the face of the way it was given freely to the nation.

It risks being turned into a pastiche of its former self by a cash-strapped heritage industry and is already starting to resemble a theme park.

Stonehenge has a great spiritual value for many, has been a meeting place for people from all over the country at solstice events going back thousands of years and is a hugely significant astronumerical structure. It should preserved as it is for all.

Other Views

I would like to include some points made by others that reflect my views rather better than I can express them myself:

East Amesbury residents

In response to an earlier consultation for a tunnel under Stonehenge, East Amesbury residents wrote in 2003 that:

"The removal of the A303 and A344 from site of the stones does mean that the opposite is also true -- the site of the stones from these roads is lost. The dis-advantage here is that this view is then not replaced."

"For the purposes of assessing the Stonehenge proposal, value should be expressed in monetary and archaeological terms."

"When considering the proposal with costs expressed in non-monetary units, the costs do appear high for the benefits obtained."

See: East Amesbury Residents: Objection to Draft Orders, 1 September 2003, available from: http://www.ukrivers.net/savestonehenge/eastamesbury.html

Although the exact nature of the proposals is not entirely the same as here, these comments seem just as relevant today.

Dan Hicks

An article written for Apollo magazine, by Dan Hicks, Associate Professor and Curator in Archaeology at the University of Oxford, during the January 2017 consultation, makes some interesting points.

The article is written in reply to the 2017 consultation response by Historic England and English Heritage, along with the National Trust. He notes that while the proposals may enhance visitor experience to their estates, it fails to conserve the wider site.

He points out that it is not the old coaching road that is the problem, but the volume of twenty-first century traffic using it. He notes that the dualling of the tunnel approach roads may actually increase the area of surface road within the World Heritage Site and would destroy the chance of ever properly conserving it.

Furthermore, he notes that suggestions of re-instating the Avenue are impractical, as it is no longer visible east of Stonehenge Bottom, runs across private land, crosses another road and would require the demolition of West Amesbury House, a Grade 1 listed building.

See: Why are England's heritage bodies supporting the Stonehenge Bypass? By Dan Hicks, available from: https://www.apollo-magazine.com/englands-heritage-bodies-supporting-stonehenge-bypass/

Summary

There is considerable risk of damage to archaeology, both directly through the construction and indirectly through potential changes to the hydrogeology of the Chalk aquifer on which the Stonehenge site sits.

The geology of the Stonehenge Bottom area is complex and not fully understood. There is the potential for the proposed works to alter the hydrogeology of the aquifer and the hydrology of Blick Mead. If a tunnel cannot be satisfactorily constructed then the application should fail and alternatives sought.

At this stage there are not even any detailed plans on how a tunnel can be constructed, as the proposal is for the method of tunnelling to be determined by an as yet unknown contractor.

There is also the loss of fine views of Stonehenge from the A303, and loss of interconnectivity in the local Public Rights of Way network.

The main advantages would be to journey times for visitors to the south-west as well as increased revenues to the heritage industry and those companies awarded construction contracts.

The consultation and application documents are big on concepts such as opening a 'mile-a-minute' South-West Freeway, which might suit business travellers and visitors of the kind portrayed in the classic comedy Fawlty Towers, yet much more vague on concepts such as preservation of archaeology and cultural heritage.

Indeed, the views of Stonehenge from the A303 are part of our culture. Our understanding of the wider historical context of the site is still in infancy. It is probable that there is more to be discovered in future. The proposals look more likely to destroy archaeological evidence than preserve it.

The proposals seem heavily weighted towards a presumption to go ahead with a tunnel, with disadvantages glossed over, or ignored. The tunnel portals and approach roads would seriously impede on the wider setting of Stonehenge and along with changes to the Chalk aquifer may lead to loss or damage to as yet undiscovered archaeology.

Too little consideration has been given to alternative routes outside the WHS.

Stonehenge and its wider setting can reasonably be regarded as the cradle of British civilisation. It is too important to be treated as an afterthought to a road improvement scheme.

Barry Garwood

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