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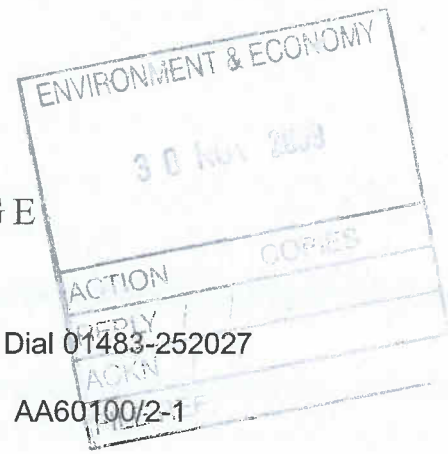
SOUTH EAST REGION

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Dear Charlie

New Bridge, Oxfordshire (Mon. No Oxon 247) / Newbridge Supplementary Feasibility Study (September 2009)

Thank you for your email of 12 October, in which you asked for the views of English Heritage on the above document. We have also previously looked at *Newbridge: Maintenance and Strengthening Feasibility Study* (June 2008) and have now seen the *Newbridge Long Term Management Strategy*

We have previously written to Stas Tereszczuk of Jacobs on 24 June 2008. He had asked for our opinion on the proposal to strengthen the bridge, and on proposals to construct a new one at a location upstream. Based on the details supplied to us, we said that we did not believe that the proposed new bridge would have any detrimental impact upon the setting of the existing bridge (subject only to satisfactory design), and concluded as follows:

the public appreciation of the current bridge was rather restricted by the current traffic on it, and that the new bridge option would allow the historic asset to be appreciated. In addition, removal of traffic from the monument would prevent the ongoing minor damage which it has suffered over the years from vehicle collision. Overall, we felt that the new bridge option would be preferable.

I can confirm that we still believe that the proposed new bridge would be a preferable option to strengthening the existing structure. It might be useful if I set out the policy framework which has guided us to this conclusion. The New Bridge is a scheduled monument which probably dates from either the fourteenth or fifteenth centuries. Government policy on archaeology is given in PPG16, which states that:

'Where nationally important archaeological remains...are affected by proposed development there should be a presumption in favour of their physical preservation.'

It expands upon this as a presumption against proposals which would involve significant alteration. This is of course planning guidance, but is an indication of the approach that should be taken here, in particular with respect to any intervention into the fabric of the structure.

In April 2008 English Heritage published *Conservation Principles: Policies and Guidance* which is intended to set out a logical approach to making decisions with respect to the management of the historic environment. Within this there are policies

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relating to new work and alteration which are clearly relevant here, and the relevant sections appear to me to be as follows:

s.138 New work or alteration to a significant place [in this case, the structure and its setting] should normally be acceptable if:

- a. There is sufficient information to understand the impacts of the proposal on the significance of the place
- b. The proposal would not materially harm the values of the place, and,
- d. the long term consequences of the proposals can, from experience, be demonstrated to be benign, or the proposals are designed not to prejudice alternative solutions in the future.

The values of the place referred to in 138b. are set in s.35-60, and I think the values that are relevant here are evidential and aesthetic. The evidential value here lies in the ability of the structure to tell us about the past, and this value lies largely in its archaeological fabric. The aesthetic value derives partly from the design of the bridge as an engineering structure, and partly from an appreciation of it as an ancient and largely unaltered structure, although these clearly overlap.

With respect to the above policy and values, I have considered each of the strengthening proposals set out in the September 2009 document in turn.

4.1 Grouting of Existing Fill

The fill material above the arches and below the road surface was presumably put in at the time of construction of the bridge in the fourteenth or fifteenth century. It is difficult to know what archaeological information it might contain, but it is clearly a significant archaeological deposit relating to the construction of the bridge. It follows that the presumption in favour of preservation in situ given in PPG16 applies. As an archaeological deposit, it has evidential value (for the same reason that it is protected under PPG16).

This proposal would not involve the removal of the fill, but it would compromise any future attempt to realise its evidential value, and the impact upon any significant deposits within the bridge must remain unknown. Some impact from trial holes would be anticipated, however, and overall the proposal could be expected to materially harm the value of the bridge (s.138b).

4.2 Plain Concrete Saddling

This would require the complete removal of the fill, and so would not preserve important archaeological deposits in situ and would affect the evidential value of the bridge. In addition, it is stated in the June 2008 report that relieving the dead load on the arch could have a detrimental effect in the longer term, and so the long term consequences of the proposal cannot be demonstrated to be benign (s.138b and d).

4.3 Cintec Arch Tec system

This would have an impact upon the fill, but the overall impact is not known. There are a variety of reasons why this would not meet criterion 138d: it is not reversible, it cannot be examined, it might lead to damage of the stonework in the arch barrel and

it might compromise the arches' ability to accommodate future movement. It can neither be demonstrated that it is benign, nor that it will not compromise future solutions.

4.4 Bersche-Rolt System

This appears to be subject to the same considerations as the Arch Tec system above (4.3.)

In summary, therefore, we believe all the proposed strengthening techniques will harm the values of the bridge, whatever load they are intended to facilitate, and we believe that they would be acceptable only where the material harm can be shown to be outweighed by the benefits. Given that this is a nationally important monument, the justification would need to be exceptional. As I have said above, in our view the alternative proposal of constructing a new bridge would not have a detrimental impact upon the setting of the monument, and so must remain our preferred option over any of the above proposals. In addition, the continued use of this bridge by HGVs, whatever the structural impact, can only lead to continued damage from collisions with the parapet, and its use by large amounts of traffic precludes its appreciation as an element of the historic environment. The proposed new bridge therefore has positive benefits to offer, compared with the detrimental impact of all of the strengthening proposals. We therefore concur with the conclusion reached in third paragraph of the summary to the September 2009 report and in the Newbridge Long Term Management Strategy

The September 2009 report also considers the possibility that further investigation of the bridge might allow parameters to be found such that a 3 or 7.5 tonne loading might be acceptable, and the investigations necessary are tabulated in table 6. The investigations involve excavating trial pits through the existing fill, and coring into the fill to locate backing levels and into the crown arch to determine stone thicknesses.

All these works are likely to impact upon significant archaeological deposits, and would therefore harm the value of the bridge and be contrary to the advice given in PPG16. The outcome is not certain, and might in fact show that a 3 or 7.5 tonne loading is not appropriate, and in any case the *Newbridge Long Term Management Strategy* concludes that the only viable options are to construct a new full strength off-line crossing or strengthen Newbridge to 40 tonnes.. Our view therefore is that to carry out such investigations in the current circumstances is unacceptable, and our advice the Secretary of State on any scheduled monument consent application would reflect this.

The weight limit to be applied to any new bridge is obviously a matter for the County Council as the highways authority.

I hope the above is helpful, and I am happy to discuss this further if you wish.

Yours sincerely



Christopher Welch
Inspector of Ancient Monuments

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