

**MINUTES OF MEETING HELD AT COUNTY HALL, LEWES
ON FRIDAY 30TH NOVEMBER 2007**

**FOR PLANNING APPLICATION: BEXHILL HASTINGS LINK ROAD
APPLICATION**

CULTURAL HERITAGE RESPONSES

Present

Tony Cook – East Sussex County Council, (Planning)
Paul Jarvis (PJ) – Arup Consultants, (Planning consultant)
David Huskisson (DH) – Landscape Architect, David Huskisson Associates
(Planning consultant)

Paul Roberts – English Heritage (Planning Consultee)
Casper Johnson – County Archaeologist, East Sussex County Council
(Planning consultee)

Giles Hewson (GH) - Project Design Team, ES co-ordinator, Mott MacDonald
Peter Hayward (PH) – Project Design Team, Project Manager, East Sussex
County Council
Nigel Marshall (NM) – Project Design Team, Landscape Architect, East
Sussex County Council

Debbie Mallard (DM) – Project Team, managing Oxford Archaeology contract,
East Sussex County Council.

ITEM		ACTION
	PR was asked by TC to summarise his responses to the application set out in his letter dated 6 July 2007.	
	<p>PR – Copies of the LiDAR Survey report and the field walking (surface collection) report were asked for. These have been received and read.</p> <p>PR had commented that further evaluation work was needed beyond that described in the ES. He thought that the ES had not considered all aspects of potential archaeological remains.</p> <p>PR had wanted clarification whether the further walkover and geophysics surveys also covered gaps in the original surveys and excluded areas.</p> <p>PR thought that the walkover and geophysics surveys were not comprehensive. There were gaps in the survey such as the balancing ponds/landscape works, borrow pits, greenway, enabling works, slope stabilisation and structures. He says that he is not saying that these gaps necessarily have to be carried out now.</p>	

	<p>PR asked for clarification of the programme and funding provision for the Stage 2 evaluation and the mitigation.</p>	
	<p>Linked to that PR asked for clarification about the parameters used to design the “stage 2” evaluation trial trenching (e.g. what % of the scheme area is the trench array).</p> <p>PR wanted to draw the Council’s attention to the possibility that archaeological remains that require full excavation (and post-excavation work) or preservation-in-situ may be discovered and so adequate funding, time and design flexibility should be provisioned to achieve this.</p> <p>It would be unhelpful to have to substantially re-design the scheme after determination as this could be technically difficult and might undermine the credibility of the determination.</p> <p>PPG16 and DMRB make it clear that evaluation should be done prior to determination.</p> <p>PR would like to discuss what evaluation can be done to allay some of his concerns.</p> <p>He would also like an overview statement that draws together our improved understanding of the cultural heritage following the completion of the latest reports.</p>	
	<p>CJ – CJ has a broadly similar view. He has always been concerned with the archaeological potential in the wetland areas in particular. He felt that the greatest weakness in the ES was the lack of knowledge of the potential of these areas.</p> <p>There have been a lot of good studies carried out such as the geoarchaeology desk based assessment, the geophysics work, and the more specific geo - archaeology assessment.</p> <p>We have a reasonable understanding of the archaeological potential of the higher drier areas and mitigation of these areas is intelligible.</p> <p>But the link between the wet and dry area is significant.</p> <p>Otherwise CJ broadly concurs with the comments from PR.</p>	

	<p>PH – These are fair comments. We knew there were some weaknesses and subsequently did some geoarchaeology field assessments this summer to fill those gaps.</p> <p>The intention has always been to provide information for a Written Scheme of Investigation (WSI), which you could condition.</p> <p>He wants to bottom out today what else is needed.</p> <p>We, the County Council are a different applicant to normal developers. We have to follow a different set of procedures. We have to satisfy conditions before we build the road. We will be asking the government for funding based on what the planning conditions are. The evaluation process is carried out by the Department for Transport (DfT).</p> <p>A normal developer may argue over the outcome of conditions as they would have a set budget.</p> <p>Our budget will be evaluated on what we need to do in archaeology terms.</p> <p>PPG 17 advises that objections raised by a statutory body can be modified following the submission of additional information.</p> <p>We are currently putting together a package of work for stage 2 of the evaluation: trial trenching, to be carried out from Spring 2008. We would like to work with PR and CJ to ensure that the WSI and tender documents are correct.</p>	
	<p>TC - What are the results of the further surveys that were carried out?</p>	
	<p>DS –</p> <p><u>Field Walking (Surface Collection) survey</u> – A small dispersed scatter of flints were found (twenty flint artefacts, and 66 fire cracked flints). These reveal evidence of prehistoric activity in the area. No specific sites were identified.</p> <p><u>LiDAR Survey</u> – very similar information to aerial photographs. Nothing extra came out of the study, (no new archaeological sites were identified) but a useful technique.</p> <p><u>Geophysics</u> - some anomalies indicated. General feedback is that there are no major sites that we can positively</p>	

	<p>identify. There are some small earthworks.</p> <p>General conclusion: low archaeology potential. This is the conclusion based on non intrusive techniques (which can sometimes be misleading).</p> <p><u>Geoarchaeology Assessment</u> – The results tell us that there is high potential for important prehistoric archaeological remains such as trackways. If there are remains there they will be important and will need to be preserved.</p> <p>We specifically found 4 flints in a test pit in the watermill stream valley. This is quite significant as the test pit was small. The technological attributes of these flints are most comparable to industries of later Neolithic or early bronze age.</p> <p>The pollen analysis of the sediment sequence indicates that there was a shift in vegetation (first signs of disturbance/clearings within the valley bottoms). Although such clearings can occur naturally, it is likely that these were formed through human interference. The pollen deposits are likely to date from the Neolithic/Bronze Age period.</p> <p>The assessment results indicate human activity in the valley and high potential for real archaeology existing. If the archaeology does exist then it will need to be preserved.</p> <p>Areas of most potential are the slopes of the valleys. There is no strong indication of a specific site. The results are pretty much as we thought.</p> <p>With this information we can put together a written scheme of investigation.</p>	
	<p>PR concurs with that information.</p> <p>But with regard to the test pit where the flints were discovered, is this not a specific site?</p> <p>Carl Champness (the field archaeologist who did the geo archaeology work) reported that the flints came from a consistent horizon. The flints are unlikely to have moved far from their original place of deposition. The flints may form part of an insitu scatter which are rare.</p>	
	<p>DS it is a site but whether it also involves other features such as hearths he is not sure. The potential is there</p>	

	though.	
	<p>CJ The fact that the flints were all in exceptionally fresh condition and are unlikely to have moved is significant.</p> <p>This small group includes flints that were retouched/ reused and utilised indicating ongoing activity rather than representing a single phase of knapping activity. The flints were found on top of the peat associated with the accumulation of the main Combe Haven Peat Sequence.</p> <p>These flints are potentially very significant and are a strong indicator of early prehistoric activity likely to be associated with the exploitation of the valley bottoms.</p> <p>The geoarchaeology report reconfirms his view of two aspects related to the wetland environment:-</p> <ol style="list-style-type: none"> 1. The wetland areas form a focus of human activity in the valley. There are likely to be individual 'hotspots'. 2. The site sits within a broader palaeoenvironmental record. <p>The Combe Haven valley contains an entire record of human activity. The valley maps environmental changes:</p> <ul style="list-style-type: none"> - inundation of the valley bottoms through a rise in sea level, - marine regression and peat deposition. - Marine transgression and a return to estuarine conditions. - Marine regression - major withdrawal of the sea from the valley - and main accumulation of the Combe Haven Peat Sequence. - Marine transgression - return of marine inundation. The return of marine conditions to the valley is likely to have contributed to the development of the iron industry through the Iron Age and into the Roman Period. The river valleys would have provided access to boats for trading and transport. <p>The entire Holocene story of the valley is revealed through the series of stratified deposits. What is important is that the wetland areas remained waterlogged and remained in good condition. The cumulative value of the sediment sequence is significant.</p> <p>Comparison with another valley in Sussex, Shinewater on</p>	

	<p>the Willingdon Levels in Eastbourne, provides a useful parallel as to the archaeological potential and significance of these sequences. At Shinewater, a substantial wooden platform and associated trackways, dated to the Late Bronze, was found buried by marine silts associated with peat deposits. The elevation of the peat and topographical setting are very similar to the upper peat in the Combe Haven Valley and would have been prime locations for early prehistoric activity.</p> <p>It is significant that we have found a potential site (flints in test pit 4) within a small fraction of the whole valley. So you could conclude that we may well expect to find further evidence for human settlement.</p>	
	<p>TC We need to look at the package of further investigation required by the applicant.</p>	
	<p>PH We have had draft tender documents prepared for the next stage of evaluation (stage 2 trial trenching) and would like to share these with CJ and PR. We intend to do the work in the new year and should have the results of that by late summer including the knowledge of what the mitigation might be.</p> <p>This is our programme and we do not want it delayed. If there is a public inquiry we will have the results of the second stage of the evaluation by then for information.</p>	
	<p>TC Appropriate mitigation should be identified prior to a planning decision being made.</p> <p>Is there sufficient understanding of the archaeology to inform a mitigation scheme?</p> <p>There seems to be sufficient information to inform a mitigation scheme for the higher dry areas. But for the valley bottoms and valley slopes more information is needed before a mitigation scheme can be specified.</p>	
	<p>PH Could that mitigation scheme for the wet areas be required by condition?</p>	
	<p>PR The costs and the undertaking of the mitigation work required could be substantial.</p>	
	<p>PH The promoter takes this risk not the planning authority. We have to bear this cost.</p> <p>Surely if the developer is willingly to accept these risks</p>	

	then we don't need to carry out the trial trenching before planning consent is given.	
	PR Holes excavated in peat will require shoring up and water will need to be pumping out. These operations are very expensive. The evaluation and mitigation work will be very complex and there may be a whole raft of things that may be required to be carried out.	
	PH When the road scheme is designed the design and build contractor will be required to mitigate the scheme.	
	PR Is there a risk that the road may not be built, that a new application may be required?	
	PH Yes and we take that risk.	
	<p>PR The wording of a planning condition would need a lot of thought.</p> <p>The case of Shinewater is significant. It is a nationally important bronze age site but it was very difficult to carry out the level of archaeological recording and investigation that English Heritage would have liked. Some excavation and recording was carried out and monitoring still continues.</p> <p>Working on the worst case scenario may be possible, but the impact on the road could be large.</p>	
	<p>DS If we do the evaluation and say we do find a preserved trackway, what would be English Heritage's (EH) view? Would EH force a scheme change or would EH be flexible on that.</p> <p>What options would the council expect? Would the mitigation be:</p> <ol style="list-style-type: none"> 1. by excavation and recording – not insitu preservation 2. and/or a re-design of the road (minor design change). 3. preservation insitu and major design changes 	
	<p>PR If planning permission had been granted and if a feature such as a trackway were discovered he would be looking for minor design changes and mitigation by excavation and recording. The discovery probably wouldn't be a 'show stopper' and he probably would not be looking at preservation insitu.</p> <p>The written scheme of investigation should include how the</p>	

	<p>applicant would deal with certain scenarios. The technical and funding aspects need to be included.</p>	
	<p>PH We would not be able to demonstrate that the funding would be there at this stage.</p> <p>Following planning consent the road scheme will be packaged together for presentation to DfT. The package of information will include:-</p> <ul style="list-style-type: none"> - the Environmental Statement including the Addendum (amendments) which will include the agreed written scheme of investigation, - the planning conditions - the expected costs and programme for the evaluation (stage 2) and the mitigation scheme including the archaeology work. <p>DfT will then decide whether the scheme should proceed and if so will provide the funding for it.</p>	
	<p>CJ Still has concerns. The broad approach is positive but the applicant should be under no illusions that the impact on the cultural heritage is simple to overcome.</p> <p>The written scheme of investigation can set out different scenarios. With regard the mitigation scheme, it is good to focus on sites but also the mitigation needs to address the broad paleoenvironmental record of the valley. The mitigation is likely to be very complex. CJ worried about how this complexity can be built in. The time frame is significant. The mitigation strategy at this stage could assume high potential for archaeology but we do not know where this high potential is. We need to ask the question: can the WSI be further informed at this stage?</p> <p>Section 9.2.2 of the geoarchaeology assessment under the title 'Recommendations for further work' discusses an alternative method to improve the effectiveness of any subsequent work. This is geophysical mapping of the valley bottom.</p>	
	<p>DS The geophysical mapping work would be the first stage of the follow on works. It will provide 3D mapping of the peat deposits and help us to target areas of high potential.</p> <p>The intrusive evaluation work on site would involve :</p> <ul style="list-style-type: none"> - standard trial trenching in the dry areas; 	

	<p>- test pitting targeted wet areas that have been identified by the geophysical mapping survey.</p> <p>The mitigation work will then follow on from this.</p> <p>In order to keep to the applicant's programme the planning application needs to be signed off (i.e. given consent with conditions for the archaeology aspects.)</p> <p>The question is can the WSI be drawn up without the results of the geophysical mapping?</p> <p>A written scheme of investigation for evaluation does not normally include mitigation. Can one put general things about mitigation into this WSI?</p> <p>We need to go back a step: whatever archaeology comes up will be dealt with appropriately and will be agreed by the applicant. The applicant will have to agree to a mitigation strategy. By accepting the condition, the applicant agrees to carry out the mitigation strategy.</p> <p>Can planning permission be granted on a WSI that includes the description of the evaluation work: geophysical mapping and trial trenching, and a mitigation scheme? The detailed mitigation scheme, developed following the completion of the evaluation would then be ready for a public inquiry.</p> <p>It is a difficult issue – can one approve an application on the basis that the applicant will undertake these levels of investigation?</p>	
	<p>PR – PR said that he could accept post-determination evaluation and mitigation provided that a <u>WSI and amended ES</u> was supplied as part of the submission to DfT. EH would want the opportunity to agree the WSI and ES prior to submission.</p> <p>The WSI and ES should make provision for the worst case scenario, in terms of the logistical and financial implications of archaeological evaluation and mitigation – this might involve the geophysical survey, boreholes/deposit modelling, trenching and test pitting, excavation of waterlogged remains similar to the Shinewater trackway and platform and/or amendments to the road scheme to avoid impacts, such as minor adjustments to the route or changes to earthworks, borrow pits, balancing ponds, services, landscaping, de-watering works etc. Insufficient funds for evaluation and mitigation would be a</p>	

	showstopper, as far as English Heritage is concerned.	
	<p>PH Currently the risk register stands at 13 million pounds. The outcome of the evaluation investigation can only reduce the risk register.</p> <p>We are not committed to the road until central government have considered the scheme package and given approval for the funds.</p>	
	CJ The hydrology and palaeo environmental issues must be addressed in the ES.	GH/PH
	<p>GH Any design change required needs to be minor. Any major changes would need a new planning application and new ES.</p> <p>We would like to be able to sit down with PR and CJ to agree the accepted scenarios for the mitigation strategy to be included in the WSI.</p>	
	<p>TC How long will the WSI take to draft.</p> <p>It would be useful to get the geophysical mapping done.</p>	
	PH But do you really need that level of detail for the draft WSI?	
	CJ The WSI would be far more refined with the results of the geophysical assessment taken into consideration.	
	TC As the planning Authority we need to be sure we know how the scheme is impacting and we need to be sure that any mitigation works are achievable in the timescale.	
	DS The geophysical mapping would be undertaken by a specialist consultant. The field work will take about a week to carry out and this will be followed up by a report.	
	<p>PH Asked DS to look into the availability of the consultant to do the work urgently and get an estimate.</p> <p>He is concerned about how this work could be carried out in advance of the trial trenching in terms of the tendering procedures at East Sussex County Council. Once he has the costs he will look into this.</p>	DS PH
	CJ highlighted section 9.2.6 of the 'Geoarchaeology Assessment'. CJ would like to see this further work on the valley sequences carried out. This should include the analysis of environmental indicators from Borehole 4, from the Watermill stream sequence. This would take several	GH/PH

	months to carry out.	
	TC We should check through the items listed in the ESCC EIA Regulation 19 letter date xx/xx/07 table.	
	Ref: 57 – re results of stage one evaluation. Results of the stage One evaluation have been completed. All agreed.	
	Ref: 58 – re indirect effects construction of scheme will have on the hydrology and therefore long term preservation of water logged deposits. GH There is a subsection in the ES that covers this.	
	PR – The ES fails to integrate indirect impacts on hydrology and the long term preservation of waterlogged deposits to the north and south of the scheme area.	
	CJ wants more information in the ES about this.	
	GH Now that we have a better understanding of the footprint of the scheme, we can get a construction advisor to look at this in more detail. We will include this in the Addendum to the ES.	GH/PH
	Ref: 59 re clarification on whether stage one evaluation would also cover side valleys, borrow pits, balancing ponds, greenway, enabling works etc. All agreed that this has been covered in discussions today. WSI will address this issue.	PH/GH
	Ref: 60 re stage 2 of the evaluation – should this be have been completed prior to submission of the ES. This has been discussed at length in the meeting. (In summary PR/CJ agreed that applicant can produce a WSI to include:- <ul style="list-style-type: none"> - the evaluation stage 2 method of work - an outline mitigation scheme consisting of best and worst case scenarios with either mitigation by excavation or minor design scheme changes. A range of scenarios will be required. - full costs of the mitigation – ball park costs, in lieu of their earlier request for carrying out the stage 2 evaluation prior to planning determination.)	PH/GH

	<p data-bbox="395 232 1177 304">EH want confirmation that this WSI will form part of package sent to DfT for approval of scheme and funds.</p> <p data-bbox="395 342 1129 414">The applicant is also looking at bringing forward the geophysical mapping to inform the WSI.</p>	
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