

This matter is being dealt with by:
Stephen Pointer
Reference:

W nottinghamshire.gov.uk

11th April 2024

West Burton Solar NSIP Examination

Sent by email to:

westburtonsolarproject@planninginspectorate.gov.uk

Dear Sir/Madam

SUBMISSION AT DEADLINE 5 – RESPONSE OF NOTTINGHAMSHIRE COUNTY COUNCIL TO EXAMINING AUTHORITY QUESTIONS 2

I am writing to provide the response of Nottinghamshire County Council to the second set of questions issued by the Examining Authority in respect of West Burton Solar Project and further information requested by the ExA.

2.2.6 The County Council is satisfied with the proposals for soil management insofar as they affect the proposed excavation of the cable corridor within Nottinghamshire.

2.2.7 The County Council notes the Ministerial Statement of 2015 in respect of BMV agricultural land and solar farms. It considers that it is relevant in stressing the importance of protecting higher quality agricultural land and that large scale solar farms which involve the best and most versatile agricultural land must only be justified by the most compelling evidence.

2.7.1 Joint response with LCC appended below.

2.7.2 The question of ploughing is not relevant as we understand fields here are generally harrowed annually rather than ploughed (2.2.3 of ExQ2).

Piling will affect archaeology as soon as it penetrates deeper than the topsoil, and by 3.5m it will have punctured all but the very deepest features such as wells or quarry pits. Effective mitigation requires sufficient site-specific evaluation to know where the archaeology is and its extent, character, significance, and depth. Avoidance and limited impact solutions are certainly elements which can be used in a fit for purpose archaeological mitigation strategy, but it needs to be based on enough baseline information to understand where the mitigation areas need to be and what type of mitigation response is reasonable.

Regarding shoes or low-level piling as mitigation techniques require a full understanding of the depth, extent, importance and nature of the surviving archaeology. Any proposal in archaeologically sensitive areas will require a firm evidence base proving that any work including refitting and decommissioning will have no impact upon the archaeology. This must include not only direct destructive impacts through groundworks, compaction or

reduction in the depth of soil necessary for protecting the archaeology but also through environmental changes such as changes to hydrology or soil composition which would be detrimental to the surviving archaeology

2.7.3 This report is useful in demonstrating the widely variable nature of responses to solar schemes. From our own joint LCC/NCC experience we believe that in part at least this is because the full impacts of these schemes are only gradually being appreciated.

Our understanding of the impact of solar farms has evolved as we have dealt with increasing numbers of them in Lincolnshire and as more details of the specific impacts have come to light. These impacts are both in terms of specific ground impacts such the use of piles rather than simply spikes for fixing arrays and the amount and depth of cable trenching, and the cumulative aspects of impacts through the lifetime of the scheme, ie decommissioning and successive refits which will multiply the site-specific ground impacts. With enhanced understanding of the damage the schemes can inflict on buried archaeological remains, plus the cumulative impacts of adjacent schemes covering thousands of hectares of an archaeological sensitive landscape, the realisation of the potential scale of loss of the archaeological resource without proper record and no public benefit is a cause of immense professional concern, and should be to all archaeologists.

2.7.4 As we've consistently stated the full impact zone needs to be adequately evaluated, as stated in the hearing we are content to move forward with the agreed 2% trenching so that needs to be across the remaining 79% of the impact zone.

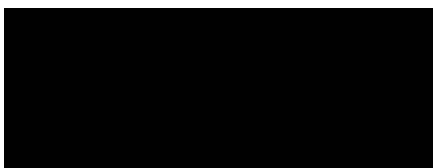
The trenching strategy will need to target potential archaeology identified from the DBA, AP and LiDAR assessment, and geophysical survey results. The trenching strategy will also need to target those areas where the above have not been successful in locating archaeology. Targeting blank areas is an essential part of determining the archaeological potential across a proposed development as different types of archaeology and geology may limit or mask the effectiveness of non-intrusive evaluation techniques.

Sufficient trenching will be required across the full impact zone to determine the presence, absence, significance, the depth and extent of any archaeological remains which could be impacted by the development.

As stated above the timely provision of trenching results are needed to inform the baseline evidence and subsequent informed fit for purpose mitigation strategy. Ideally this should be in advance of the determination and certainly the results are needed in advance of the work programme commencing in any of the areas not currently adequately evaluated.

I also attach a supplementary statement setting out the joint position of Nottinghamshire County Council and Lincolnshire County Council in respect of a number of outstanding questions which have been asked by the ExA during the hearings.

Yours sincerely



**Stephen Pointer MRTPI
Team Manager Planning Policy
Nottinghamshire County Council**

Response to 2.7.1

Conclusions against Archaeological Policy and Guidance

The Applicant and LCC/NCC are asked to set clearly set out, ideally in tabular form, their positions on the Applicant's approach to archaeological management and mitigation in terms of how this either complies with, or does not comply with, the provisions of relevant legislation, policy and guidance. This should include consideration of the implications of the Applicants 'without prejudice' Written Scheme of Investigation [\[REP4-075\]](#). Where references are made to current professional guidance, clear references and links to these provisions should be given.

In addition, where it is suggested that the Applicants approach does not comply with relevant provisions, LCC/NCC are asked to clearly identify what further field evaluation and mitigation work would be required in order to address any suggested inadequacies.

Legislation, policy and guidance	Relevant reference	How the Applicant's approach to archaeological management and mitigation either complies or does not comply with the provisions
Overarching National Policy Statement for Energy (EN-1)	EN-1 outlines requirements for understanding the significance of heritage assets that will be affected, including 5.9.12: <i>'The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents.'</i> (Section 5.9.9 – 5.9.15)	The significance of any heritage assets cannot be assessed until there has been sufficient evaluation to identify the currently unknown archaeology across the proposed development area. Trial trenching is essential in finding and characterising the archaeology. The applicant has not undertaken sufficient trenching evaluation to identify the presence of archaeology across the impact zone and therefore <i>'the significance of any heritage assets'</i> cannot be adequately understood.
National Policy Statement for Renewable Energy Infrastructure (EN-3)	References EN-1 (discussed above) but also includes: <i>'The results of pre-determination archaeological evaluation inform the design of the scheme and related archaeological planning conditions.'</i> (footnote 94)	As only 21% of the site has been subject to trial trenching there cannot be a proportionate and fit for purpose scheme design or archaeological mitigation strategy.

<p>National Policy Statement for Electricity Networks Infrastructure (EN-5)</p>	<p>EN-5 states that <i>'Applicants must take into account Schedule 9 to the Electricity Act 1989, which places a duty on all transmission and distribution licence holders, in formulating proposals for new electricity networks infrastructure, to "have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and ...do what [they] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.'</i> (2.2.10)</p>	<p>It is not reasonable to only evaluate 21% of the site as mitigation is not possible without enough evaluation to understand the site-specific archaeological potential and the developmental impact upon it.</p> <p>Concerning the cabling, section 2.9.25 of this policy states that the Secretary of State should consider <i>'the potentially very disruptive effects of undergrounding on local communities, habitats, archaeological and heritage sites, soil, geology, and, for a substantial time after construction, landscape and visual amenity.'</i></p> <p>The temporary nature of the cable trenching works will cause permanent damage and destruction to archaeology which is a non-renewable resource.</p>
<p>Infrastructure Planning (Environmental Impact Assessment) Regulations 2017</p>	<p>EIA Regulations state that <i>'The EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors...(d)material assets, cultural heritage and the landscape.'</i> (Regulation 5 (2d))</p>	<p>The direct and indirect significant effects of the development on cultural heritage cannot be understood until sufficient trial trenching has been undertaken across the full impact zone.</p>
<p>The National Planning Policy Framework</p>	<p>NPPF states that <i>'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise</i></p>	<p>We haven't got a proportionate level of detail on the significance of any heritage assets affected on almost 4/5ths of the site and there is insufficient information to understand the impact.</p>

	<p><i>where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.'</i> (para 200)</p>	
Central Lincolnshire Local Plan	<p>Policy S57 The Historic Environment</p> <p><i>'Development proposals should protect, conserve and seek opportunities to enhance the historic environment of Central Lincolnshire. In instances where a development proposal would affect the significance of a heritage asset (whether designated or non-designated), including any contribution made by its setting, the applicant will be required to undertake and provide the following, in a manner proportionate to the asset's significance: a) describe and assess the significance of the asset, including its setting, to determine its architectural, historical or archaeological interest; and b) identify the impact of the proposed works on the significance and special character of the asset, including its setting; and c) provide a clear justification for the works, especially if these would harm the significance of the asset, including its setting, so that the harm can be weighed against public benefits.'</i>(p125)</p>	<p>Sufficient trenching is required to describe and assess the significance of areas of archaeological interest which have yet to be identified and to understand the impact of the proposed works upon them. Harm to the archaeological resource cannot currently be understood and balanced against public benefit.</p>
	<p>Archaeology</p> <p><i>'Development affecting archaeological remains, whether known or potential,</i></p>	<p>Again, there has not been sufficient evaluation to understand the potential for and significance of remains, or the impact of development upon them. As</p>

	<p><i>designated or undesignated, should take every practical and reasonable step to protect and, where possible, enhance their significance. Planning applications for such development should be accompanied by an appropriate and proportionate assessment to understand the potential for and significance of remains, and the impact of development upon them. If initial assessment does not provide sufficient information, developers will be required to undertake field evaluation in advance of determination of the application. This may include a range of techniques for both intrusive and non-intrusive evaluation, as appropriate to the site. Wherever possible and appropriate, mitigation strategies should ensure the preservation of archaeological remains in-situ. Where this is either not possible or not desirable, provision must be made for preservation by record according to an agreed written scheme of investigation submitted by the developer and approved by the planning authority. Any work undertaken as part of the planning process must be appropriately archived in a way agreed with the local planning authority.</i>’(p126)</p>	<p>such, provision cannot be made for appropriate mitigation.</p>
<p>Historic England, Piling and Archaeology guidance and good practice (revised 2019)</p>	<p>Please be advised that in accordance with Historic England’s revised Piling and Archaeology guidance <i>‘The applicant will need to provide sufficient information demonstrating an adequate understanding of the significance of the archaeological site and assessment of potential harm to that significance arising from</i></p>	<p>This requirement has not been achieved. The archaeological potential for the proposed piling areas has not been adequately investigated and there is insufficient baseline evidence to understand archaeological significance or assess harm.</p>

	<p><i>the development.</i>' (p2) HE revised Piling and Archaeology</p>	
<p>NSIPs - Advice Note Nine</p>	<p><i>'Implementation of the Rochdale Envelope assessment approach should only be used where it is necessary and should not be treated as a blanket opportunity to allow for insufficient detail in the assessment. Applicants should make every effort to finalise details applicable to the Proposed Development prior to submission of their DCO application. Indeed, as explained earlier in this Advice Note, it will be in all parties' interests for the Applicant to provide as much information as possible to inform the Pre-application consultation process.'</i> (5.2)</p>	<p>Where the developer proposes the Rochdale Envelope in dealing with their application, it is essential that an understanding of the archaeological resource is achieved to allow for informed and appropriate mitigation. This can only be achieved through adequate trenching evaluation of the full impact zone and the timely provision of the results to inform the baseline evidence and subsequent informed fit for purpose mitigation strategy. Ideally this should be in advance of the determination and certainly the results are needed in advance of the work programme commencing in any of the areas not currently adequately evaluated.</p> <p>The current position of inadequate trenching with the proposed provision of some additional but still insufficient trenching outlined in the Applicant's without prejudice WSI means that we will be left with one of two inadequate options: either that the lack of adequate trenching evaluation will cause a very high level of risk to the post-consent work programme and its associated budget; or that archaeology across the scheme will be destroyed without record meaning that understanding of the archaeology will be lost with a corresponding loss of public benefit.</p>
<p>Historic England Advice Note 17: Planning and Archaeology</p>	<p><i>'Appropriate evaluation can support the smooth and speedy progression of the development and help to manage the developer's risk early in the planning process'</i> (section 131). It also states that <i>'Data gathered can also help to inform a costed mitigation strategy, the benefits of which include a reduction in the chances of unexpected risks</i></p>	<p>Please see our comments on Advice Note Nine.</p> <p>As only 21% of the site has been sufficiently evaluated the level of risk of 79% of the site remains unknown and unforecastable.</p>

	<p><i>and associated costs, and potentially the scope to allocate the cost of archaeology appropriately into financial forecasts’ (section 132).</i></p>	
<p>Historic England, Managing Significance in Decision-Taking in the Historic Environment (2015)</p>	<p><i>‘Archaeological interest, as defined in the NPPF, differs from historic interest because it is the prospects for a future expert archaeological investigation to reveal more about our past that need protecting.’ (section 16)</i></p> <p><i>Many heritage assets have a significance that is a combination of historic, architectural, artistic and archaeological interest. However, some will currently hold only an archaeological interest, in that nothing substantial may be known about the site and yet there is a credible expectation that investigation may yield something of strong enough interest to justify some level of protection. (section 30)</i></p> <p><i>For sites with archaeological interest, whether designated or not, the benefits of conserving them are a material consideration when considering planning applications for development. (section 31)</i></p>	<p>The provision of solar arrays and associated infrastructure means that archaeology cannot be searched for or investigated following development and this unrecorded archaeology will continue to be damaged and destroyed, for example through refitting and decommissioning, throughout the lifetime of the development.</p> <p>Meaningful evaluation therefore can only occur before development commences.</p>
<p>Chartered Institute for Archaeologists (CIfA) Standard for archaeological evaluation</p>	<p><i>‘An archaeological field evaluation will seek to determine, record and report on the nature, extent, preservation and significance of archaeological remains within a defined area. The scope of the work will be described in a project design that is fit for purpose and will be carried out by suitably competent persons in accordance with that design and the CIfA Code</i></p>	<p>The ‘defined area’ of the field evaluation should be the full extent of the development impact zone.</p>

	<i>of conduct and give due regard to the guidance for archaeological field evaluation.</i>	
ClfA Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment	<p><i>‘Advice should be clear, compliant, impartial, informed and robust, and should be proportionate to a thoroughly researched and clearly reasoned assessment of the known or potential significance of the heritage assets concerned.’</i></p> <p>Advisors must <i>‘give advice based on a sound understanding of the heritage issues and, through the provision of advice, seek to manage change within the historic environment, reconciling wherever possible the need to conserve and enhance significance with the needs of their clients.’</i>(section 3.1.1)</p> <p><i>“Advisors should ensure that their advice regarding the scope of any assessment of archaeological or cultural heritage significance complies with the relevant ClfA Standard and guidance, and is sufficient to ensure as full an understanding as is reasonably possible of the potential impact of change on the asset’s significance. This should include consideration of all aspects of the historic environment, be proportionate to both the significance of the asset(s) and the potential impact of the proposal on them, and be clearly explained and reasoned.”</i> (section 3.1.2a)</p>	Sufficient baseline evidence is required to achieve this.
ClfA Standard and guidance for archaeological advice by historic environment services	<i>‘Advisors should only make a recommendation in response to a development proposal where the significance of assets affected by the development proposal and the scale of any loss of significance is adequately understood. Where there is insufficient evidence, advisors</i>	Both LCC and NCC archaeological advisors agree that there is insufficient evidence, both currently and as proposed in the Applicant’s WSIs. For us to meet the requirements of this standard we need to see adequate trenching results across the full impact zone to inform fit

	<i>should recommend that further information be gathered prior to determination of the proposal. Requirements for the gathering of further information should always be focused on informing decision making.'</i> (section 7.3.4)	for purpose appropriate levels of mitigation and to manage the level of post-consent risk for the Applicant.
High Court Appeal decision In R.(Low Carbon Solar Park 6 Ltd) v SoS, 5 th April 2024.	<i>'... an understanding of the significance of heritage assets is the starting point for determining any mitigation, and it is not appropriate to assess mitigation without that understanding... There needs to be an understanding of significance in order to assess whether any mitigation appropriately addresses any harm.'</i> (section 49)	There is insufficient trenching across the redline boundary and the lack of trenching results means there is insufficient baseline evidence to inform a reasonable fit for purpose site-specific mitigation strategy to deal with the developmental impact which is proportionate to the significance of the currently surviving archaeology.

West Burton List of Actions

NCC and LCC to provide further information and evidence on the area forming the Order Limits in terms of its relative sensitivity and archaeological significance.

The Trent Valley flood plain has significant archaeology from the Palaeolithic period onward covering every period of human activity.

Farndon Fields is an extremely rare Late Upper Palaeolithic open flint-knapping site on the Trent flood plain which is of international significance and it shows activity by humans when they are just a few kilometres from the glacier ice of the last Ice Age. You will not find Late Upper Palaeolithic sites by geophysical survey and desk based assessment alone and there are undoubtedly more such sites to be found along the Trent Valley flood plain.

Recent evaluation work in the Trent Valley flood plain has identified previously unrecorded archaeology including Neolithic pits and flint tools and Bronze Age burnt mounds which again were not identified through desk based assessment or geophysical survey.

DN Riley's aerial photographic surveys in the 1970s identified a palimpsest of archaeological features of a range of dates either side of the Trent across the whole flood plain and into the terraces either side. The range of archaeology includes Iron Age square barrows not previously identified outside of Yorkshire, Roman villas and settlements, and Iron Age into Roman period brickwork-pattern field systems which survive above ground in nearby Sherwood Forest. When archaeological field evaluation is undertaken in this landscape far more archaeology has been found to be present.

Roman settlements have been found on Tiln Farm solar park which were not identified by geophysics but were identified through trial trenching. We're getting an increasing understanding of the hierarchy of Roman settlement through the Trent Valley through a range of techniques, from air photos and geophysics to trenching and fieldwalking.

The Order Limits sit within the Trent flood plain and is part of this complex and highly significant archaeological landscape. Archaeology is a finite resource and it is essential that currently surviving archaeology is identified and recorded in order to advance our understanding and provide public benefit.

LCC and NCC to provide specific comments in relation to:

- a. If the Secretary of State were to agree that sufficient pre-consent archaeological evaluation has taken place, how their other concerns could be addressed through specific amendments to the Applicant's WSI.**
- b. With reference to the need for future monitoring of impacts on the underlying archaeological resource, for example in relation to the comment regarding ground compaction from concrete shoes, the LPAs are asked to clarify what specific provisions are being sought within the Applicants management plans.**

a. There will need to be post-consent evaluation phases to cover the full Order Limits to inform appropriate levels of archaeological mitigation including preservation in situ, strip map and record and archaeological excavation proportional to the level of significance of the surviving archaeology as well as potential design changes to avoid preservation in situ areas and any nationally significant or equivalent sites.

b. Preservation in situ areas must include mitigation measures to ensure the preservation in situ areas are protected from development works which could damage or destroy the surviving archaeology. There will be significant ongoing constraints in the construction and decommissioning phases which will affect not only the number of solar panels but the development works themselves around the preservation in situ areas including plant activity and the placement of associated infrastructure such as compounds and access routes.

The full extent of the archaeological areas must be determined and each area must be fenced off and subject to a programme of monitoring throughout the construction, operation and the decommissioning phases, and there will be no ground disturbance whatsoever which may disturb or affect the archaeological remains, including plant movement or storage. The fencing will need to remain in place and be maintained throughout the lifetime of the scheme. They will need an Archaeological Clerk of Works to ensure that any preservation in situ areas are

monitored appropriately to ensure compliance, and the management strategy for the preservation in situ areas will need to be included in all management plans to ensure the protection measures stay in place throughout the development.

Option C

In the light of the WSIs produced by the Applicant we were asked by the Examining Authority to propose a third option.

We recommend that the Applicant undertake the previously agreed 2% trenching with a 2% contingency across the remaining 79% of the Order Limits. The full final evaluation report will need to be produced in a timely fashion as the trenching results are required as baseline evidence to inform reasonable, proportionate and fit for purpose site-specific mitigation to be agreed across the Order Limits.