



SOCIETY OF ANTIQUARIES OF LONDON

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THE PROPOSED EXPANSION OF HEATHROW AIRPORT

Response to the Public Consultation by the Society of Antiquaries of London

The Society of Antiquaries of London is pleased to have the opportunity to comment on the proposed expansion of Heathrow Airport.

The Society of Antiquaries of London, an elected college of 3,000 Fellows, is Britain's oldest independent learned society concerned with the study of the material culture of the past. Founded in 1707, its Royal Charter of 1751 defines the Society's aim as 'the encouragement, advancement and furtherance of the study and knowledge of the antiquities and history of this and other countries'. The range of the Society's interests thus covers a wide field, from the archaeology of all periods and all countries to heraldry and art history, architectural history and other subjects based on the material remains of the past. The Society recognizes that understanding the past is relevant to present and future generations; that the tasks of safeguarding, protecting and disseminating knowledge about heritage are important for the world of today; and that research and debate about, as well as respect and appreciation for, the material remains of the past are fundamental to our understanding of ourselves.

Our response is concerned with the impact of the proposed expansion on nationally significant elements of the historic environment, the subject of question 5m in the online response form. It follows our response to the Government's *Draft Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England* in May 2017. This questioned the adequacy of the 'strategic heritage impact assessment' as the basis of an irrevocable decision to proceed with the Heathrow North-West Runway scheme, which even the limited evidence available suggested had the greatest negative impacts on the historic environment of any option.

Notwithstanding our concerns about the selection of Heathrow as the preferred site, the Society suggested that assessment of an application for consent for the North-West runway project should be based firstly, on the extent to which loss of and harm to heritage assets is demonstrably minimised; and secondly, where harm or loss is unavoidable, the full research potential of preservation by record is realised through a comprehensive programme of archaeological investigation including of standing structures, and its publication and wide dissemination. Specifically, we suggested that the application of these principles should include (but not be limited to) several specific issues. Before we set out those issues (*in italic*) and consider the extent to which the consultation documents, particularly *Our approach to the historic environment* (January 2018) addresses them, we wish to address a general point.

As the documents in this consultation emphasise, effects on the historic environment would extend far beyond the new airport perimeter. *Our Emerging Plans* (fig 15.2) indicates potential borrow pits and construction sites, the former at least involving total loss of any archaeological deposits, while development to provide or replace supporting facilities for the airport (*Our Emerging Plans, passim*) add up to a scale of development greater than that for the new runway itself. Flood storage possibilities (*Our emerging Plans, fig 9.1*) extend far to the north of the airport, up the Colne Valley. Green infrastructure projects (*Historic Environment, fig 3*) can impact archaeological deposits. Therefore we believe that it is essential that the study area defined in fig 3.4 in *Our Approach to the Historic Environment* document be expanded (particularly to the west and the north) to embrace all potentially affected areas, so that the total impact of the project on heritage assets and undesignated archaeological deposits, and the potential for mitigation through scheme development, is ascertained at the outset.

The specific principles that we advised should inform assessment were

1 *Designing the airport perimeter in the vicinity of what would remain of the historic settlement of Harmondsworth, so far as possible, to deflect aircraft noise from it and mitigate visual impact on its setting,*

which will be radically changed. The Great Barn, built in 1426-7, an inspiration for the arts and crafts movement and celebrated by John Betjeman is listed grade I, and in the ownership of English Heritage as part of the 'national collection.' Its relationship to Manor Farm and the Church is critical to understanding and appreciating its historic context and significance.

We are pleased to see the importance of the Great Barn and St Mary's church being recognised, that the 'approximate expansion boundary' continues to leave both outside it, and that retaining these buildings *in situ* 'remains [the] preferred approach'. But it is disappointing to read that 'it may still be necessary to consider other options including the possible relocation of the barn', pending 'research on the effectiveness of measures, such as noise controls, that will influence the viability of sustainable uses for heritage assets.' Undertaking this research should be a priority, but it is disappointing to see relocation still being put forward as a potential option. If the barn cannot be retained as a monument because of noise levels, it suggests that its context, the northern half of Harmondsworth Conservation Area, also has no future, since the barn is located furthest from the proposed boundary. English Heritage acquired Harmondsworth Barn to secure its future in the public interest, and subsequently undertook major repair. Increasing public access to it is desirable, but its future should not, as paras 8.2.4-5 imply, be dependent upon it being developed as a self-financing visitor attraction.

2 *Taking fully into account the previous major construction projects at Heathrow, such as Terminal 5, which largely affected the shallow archaeological features and deposits located on the Taplow terrace gravels. Excavations ahead of Terminal 5 revealed the evolution of a prehistoric landscape from the late Mesolithic, through the construction of a complex of cursus monuments in the Neolithic, and the adoption of a settled landscape of fields, trackways and settlements in the Bronze and Iron Ages. The scale of the excavations and the nature of the remains make Heathrow and its environs the most significant area for understanding the evolution of the prehistoric and historic landscape of the middle Thames Valley. It is anticipated that parts of the proposed North West runway will have similar impacts on equally significant archaeological deposits.*

We welcome the acknowledgement of the value of previous work at Heathrow Terminal 5, the aim of building on its legacy (*Historic Environment*, 5.3.2-3) and the priority to be given to focussing development on areas where the archaeological deposits have been destroyed by previous development. However, taking into account the scale of the proposed development, including the consequential development of additional and relocated facilities, the challenge will still be of a significantly greater order than that of Terminal 5.

3 *Paying particular attention in a comprehensive archaeological mitigation programme to the impact of the proposed scheme on archaeological remains preserved within the fine-grained alluvial deposits of the Colne Valley floodplain. This aspect of the North-West runway proposal will be radically different from the archaeological work at Terminal 5. The site at Kingsmead Quarry, Horton, Berkshire provides the perfect example of the potential of the of the Colne Valley floodplain, as it produced in-situ archaeological remains from the Late Glacial and Mesolithic periods (10,000-4000 BC), the Neolithic, Bronze and Iron Ages and the Romano-British, Saxon and medieval periods. These archaeological remains were all far better preserved than their equivalents excavated in advance of the construction of Terminal 5. In addition, the Colne alluvial deposits have far greater potential for the exceptional preservation of archaeological waterlogged organic remains.*

The absence of any specific reference to the scale and importance of such deposits and the challenges they are likely to present is a matter of very considerable concern, given the extent of additional engineering works envisaged in the river valleys.

4 *Ensuring that the programme of archaeological mitigation, like that at Terminal 5, has at its heart a rigorous academic research agenda and philosophy that informs and guides the excavation and analytical process.*

As with the Terminal 5 project, a rigorous academic philosophy should be at the heart of and inform the archaeological programme. Terminal 5 demonstrated that this approach produced cost-effective archaeological mitigation and a compelling historical landscape narrative. The archaeological programme cannot simply be reduced to a series of questions derived from a research agenda but demand engagement with the intellectual discipline of exploring the past through the physical evidence. The early engagement of a leading academic is thus essential.

The Terminal 5 project also demonstrated that the early engagement of the archaeological contractor in the design of the archaeological programme is essential. Major contractors have much skill and experience to bring to the environment of large infrastructure projects, especially in making realistic judgements on resourcing and programming.

5 Integrating fully the results of the comprehensive programme of archaeological mitigation for the North West runway with the data recovered, analysed and published as part of the Terminal 5 programme; in particular the digital GIS datasets should be seamlessly integrated with those from Terminal 5.

Section 5.4.1 of *Our Approach to Historic Environment* calls for comments that would inform archaeological proposals. Our comments are as follows:

- The archaeological archives of the Terminal 5 project and other historical archaeological fieldwork carried out by separate organisations should be combined into a single GIS system.
- All fieldwork arising from trial work and mitigation for the third runway project should be integrated with the GIS system.
- A deposit model should be created showing areas where archaeological remains have already been destroyed, together with a topographic model using the data from the 1943 Air Ministry survey. This should be supplemented with detailed topographic survey data for areas required for the new expanded Heathrow and consequential development beyond its boundary (as noted in opening paragraph 5 of this response).
- Previous experience has shown that non-intrusive survey techniques such as geophysics and aerial photography have limited value at Heathrow. On the gravel terrace this is largely due to the Langley Silt Complex ('brickearth') masking the detection of archaeological features. On the Colne floodplain the depth and fine-grained nature of the alluvial deposits has a similar effect in making remote sensing techniques problematic.
- In the light of the limitations of non-intrusive survey techniques, trial trenching and other intrusive survey techniques should be given greater importance. A rigorous academic rationale for the design and execution of any intrusive surveys must be developed, rather than relying on a random percentage-based approach to sampling.

We would be pleased to elaborate on any of these points if that would be helpful.

On behalf of the Policy Committee of the Society of Antiquaries of London,



John S.C. Lewis FSA
General Secretary

27th March 2018.