

# Geophysical Survey: Guidance Document

## April 2024

### 1. SUMMARY OF BRIEF:

- 1.1 This document provides the outline framework on which a detailed specification of work should be based. This specification (Written Scheme of Investigation) will need to be agreed with Oxfordshire County Archaeological Services **in advance of** the commencement of the fieldwork. Oxfordshire County Council aim to respond to such WSIs within 21 working days.
- 1.2 The geophysical survey will aim to determine (as far as is reasonably possible from a limited programme of non-intrusive field investigation) the nature of the archaeological resource within the specified area using appropriate methods of study which satisfy the stated and implied aims of the project. This evidence will form the basis of any proposals for further investigation or appropriate mitigation measures that may seek to limit the damage to significant archaeological deposits. The project shall include any post-fieldwork and publication requirements resulting from it.

### PROJECT METHODOLOGY AND DATA COLLECTION:

1. The project shall be under the control of a qualified archaeologist who should preferably be a member of the Institute of Field Archaeologists. A written scheme of investigation must be agreed with County Archaeological Services in advance of the fieldwork being undertaken and sufficient time to facilitate this must be provided.

### 2 Geophysical Survey

- 2.1 The geophysical survey will need to be undertaken over the area that will be disturbed by the development, including any areas of flood compensation, tree planting or any other proposals that will involve below ground disturbance. The survey will typically consist of a magnetometry survey but the choice of technique to be used will be determined by the geophysical contractor taking into account the soil type, geology, current ground conditions and use and any other relevant factors that may affect the effectiveness of the results. The WSI will need to set out clearly the justification of the choice of survey.

### 3 MONITORING ARRANGEMENTS:

Oxfordshire County Council Archaeological Services will monitor progress and standards throughout the field survey phase of the project. To facilitate this, the specification should include a projected timetable on site and the County Archaeological Officer, or his representative(s) shall be notified of the start date of the survey.

### 4 REPORTING AND DISSEMINATION:

- 4.1. For most survey projects the preparation of the report should be relatively simple following on directly from the desk-based study and/or fieldwork and achieved within

a standard format. Details of styles and format are to be determined by the Unit. In any event, the report should include as a minimum.

- a) The report is to contain information on the topography geology, soils and known archaeology of the site. Where any of this is not known it must be explicitly stated as this may affect the certainty of the interpretation.
- b) The report should include a non-technical summary with sufficient information to allow the interested reader to gain an idea of the scope of the work and general success, or otherwise, of locating archaeological remains.
- c) a statement of the objectives and methods of the study;
- d) Clear interpretation diagrams must also be provided. These should be clear, separate diagrams that can be understood by a non-technical reader. Interpretations drawn on top of data diagrams are not adequate.
- e) while it is the responsibility of the geophysicist to display the data in a format that illustrates their final interpretation, the effects of each process step should be documented and displayed. Displays of the raw data should be provided together with modified data after each smoothing or filtering algorithm. In general as little processing as possible should be undertaken.
- f) At least one plot of the raw data should be included, normally in the form of an X-Y trace or a grey scale image, in order that a geophysicist can make an independent assessment of the results. If the survey does not produced appropriate X-Y trace plots or raw data, such as may be the case with multi array systems then the reasons why this cannot be included should be clearly set out within the WSI.
- g) All data and interpretation diagrams should be reproduced at an appropriate scale from which exact measurements can be taken (normally 1:1000 preferred minimum).
- h) identification of areas of known and possible archaeological or historic landscape interest, together with brief justification of such identification, and a preliminary indication of their likely importance including areas of multiple cultural heritage interest.
- i) the anticipated degree of survival of any archaeological site or area so identified;
- j) a comprehensive bibliography of sources of information consulted, including those with no useful information;
- k) consideration of the evidence assembled within a wider landscape setting;
- l) a critical review of the effectiveness of the methodology employed.
- m) The basic computerised data is to be regarded as part of the site archive. The digital archive should be deposited with the ADS.

- 4.2. A **draft copy** of the summary report (either in pdf or .doc format) shall be supplied to the office of the County Archaeological Officer; for verification and assessment by the CAO or his representative. This will need to be provided before a final copy is produced or submitted with any planning application.
- 4.3. When the report has been agreed a final digital copy will then be supplied to the County Historic Environment Record (HER) at [archaeology@oxfordshire.gov.uk](mailto:archaeology@oxfordshire.gov.uk) on the understanding that it will become a public document after an appropriate period of time (generally not exceeding six months). GIS files (shape and geo-rectified Tiff files) of the interpretation and greyscale images should be provided to the office of the County Archaeological Officer.
- 4.4. All archaeological organisations should ensure that an abstract containing the essential elements of the results precedes the main body of the report.
- 4.5. Publication of significant results should be pursued and should take place within a reasonable length of time (normally not more than five years after completion of the work). Style and format to be determined by the archaeological organisation, with regard to agreed standards of archaeological publication, and the house style of the appropriate local, regional or national publication. In a phased programme of work, assessment results will normally be incorporated into the final publication. It is recommended that all results should be published, even if limited to one-line reports in a local journal on work done with negative results.
- 4.6. The report should state the location of the archive and acknowledge the curatorial role played in the project by Oxfordshire County Council Archaeological Services. It should also acknowledge any provision of information from the County Historic Environment Record which is copyright of Oxfordshire County Council.

## **County Archaeological Services**

## OXFORDSHIRE COUNTY COUNCIL Contacts

### **COUNTY ARCHAEOLOGICAL SERVICES CONTACTS: DEVELOPMENT CONTROL**

Email: [archaeologydc@oxfordshire.gov.uk](mailto:archaeologydc@oxfordshire.gov.uk)

**Lead Archaeologist: Richard Oram**

Tel: 07917001026

Email: [Richard.oram@oxfordshire.gov.uk](mailto:Richard.oram@oxfordshire.gov.uk)

Responsible for archaeological planning matters for West Oxfordshire and OCC.

**Planning Archaeologist: Steven Weaver**

Tel: 07526972981

Email: [steven.weaver@oxfordshire.gov.uk](mailto:steven.weaver@oxfordshire.gov.uk)

Responsible for archaeological planning matters for South Oxfordshire and Vale of the White Horse.

**Planning Archaeologist: Victoria Green**

Tel: 07922848811

Email: [victoria.green@oxfordshire.gov.uk](mailto:victoria.green@oxfordshire.gov.uk)

Responsible for archaeological planning matters for Cherwell.

*(All other dealings with national and regional bodies/utility Companies are shared on a District basis).*

### **County Historic Environment Record**

Email: [archaeology@oxfordshire.gov.uk](mailto:archaeology@oxfordshire.gov.uk)

**County Historic Environment Record Officer: Jacqueline Pitt**

Tel: 07741607816

Email: [archaeology@oxfordshire.gov.uk](mailto:archaeology@oxfordshire.gov.uk)

Responsible for management, development and access to the HER.

**Archaeologist: Robbie Luxford**

Tel: 07785453287

Email: [Robbie.Luxford@Oxfordshire.gov.uk](mailto:Robbie.Luxford@Oxfordshire.gov.uk)

Responsible for assisting the HER and DC Officers and invoice issues.

### **COUNTY MUSEUM AND ARCHIVE STORE**

Witney Road, Standlake, Oxon OX8 7QG

**Archaeological Curator: Angie Bolton** - [Angie.Bolton@Oxfordshire.gov.uk](mailto:Angie.Bolton@Oxfordshire.gov.uk)

01865 300557

**Conservation Laboratory:**

01865 300937

**Finds Liaison Officer:-**

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## **Oxfordshire County Archaeological Charging policy.**

Oxfordshire County Archaeological Service (OCAS) has a varied and demanding caseload and in order to deal efficiently with these demands operates a policy of aiming to respond to all consultations within 21 working days.

We do recognise however that there are some occasions outside of our control where circumstances mean that this can cause delays to developments. As such we have agreed a set of charges for a priority DC service to deal with exceptional circumstances.

### **There will be no charge for agreeing reports and WSIs within our standard 21 working day timeframe.**

The priority service will be provided subject to availability and will need to be agreed with OCAS either direct with the relevant case office or by emailing [Archaeologydc@oxfordshire.gov.uk](mailto:Archaeologydc@oxfordshire.gov.uk)

The new priority DC charges are as follows,

<b>Type</b>	<b>Standard Timeframe</b>	<b>Standard Charge £</b>	<b>Priority offered</b>	<b>Charge £ (up to)</b>	<b>notes</b>
<b>Agreement of WSI</b>	21 days	free	within 3 days	300	
<b>Reviewing GS report</b>	21 days	free	within 3 days	300	

Very large geophysical survey reports consisting of many pages of data may not be suitable for this priority service. If this is the case this will be highlighted at the WSI stage.