HISTORIC
ENVIRONMENT SERVICE

SOUTH WEST
HERITAGE TRUST

SOMERSET ARCHAEOLOGICAL HANDBOOK

2017

REGISTERED ORGANISATION CIfA

Somerset's archaeology and historic environment

Somerset is remarkable for the richness of its historic environment. Heritage assets such as Montacute House, the prehistoric hillfort at South Cadbury and thousands of less ambitious structures remain conspicuous parts of the county we value. There are also important buried archaeological remains such as Taunton Priory and Glastonbury Lake Village, as well as many more sites that await discovery. Together they form a legacy which is fundamental to Somerset's unique identity. But it is a legacy which needs careful stewardship.

This updated edition of the Archaeology Handbook reflects the South West Heritage Trust's ambition to ensure that Somerset's historic environment is preserved, protected, promoted and recorded. The new edition takes account of the latest national and local planning policy as well as of professional guidance.

The handbook is intended for archaeologists and other historic environment professionals working within the planning process. It is also likely to be a useful resource for researchers carrying out a wide variety of projects related to Somerset's historic environment.

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South West Heritage Trust, Historic Environment Service Archaeological Handbook (Third Edition rev)

1. INTRODUCTION

1.1 Archaeology and the planning process

This handbook sets out the standards and guidance for archaeological work in Somerset. It is aimed at anyone involved with archaeology as part of the planning process: primarily planning officers, developers, archaeological contractors and consultants.

This handbook replaces the 2011 version (SCC 2011) and should be referred to and referenced, when commissioning or designing archaeological projects in Somerset. Any project initiated through the planning process must conform to the standards outlined in this handbook.

1.1.1 National legislative framework

While the handbook contains guidance relevant to all archaeological projects, including those undertaken for research purposes, its primary function is to facilitate the delivery of archaeological projects as part of the planning process.

Government policy and guidance regarding the historic environment is contained in Section 12 *Conserving and Enhancing the historic environment* (paragraphs 126-141) of the National Planning Policy Framework (NPPF) and *Conserving and enhancing the historic environment*, Section ID18a of the Planning Practice Guidance (PPG Department for Communities and Local Government, March 2012 and April 2014).

In addition to the normal planning framework set out in the Town and Country Planning Act 1990, the Planning (Listed Buildings and Conservation Areas) Act 1990 provides specific protection for buildings and areas of special architectural or historic interest. The Ancient Monuments and Archaeological Areas Act 1979 provides specific protection for scheduled monuments (see below).

The national guidance and legal framework are summarised below. The aims of this guidance are to ensure that local planning authorities, developers and owners of heritage assets adopt and develop a consistent and holistic approach to the conservation and enhancement of the historic environment, whilst achieving sustainable development (NPPF, paragraphs 6-10).

Annex 2 of National Planning Policy Framework (NPPF) defines the historic environment as '*all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.'*

Aspects of the historic environment, including archaeological remains, historic buildings and historic landscapes are referred to as heritage assets. Annex 2 of NPPF defines a heritage asset as *'a building, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets include designated heritage assets and assets identified by the local planning authority.'*

The appropriate conservation of these heritage assets forms one of the 'Core Planning Principles' that underpins the planning system (NPPF, paragraph 17, bullet 10). Heritage assets are an irreplaceable resource and effective conservation will deliver wider social, cultural, economic, and environmental benefits. Public benefits do not always have to be visible or accessible to the public to be genuine public benefits. They can include heritage benefits, such as

- Enhancing the significance of a heritage asset and the contribution of its setting;

- Reducing or removing risks to a heritage asset;
- Securing the optimum viable use of a heritage asset, with a view to its long term conservation (PPG ID18a, paragraph 020).

In line with NPPF, the Local Planning Authorities have set out within their Local Plans, strategies for the conservation and enjoyment of the historic environment, with the aim of delivering development within a setting that will make a positive contribution to, or better reveal the significance of, the heritage asset (PPG, ID18a, paragraph 004).

In accordance with paragraph 128 of NPPF, applicants or developers applying for planning permission, which may affect a heritage asset, are required 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 significance of 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 heritage assets assessed using appropriate expertise where necessary. Where a site on which a 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'*.

The significance of a heritage asset is the sum of its archaeological, architectural, historic and artistic interest. Significance is derived from a heritage asset's physical presence and its setting. Setting is the surroundings in which an asset is experienced, and may therefore be more extensive than its curtilage. Understanding the nature, extent and importance of the significance of a heritage asset, and the contribution made by its setting, is intrinsic to understanding the potential impact and acceptability of a development proposal (PPG ID18a, paragraph 009). The significance and setting of heritage assets is further discussed in Section below.

Development Plan Policies produced by the district councils of Somerset underline the importance of archaeological remains, as an integral part of the historic environment of the county.

1.1.2 Designated heritage assets

Designated heritage assets are sites of national importance (i.e. World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Registered Parks and Gardens, Registered Battlefields or Conservation Areas). The Department for Culture, Media and Sport (DCMS) is responsible for the identification and designation of Listed Buildings, Scheduled Monuments and Protected Wreck sites. Historic England identifies and designates Registered Parks, Gardens and Battlefields and administers all the national designation regimes. World Heritage Sites are inscribed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO). In most cases, Conservation Areas are designated by Local Planning Authorities. The National Heritage List for England is the official database of all nationally designated heritage assets – see www.HistoricEngland.org.uk/listing/the-list.

Difference classes of heritage asset are associated with different regimes of control and protection for historical reasons:

- Works to Scheduled Monuments are subject the 1979 Ancient Monuments and Archaeological Areas Act. All work will require the permission of the Secretary of State for

Culture, Media and Sport (Scheduled Monument Consent). This is administered by Historic England, who should be contacted for advice regarding any work to a Scheduled Monument. Planning permission may also be required from the local planning authority and the obtaining of one consent or permission does not obviate the requirement for the other.

- Certain works to Listed Buildings require consent from the local planning authority in addition to any planning permission required.
- There are no protected wrecks in Somerset
- Conservation Areas, Registered Parks, Gardens, and Battlefields do not require any separate consents but planning applications that affect them need to take the significance of the designated assessed into account. The designation of a Conservation Areas also requires planning permission for certain categories of demolition and enables enhanced controls over advertisements, trees and permitted development rights.

Under NPPF, the impacts of any development upon the significance of designated heritage assets should be assessed in terms of 'substantial' and 'less than substantial harm' (NPPF paragraphs 132 and 134). It is the degree of harm to the asset's significance rather than the scale of the development that is to be assessed. Further guidance concerning substantial harm can be found in PPG ID 18a, Section 3.

Scheduled Monument the Iron Age hillfort at Ham Hill, Yeovil

1.1.3 Non-designated heritage assets

Non-designated heritage assets have been identified by local planning authorities. These include buildings, monuments, sites, places, area or landscapes identified as having a degree of significance requiring consideration in the planning process.

NPPF identifies two categories of non-designated heritage assets of archaeological interest: (PPG 18a, paragraphs 039-041):

> *a) Those that are demonstrably of equivalent significance to scheduled monuments and are therefore considered subject to the same policies as those for designated heritage assets (NPPF Paragraph 139).*
> *b) Other non-designated heritage assets of archaeological interest. On occasion the understanding of a site may change following assessment and evaluation prior to a planning decision and move it from this category to the first*

Information relating to designated and non-designated heritage assets is recorded on the local Historic Environment Record (HER). The Somerset HER is a publicly-accessible online source of information about the local historic environment and covers the whole of the Somerset County Council area, with the exception of Exmoor National Park.

Criteria for determining the impacts of development upon the significance of a non-designated heritage asset are set out Paragraph 135 of NPPF.

1.1.4 The South West Heritage Trust

The South West Heritage Trust (SWHT) was established by Somerset and Devon County Councils in November 2014. The SWHT receives grants from the councils to deliver a wide range of activities covering archives, local studies, museums, and the management of the historic environment. Somerset County and District Councils exercise their duty of stewardship of the historic environment through the Historic Environment Service of the South West Heritage Trust. The agreed activities of the SWHT include the following statement that covers the work of the Historic Environment Service:

> "**Providing expert advice to protect Somerset's rich heritage**
>
> - The Trust will provide archaeological and conservation advice to the Council in accordance with the National Planning Policy Framework (Department for Communities and Local Government, 2012), and successor frameworks or standards, and in accordance with relevant planning policies. Such advice will include archaeological and conservation advice to the Council as Highway Authority and on all heritage matters relating to the Council's own properties, including bridges, schools and other historic or listed buildings. The Trust will act for the Council in providing heritage advice on agri-environment schemes. The Trust will take part in consultations in respect of heritage matters related to works proposed by statutory undertakers and statutory agencies.
>
> - The Trust will, as requested and reasonably possible, provide archaeological and conservation advice to the Diocese of Bath and Wells through the Diocesan Advisory Committee.
>
> - The Trust will provide and maintain a Somerset Historic Environment Record for the Council.
>
> - The Trust will seek to protect heritage assets and work in partnership with the Council and district councils to that end."

The Historic Environment Service (HES) of the SWHT is responsible for ensuring that Somerset's historic environment, is conserved, enhanced, and protected, thereby enabling the sustainable management and enjoyment of this resource. The HES provides advice and is responsible for maintaining the Somerset Historic Environment Record (HER), formerly the Sites and Monuments Record (SMR), which provides details of the historic environment. It is available on line via www.somerset.gov.uk/her

The HES provides archaeological and conservation advice to the Diocesan Advisory Committee of Bath and Wells. This advice is in line with best practice given by the Association of Diocesan and Cathedral Archaeologists, Historic England and the Church Building Council Guidance note on Archaeology. (Church Care, October 2013.) See www.churchcare.co.uk/images/archaeology.pdf and www.archaeologyuk.org/adca/documents/ADCAGuidanceNote1.pd

The Somerset Museums Service has responsibility for the selection, retention and long-term documentation and preservation of archaeological artefacts and the management of public access to its collections and associated information. In addition, the SMS manages the operation of the Portable Antiquities Scheme in Somerset, and the administration of the 1996 Treasure Act in collaboration with the coroner's office.

The Archives and Local Studies Service has responsibilities to find, preserve and make available for research written, cartographic, photographic and electronic information.

1.3 GENERAL REQUIREMENTS FOR ARCHAEOLOGICAL PROJECTS

1.3.1 Professional standards

All archaeological projects must be undertaken in accordance with relevant professional standards. The Chartered Institute for Archaeologists (CIfA) is the nationally recognised body that provides standards and guidance to the profession. The Historic Environment Service (HES) strongly encourages all archaeological contractors and consultants to adhere to the CIfA's formally adopted Charter, by-laws, regulations including the *Code of Conduct* (2014) and all relevant standards and guidance, where appropriate. A list of these documents can be found below.

CIfA membership and the CIfA guidance documents are regarded as baseline standards for competence and best practice. Archaeologists working on a project should not attempt tasks outside their areas of competence.

All archaeological fieldwork must be carried out with due regard to Health and Safety considerations. Contractors must carry out Risk Assessments for all activities, including arrangements for project monitoring by HES staff.

1.3.2 Project briefs, project designs, specifications and written schemes of investigation

The HES, as advisors to the local planning authorities, requires archaeological consultants and contractors to submit Project Designs (PDs) or Written Schemes of Investigation (WSIs) for written approval before proposals, estimates of costs or quotations are provided to the potential client. This is best practice in line with CIfA and Historic England standards and guidance. Archaeological contractors and consultants are strongly advised to inspect sites on the ground, and familiarise themselves with sufficient background to the site, its archaeological context, potential and significance, prior to the commencement of a project. It is the responsibility of the archaeological contractor to ensure that adequate resources are available from the client to complete the programme of archaeological work set out in the Project Design or Written Scheme of Investigation.

Project Designs and Written Schemes of Investigation will be rejected if they do not meet the requirements of the project brief or specification, are insufficiently documented, or fail to demonstrate the competence and ability of the contractor to undertake the work in accordance with the Historic England and CIfA guidelines, and the guidance outlined in this handbook.

Project briefs or specifications issued by HES are usually valid for a specified time period. New discoveries, changes in policy, national guidance or standards may necessitate revisions.

1.3.3 Charging Policy for approval of written schemes of investigation

The following charges will apply to the approval of WSIs by the SWHT from 1/4/2018. These charges are liable to change and there may be additional charges so please consult the SWHT website for current charges and conditions. Due to the variations of scale and complexity of projects the SWHT reserves the right to apply other charges where appropriate. This will only occur in exceptional circumstances when extra involvement from SWHT is required. Infrastructure projects will be charged on the basis of Planning Performance Agreements, Section 106 payments or other legal agreement.

Approval of WSIs		
Development Type Based on The Town and Country Planning Regulations	**Description**	**Fee and point of charge**
Householder Developments	work on an existing dwelling, eg extensions or alterations to historic fabric	**£65 (Discretionary)** **Charged for approval of post-determination WSI (to fulfil a condition)**
Minor Developments	dwellings 2-9 of less than 0.5ha, non-residential development of less than 1000m^2, non-residential development on site of less than 1000m^2, change of use (less than 1000m^2, minor development including listed buildings (if not under the householder service); all advertisements and hoardings, agricultural, telecommunications and others	**£100** **Charged for approval of pre-determination geophysical survey** **£100** **Charged for approval of pre-determination trial trench evaluation WSI** **£220** **Charged for approval of post-determination WSI (to fulfil a condition)**
Major Developments	Residential development of 10-99 dwellings, residential development on sites of 0.5ha or more and less than 2.5ha, non-residential	**£100** **Charged for approving of pre-determination geophysical survey**

	development of 1000m^2 or more and less than 10,000m^2, change of use (1000m^2 or more and less than 10,000m^2)	**£100** **Charged for approval of pre- determination trial trench evaluation WSI** **£325** **Charged for post-determination WSI (to fulfil a condition)**
Strategic Developments	Residential development of 100 dwellings or more, residential development on sites of 2.5ha or more, non-residential development of 10,000m^2 or more, non-residential development on sites of 5ha or more, all minerals and waste and windfarm development proposals	**£100** **Charged for approval of pre-determination geophysical survey** **£100** **Charged for approval of pre-determination trial trench evaluation WSI** **£575** **Charged for post-determination WSI (to fulfil a condition)**
Consultation Fees		
Utilities	Smaller schemes requiring limited assessment	**£100**
	Schemes that require site visits/meetings etc following initial assessment	**Increments of £50**

2. ARCHAEOLOGY AND THE PLANNING PROCESS IN SOMERSET

2.1 Introduction

All Local Planning Authorities (LPAs) in Somerset use similar processes to adhere to the guidance set out in the National Planning Policy Framework (NPPF). The HES acts as the heritage advisor for applications to county and district councils, as well as offering guidance to aid the applicant/developer to assist with the fulfilment of their archaeological responsibilities. The HES is also responsible for monitoring archaeological projects to ensure that appropriate standards are maintained. This includes the production of specifications and briefs where appropriate, site visits at short notice, the inspection of on-site records and techniques, monitoring of post-excavation timetables and report assessment.

2.2 Preliminary enquiries

In the event that a development project has the potential to impact upon a heritage asset, it is strongly recommended that the HES is consulted at an early stage. This is in accordance with the decision-taking sections of NPPF and PPG (Pre-application engagement and front loading, paragraphs 188-195 and Section ID20). The HES assesses both pre-application and submitted planning applications. Recommendations regarding archaeological issues are based upon the nature of the proposal and the significance of any potential heritage assets. Preliminary consultations should include the submission of a site plan and a brief description of the proposed development. Any other background information pertaining to the proposed development site can also be very useful in helping the HES to provide advice, such as the results from geotechnical investigations.

Where a proposal is likely to affect the significance of heritage assets, any pre-application discussion and subsequent applications will benefit from the adoption of a structured approach to the assembly and analysis of all relevant information. A staged approach for this process is set out in the Historic England document *Managing Significance in Decision-Taking in the Historic Environment – Historic Environment Good Practice Advice in Planning: 2*.

2.3 Archaeological recommendations

When a planning proposal is assessed, there may be insufficient information available to make a reasoned decision concerning the significance of the heritage asset(s) affected, the contribution made by setting to the heritage asset(s), and the likely impact of the proposal. In accordance with paragraph 128 of the NPPF, HES may therefore '***require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.***' The preparation of the desk-based assessment and the field evaluation should occur before the submission of an application, or prior to the determination of planning application.

If sufficient information is contained in the proposal, or exists in the HER, to formulate a mitigation strategy the HES may recommend that a condition be attached to the Planning Permission, to ensure the protection or appropriate preservation and recording of any heritage asset(s) affected by a development. In certain circumstances, where the significance of the heritage asset(s) outweigh(s) the requirement for development and the protection of the remains cannot be secured, the HES may recommend refusal of the application (NPPF, Paragraph 133).

2.4 Archaeological planning conditions

Archaeological work is usually secured through the planning process by the use of a model 55 negative condition. Although the exact wording may differ slightly between districts and county applications, the following statement is often used:

'*No development hereby approved shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the local planning authority*.'

In order to comply with such a condition, the applicant must obtain agreement in writing from the LPA confirming that the condition has been discharged. Conditions are not discharged until the applicant has completed the required work and deposited a completed archaeological report with the HES and the complete archive for preservation, with the appropriate.

Open day at Cannington By-Pass excavation, part of the Hinkley Point Project

2.5 Treasure Act 1996

The Treasure Act of 1996 legally obliges finders of objects, which fulfill the legally defined term of treasure, during archaeological investigations, or subsequently during finds processing, to report their find to their local coroner within fourteen days. This can be done through the Finds Liaison Officer at the Somerset Heritage Centre, who serves as the adviser on treasure for the county. Where removal of artefacts cannot be effected on the same working day as the discovery, suitable security measures must be taken to ensure the protection of the find from theft.

An inquest by the coroner will determine whether the find constitutes treasure or not. Where finds are declared to be treasure, the coroner will offer the item for sale to the appropriate museum at a price set by an independent board of antiquities experts known as the Treasure Valuation Committee. Where a museum expresses no interest in the item, or is unable to purchase it, the object will be returned to the owner. Landowners have sole title to any items found on their property. Legitimate metal detectorists should come to an agreement with the owners of the land before they detect to share any proceeds from treasure sales.

2.6 Community engagement and outreach

HES encourages outreach as part of archaeological projects, to provide appropriate and suitable opportunities for community engagement either as training, in the form of volunteer participation and/or by the provision of general information about the nature of the investigations being undertaken. In some cases, an outreach project this may be secured by a Section 106 agreement.

3. PRE-DETERMINATION ARCHAEOLOGICAL INVESTIGATIONS

3.1 Initial appraisal

The HES assesses development proposals for any archaeological implications. This involves checking the details of the application against the HER, previous archaeological work, the Extensive Urban Surveys and other relevant information, eg aerial photographs and historic maps. Where appropriate the HES will provide a Project Brief or Specification detailing the requirements for archaeological investigations.

3.2 Desk-based assessment

In accordance with NPPF, the HES may consider it appropriate to recommend the preparation of a desk-based assessment. This will comprise a comprehensive review of all existing base-line data, (normally without the requirement for any fieldwork), to establish the presence or confirm the absence of any heritage assets. Where present, the significance of any heritage assets affected must be established in accordance with accepted methodologies. In line with paragraph 128 of NPPF, it may also be appropriate to provide an assessment of the setting of any heritage assets(s), which may be affected by the development proposal.

CIfA defines archaeological desk-based assessment as:

> *'... a programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage assets and, in England, the nature, extent and quality of the known or potential archaeological, historic, architectural and artistic interest. Significance is to be judged in a local, regional, national or international context as appropriate' (CIfA 2014).*

Desk-based assessments should be carried out in accordance with CIfA's *Standard and guidance for historic environment desk-based assessment* (2014).

3.3 Field evaluation

Where a proposal is likely to affect archaeological remains, but insufficient information currently exists to make a reasoned decision concerning these effects, an archaeological field evaluation may be required. The purpose of an evaluation is to provide information on the extent, nature, character and significance of any archaeological remains, thereby enabling the design of an appropriate mitigation strategy. The evaluation should ideally take place before the submission of an application, or prior to determination of a planning application. Details concerning the aims, objectives and methodology of a field evaluation must be presented in a Project Design (PD) or Written Scheme of Investigation (WSI) to be agreed with the HES prior to the commencement of any fieldwork.

CIfA (2014) defines field evaluation as:

> *'... a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, intertidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate.'*

Archaeological field evaluation is a staged process. The phases of investigation will vary depending upon the nature of the proposal, and the available information concerning the archaeological remains. Some techniques used to evaluate archaeological remains may also be employed during the mitigation stage of a project, as part of an agreed programme of archaeological investigation.

Archaeological field evaluation should be carried out in accordance with CIfA's *Standard and Guidance for Field Evaluation* (2014).

3.4 Bore holes

Bore holes (both manual and mechanical) provide data on sub-surface deposits. Recording and sampling of core data should only be carried out by qualified geoarchaeologists. Each survey will have specific requirements, and details of surveys must therefore be agreed with the HES prior to their implementation. With a view to saving resources, consideration should be given to combining archaeological evaluation with any geotechnical site investigations being carried out by architects, structural engineers and others as part of a normal site analysis. Where possible, archaeologists should observe soil test pits or be given access to stratigraphical data obtained for geotechnical purposes.

The extraction of a percussion core at Southlake Moor.

3.5 Earthwork survey

Earthwork surveys may form part of a pre-determination evaluation or a post-determination mitigation strategy. They should not be carried out at a scale less than 1:500 and will normally be presented as a hachured survey, although a contour survey may occasionally be required. Guidelines for the analytical survey of earthworks (and landscapes) are set out in '*Understanding the Archaeology of Landscapes – a guide to good recording practice* (English Heritage 2007). Details concerning the aims, objectives and methodology of an earthwork survey must be presented in a PD or WSI to be agreed with HES prior to the commencement of any fieldwork

3.6 Fieldwalking and/or metal detecting survey

Fieldwalking is essentially a technique used for archaeological prospection during the field evaluation of a rural site. It can help with determining whether or not there is a possible archaeological interest in the area. It can assist with providing information about the character of any archaeological remains where present (ie industrial or settlement) and can provide some information of the date of any activity (eg Mesolithic, Roman, medieval etc.). Fieldwalking should ideally be carried out in spring or autumn, when vegetation is at its lowest and fields have been ploughed.

The technique comprises the collection of surface artefacts, from a measured grid, which is mapped on the ground surface. In some instances, it may be appropriate to include the use of metal detectors to help with the recovery of metal objects, particularly on Roman or later sites and battlefields. However, the recovery of archaeological objects located by metal detectors as part of field walking should be restricted to those in the plough soil. Where an artefact or artefacts are located below plough soil depth, they should be left *in-situ* and appropriate arrangements put in place for their later recovery under controlled excavation conditions.

Metal detector operators in the employ of the archaeological contractor, should be experienced, competent and use reliable well-maintained equipment.

Metal Detecting Survey at the Sedgemoor battlefield, Westonzoyland.

When carrying out a fieldwalking survey, a retention and discard policy must be agreed with HES. Wherever there is any uncertainty over an object, it should be retained for examination by a relevant specialist. A *pro forma* recording sheet must be used during the survey. This should provide details of discarded material, equipment used, conditions and additional observations.

Where a metal detecting survey is carried out by non-professional archaeologist for the purpose of research or hobby, finds should be reported to the Portable Antiquities Scheme through the Finds Liaison Officer, who is based at the Somerset Heritage Centre. Wherever possible, all finds locations should be recorded to a minimum of an 8-figure grid reference. Objects which may be considered treasure under the 1996 Treasure Act should be reported to the coroner.

If the survey takes place on a Registered Battlefield, all finds should be fully located using GPS or another precise survey method to ensure proper and complete recording of the historic event. HES should be contacted beforehand to discuss detailed survey requirements.

Details concerning the aims, objectives and methodology of a fieldwalking and/or metal detecting must be presented in a PD or WSI to be agreed with HES prior to the commencement of any fieldwork.

3.7 Test pit excavation

On some large greenfield projects, it may be appropriate to arrange for some limited, preliminary, intrusive ground investigation by the manual excavation of test pits, rather than trial trenching. Ideally this will consist of the manual excavation of trial pits (normally *c*.1.5m x *c*. 1.5m) arranged in a regular pattern, for example a 50m grid. The details will vary from site to site and any proposals must be agreed in detail with the HES. The general standards and methods of work for the excavation of test pits are the same as for all archaeological field investigation.

3.8 Geophysical survey

Geophysicists use a number of techniques to understand ground conditions and predict buried archaeological remains. These techniques are particularly useful on rural sites where archaeological remains such as ditches and walls survive in areas currently under the plough, or in pasture fields. Geophysical surveys are less useful in urban contexts although Ground Penetrating Radar can provide useful information.

CIfA (2014) defines geophysical survey as using:

> *'... non-intrusive and non-destructive techniques to determine the presence or absence of anomalies likely to be caused by archaeological features, structures or deposits, as far as reasonably possible, within a specified area or site on land, in the inter-tidal zone or underwater. Geophysical survey determines the presence of anomalies of archaeological potential through measurement of one or more physical properties of the subsurface'.*

All surveys should conform to the guidance note *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008) and CIfA's *Standard and guidance for archaeological geophysical survey* (2014). Depending upon the scale and type of survey to be carried out, it may not be necessary to produce a PD or WSI. However, as a minimum, where possible HES should be supplied with a site location plan indicating the survey areas, the dates of the proposed survey together with the name of the archaeological contractor carrying out the survey.

3.9 Trial trench evaluation

This technique involves the machine-excavation of a series of trial trenches to examine and assess archaeological remains on the proposal site. Information from the investigation is used to determine the significance of any archaeological remains, the physical impact the proposal will have on the buried remains and to inform a mitigation strategy, where necessary. Depending upon the significance, condition and vulnerability of the archaeological remains, foundation schemes and service trenches may need to be redesigned to ensure the preservation of any remains *in-situ*. Evidence from the trial trenches will inform the requirements for further appropriate archaeological investigation or a mitigation strategy either prior to, or during development.

4. POST-DETERMINATION ARCHAEOLOGICAL INVESTIGATION

4.1 Planning conditions

Following determination of a planning application, any developments which will impact on archaeological remains, will normally have a model 55 negative condition attached. This is used to ensure the agreed programme of archaeological work is carried out prior to, or during development. The type of work is dependent on the significance of the site, the details of the proposal and its potential impacts, and where applicable the results of an evaluation.

Paragraph 141 of NPPF outlines this process as follows:

> '*Local planning authorities should make information about the significance of the historic environment gathered as part of plan making or development management publicly accessible. They should also require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and impact, and to make this evidence (any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted*.'

4.2 Archaeological watching brief

Where a site has a perceived archaeological potential or where the mitigation strategy suggests some level of recording other than excavation is necessary, a watching brief may be appropriate. CIfA (2014) defines archaeological watching brief as:

> *'... a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.'*

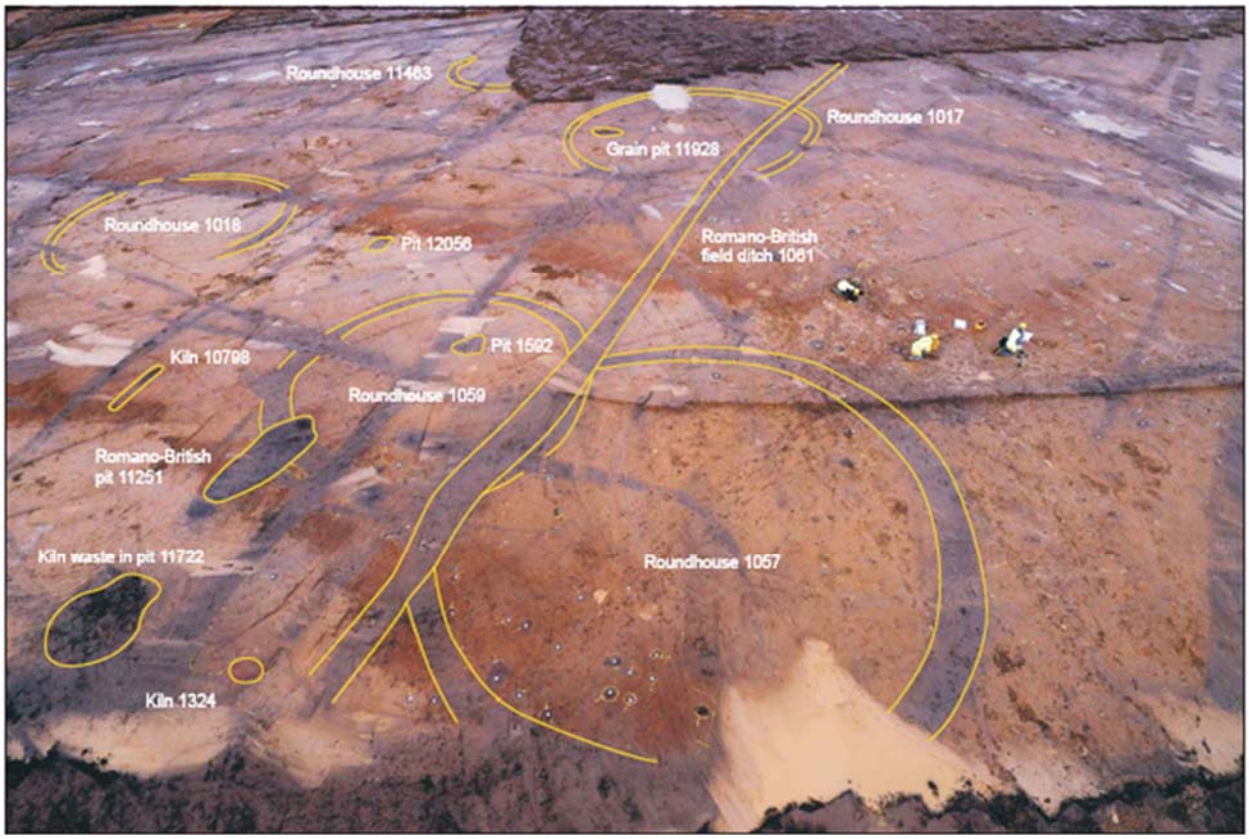
The purpose of a watching brief, as defined by CIfA (2014), is:

- *To allow within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works; and*
- *To provide an opportunity, if needed, for the watching archaeologist to signal to all parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support a treatment to a satisfactory and proper standard.*
- *A watching brief is not intended to reduce the requirement for excavation or preservation of known or inferred deposits, and it is intended to guide, not replace, any requirement for contingent excavation or preservation of possible deposits.*
- *The objective of a watching brief is to establish and make available information about the archaeological resource existing on a site.*

In certain circumstances it may be deemed appropriate for the archaeologist to be more closely involved with the on-site works. This will entail the archaeologist being authorised to directly advise the contractor on certain aspects of site works to ensure archaeological deposits are not unnecessarily disturbed. This may be of particular importance when nationally important archaeological remains or a Scheduled Monument are involved, or where the objective is to achieve preservation *in-situ* of other sensitive remains. Details concerning the aims, objectives and methodology of an archaeological watching brief must be presented in a PD or WSI to be agreed with HES prior to the commencement of any fieldwork

4.3 Excavation and preservation by record

Archaeological projects are many and varied. Different developments may have widely different effects upon the archaeological resource, and projects will need to be tailored to these varying conditions. In certain circumstances the local planning authority may accept that the only suitable option is to preserve by record, that is, to record the archaeological remains by means of a full-scale excavation, prior to the commencement of any development. As this happens rarely, each project will be dealt with on its own merits, and will be subject to its own archaeological management practice.



Excavation of prehistoric and Roman period settlement at Lyde Road, Yeovil

CIfA (2014) defines archaeological excavation as:

> *'... a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during*

fieldwork are studied and the results of that study published in detail appropriate to the project design'.

It also describes the purpose of an excavation as being the examination of:

'... the archaeological resource within a given area or site within a framework of defined research objectives, to seek a better understanding of and compile a lasting record of that resource, to analyse and interpret the results, and disseminate them'.

5. BUILDING ASSESSMENT AND RECORDING

5.1 Introduction

CIfA (2014) defines archaeological building investigation and recording (ABIR) as:

> *'... a programme of work intended to establish the character, history, dating, form and archaeological development of a specified building, structure, or complex and its setting, including buried components, on land, inter-tidal zone or underwater'.*

The assessment and recording of historic buildings is relevant to both pre- and post-determination investigation. Building recording at the pre-determination stage is used to achieve a better understanding of a historic building or structure in order to inform decisions on its care or alteration. Building recording at the post-determination stage is used to record and retain historical information that would otherwise be lost.

The policy background for securing building recording is provided by Historic England in its publication '*Understanding Historic Buildings: Policy and Guidance for Local Planning Authorities',* published by English Heritage in 2008.

5.2 Understanding significance

Where a proposal is likely to affect a historic building or structure the applicant will need to supply sufficient information to allow the building's significance to be understood and, in turn, to enable informed decisions to be made on the likely impact on its significance. This 'impact assessment' is required in various forms for different development control regimes and circumstances:

1) A 'Heritage statement' for planning permission and listed building consent applications. This should set out the architectural and historic significance of the building or structure as required under paragraph 128 of the National Planning Policy Framework. It can be a stand-alone document or part of a 'Design and Access Statement' if the latter is required.

   Specialist reports and structural surveys may be necessary to support a Heritage Statement.

   Guidance on heritage statements and design and access statements can be found in the followings publications:

   - English Heritage (2008). *Understanding Historic Buildings: Policy and Guidance for Local Planning Authorities,* pp. 4 and 5.

   - Department for Communities and Local Government (2014). *Planning Practice Guidance: Validation requirements*, Reference ID: 14-022-20140306, Paragraphs 029-033. Available at: http://planningguidance.communities.gov.uk/ (accessed 20 June 2016).

   - *The Planning (Listed Buildings and Conservation Areas) Regulations 1990 (S.I. 1990/1519), Regulation 3A, as amended by S.I. 006/1063, S.I. 2010/2185, and 2013/1239.*

   - *The Town and County Planning (Development Management Procedure) (England) Order 2015 (S.I. 2015/595), Article 9.*

2) A 'Statement of Significance' for Church of England faculty applications. Guidance on the content and completion of a Statement of Significance is provided in:

    - Cathedrals and Church Buildings Division, Archbishop' Council (2014). Guidance Note: Statement of Significance and Statement of Needs. Available at: http://www.churchcare.co.uk/churches/guidance-advice/ (accessed 20 June 2016).

3) A 'Desk Based Assessment' (DBA) where there is the potential for the historic building, structure or the site to include archaeological interest.

5.3 Recording

The recording of a historic building or structure may be required where alteration or demolition is deemed acceptable and the historic information would otherwise be lost. This is normally achieved through a condition attached to a planning permission, listed building consent or faculty approval. It can also be associated with an archaeological monitoring condition where hidden details are likely to be opened-up. The practice and methodology for fulfilling a recording condition will be set out by the contractor in a Written Scheme of Investigation (WSI) and submitted for approval to the planning authority.

Guidance on the policy background, the attachment of a recording condition, and securing a Written Scheme of Investigation are provided in:

- English Heritage (2008). U*nderstanding Historic Buildings: Policy and Guidance for Local Planning Authorities*, pp. 4, 10, 13 and 14.

Guidance on the types of investigation and record, appropriate level of recording, and standards are provided in:

- Historic England (2016), *Understanding Historic Buildings*: *A Guide to Good Recording Practice.*

Note that record photographs should be monochrome negatives and prints, duplicated by either colour reversal (slide) film or digital images in uncompressed Tagged Image File Format (tiff).

5.4 Archiving

Good recording will only be beneficial if the final stage of making it accessible for the long term is secured. The following steps apply to building recording reports and DBAs, and any accompanying photographs, survey drawings etc, collectively known as the archive. They also apply whether they arise from a requirement of the planning or faculty development control systems or from research projects.

National good practice advice is provided in the following documents:

- English Heritage (2008). U*nderstanding Historic Buildings: Policy and Guidance for Local Planning Authorities.* A brief guide to archiving is provided on page 15.

- Historic England (2016), *Understanding Historic Buildings*: *A Guide to Good Recording Practice.* Section 6 provides a guide to the standards for depositing materials and provisions for storage and retrieval.

In Somerset, primary physical archive material (notebooks, plans, survey drawings, photographic prints, colour slides etc) should be deposited with the Archives and Record Service at the Somerset Heritage Centre, including a copy of the report.

Digital records in common office formats (such as Word documents, spreadsheets and digital images) will be accepted by the Archives and Record Service in the near future but until then, and for more complex digital data (such as CAD drawings, laser scans etc), a suitable Trusted Digital Repository that specialises in archaeological archives should be used. Currently only the Archaeology Data Service (ADS, http://archaeologydataservice.ac.uk/) meets these criteria. The digital deposit should include a copy of all the publications relating to the project to allow the digital archive's stand-alone use.

Please email somersetarchives@swheritage.org.uk to arrange deposition of the physical archive and to discuss requirements for digital preservation.

Two copies of the report (only) should be provided to the Somerset Historic Environment Record (HER): one paper copy and one digital copy in .pdf/a format. Please email historicenvironment@swheritage.org.uk to deposit or discuss this.

6. TECHNIQUES OF ARCHAEOLOGICAL INVESTIGATION

6.1 Introduction

All archaeological investigation should be carried out in accordance with best practice and conform to existing guidance documents and guidance outlined in this manual. This section covers the techniques for archaeological investigation in more detail.

6.2 Archaeological contractor's responsibilities

To enable the monitoring of archaeological projects and the deposition of finds, HES requires the appointed archaeological contractors to contact the HER prior to commencement of work, to obtain a museum accession number and a HER Primary Record Number (PRN). These should be requested via email to historicenvironment@swheritage.org.uk and from 1/4/2018 there will be an initial charge levied for archive storage (see Museum Storage Charges). The email should include the planning application number (if relevant), national grid reference and the type of fieldwork (evaluation, watching brief etc). Non-intrusive work, such as survey, will not require a museum number as there will be no finds. Each phase of a project may require separate PRNs although it is likely that the museum number will remain the same. An entry onto the OASIS system (Online Access to the Index of archaeological investigations) should also be made on the OASIS website.

The HES should be notified in writing of the start of the project at least two days prior to commencement. The notification should include:

- The site name and address;
- The museum accession number;
- The Historic Environment Record PRN;
- An OASIS number (where appropriate);
- The planning application number (if relevant);
- The start date of work;
- The expected duration of project; and,
- The name of the site project officer together with contact details.

To ensure the effective compilation of an archive and its long-term preservation, the contractor must submit evidence of, or agree with the recipient museum the following:

- Consent from the landowner for the transfer of ownership of the finds archive;
- The allocation of a museum accession number with which all material recovered will be marked in permanent form (both finds and records);
- A policy of selection for retention and discard of finds appropriate to the site; and
- Provision of a storage grant towards the long-term costs of care of the archive.

6.3 Desk-based assessment (DBA)

6.3.1 Content

Existing written and other sources, which should be consulted as part of a desk-based assessment (DBA) include as appropriate: published material, unpublished reports and associated archives, early maps and any other cartographic evidence, aerial photographs and lidar data (where available). A detailed search for material relating to the history of the site is not generally required, except where such information may indicate the potential for archaeological remains. It is strongly recommended that HES are contacted prior to the production of DBA in order that the scope of the assessment may

be agreed. This will be particularly beneficial for pre-application enquiries concerning wind turbine and solar farm proposals.

A DBA should cover the proposed development site in detail and an area around the site to provide context. In urban areas this should extend for *c*. 500m, but in rural areas *c*. 3-4 km may be more appropriate, particularly where there may be an issue with impacts upon the setting of heritage assets.

The DBA must include a site location figure and a map extract indicating the location of all heritage assets identified as part of the assessment. Details of the methodology employed and aims or objectives should also be outlined. An assessment should be made of the extent and degree to which the historic environment will be affected by a development proposal, as well addressing the potential for any previously unrecorded heritage assets. The DBA must include an assessment of the significance of any heritage assets identified as potentially being impacted by the scheme together with an assessment of their setting. The DBA should be comprehensive in addressing all the issues in accordance with existing legislation, standards and guidelines (NPPF, PPG, CIfA and Historic England).

6.3.2 The significance of heritage assets

As a minimum, and in accordance with paragraph 128 of NPPF, a DBA should seek to '*describe the significance of any heritage assets affected, including any contribution made by setting*'.

NPPF (Annex 2) defines significance as being '*the value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.*'

Additional national guidance for the assessment of the significance of heritage assets is based upon criteria presented in the publication *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment* (English Heritage 2008) This document, which provides a comprehensive framework for the sustainable management of the historic environment, determines that the significance of a heritage asset may be measured by the consideration of four heritage values - evidential, historical, aesthetic or communal. See PPG ID18a (paragraphs 008-010) for further guidance.

An assessment of the significance of a heritage asset should seek to identify how aspects of the asset have evolved over time to contribute to, or detract from the identified heritage values. The present character of the heritage asset is the result of a chronological sequence of events. In line with paragraph 128 of NPPF, an assessment of significance should be proportionate to the significance of the asset and the potential impact that the proposals may have upon those 'values', which contribute to its significance.

The relative significance of any identified heritage assets should also be assessed in accordance with established criteria. An example may be the non-metrical six-point scale of significance derived from the Highways Agency's *Design Manual for Roads and Bridges*, (Volume 11, 2009). It is recommended that where appropriate, significance is also qualified in terms of international, national, regional, local, negligible and unknown importance.

6.3.3 The setting of heritage assets

All heritage assets have a setting, irrespective of the form in which they survive and whether they are designated or not. Heritage assets may be affected by direct physical change or by change in their setting.

Current legislation and guidance consider the setting of a heritage asset as being a contributory factor to those 'values', ie archaeological, architectural, artistic or historic considered to comprise its overall heritage interest. Therefore, any development proposal which may impact upon the attributes (values) of the setting of a heritage asset, will in turn impact upon its significance. The extent and significance of a setting, and the impact of development upon it, are not fixed as they can change over time and need to be assessed on a case by case basis. Not all designated heritage asses have settings, which may be adversely affected by a development proposal, while those which retain a strong presence in the landscape may be more vulnerable eg historic buildings, upstanding archaeological monuments and historic landscapes. An assessment of the setting of a heritage asset will be particularly relevant in cases where applications are being made for major infrastructure or housing developments, wind turbines and solar farms.

NPPF (Annex 2) defines setting as being *the 'surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.'*

Section ID18a of PPG (paragraph 013) offers the following guidance regarding setting:

> *'The extent and importance of setting is often expressed by reference to visual considerations. Although views of or from an asset will play an important part, the way in which we experience an asset in its setting is also influenced by other environmental factors such as noise, dust and vibration from other land uses in the vicinity, and by our understanding of the historic relationship between places. For example, buildings that are in close proximity but are not visible from each other may have a historic or aesthetic connection that amplifies the experience of the significance of each.*
> *When assessing any application for development which may affect the setting of a heritage asset, local planning authorities may need to consider the implications of cumulative change. They may also need to consider the fact that developments which materially detract from the asset's significance may also damage its economic viability now, or in the future, thereby threatening its ongoing conservation.'*

Where appropriate, a settings assessment should include viewshed analysis (a visibility analysis technique) using digital terrain mapping to produce a Zone of Visual Influence (ZVI). A ZVI maps the area that technically shares intervisibility with the proposed application area (a viewshed). A ZVI can aid with identifying those heritage assets which can be determined to have a view which contributes to their significance. In the case of a settings assessment, this view may then be assessed in terms of how it may be affected by a development proposal. An assessment of visual impacts upon the setting of the historic environment is distinctly different to that undertaken as part of the Landscape and Visual Impact Assessment.

The main problem with ZVIs is that some are based upon 'bare earth models' (Digital Terrain Models), whereas a Digital Surface Model (DSM) takes into account surface forms or features such as woodland, trees, vegetation, buildings, roads etc. The inclusion of a heritage asset with a ZVI should therefore not be confused with 'real world visibility'. A settings assessment must therefore

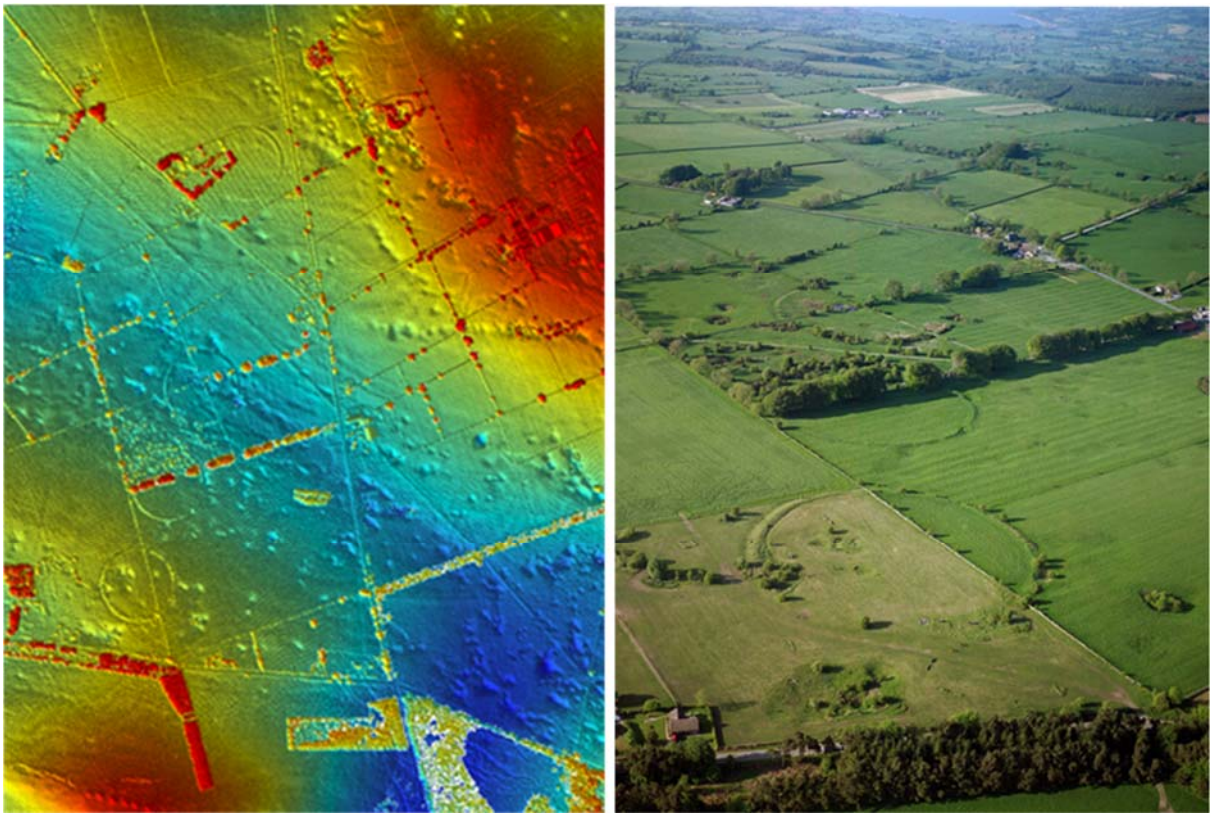
include a detailed programme of field reconnaissance within the identified viewshed. This should take into account the settings and views of all heritage assets identified as being potentially impacted by the development proposals. Methodologies for such an analysis must be clearly explained in the DBA, including the criteria used for the selection and exclusion of heritage assets within a specified study area.

Guidance for the assessment of any impacts upon the setting and therefore significance of a heritage asset is provided in the *The Setting of Heritage Assets* (Historic England 2015), which provides a framework for this type of assessment, and *Seeing the History in the View* (English Heritage 2011). Further guidance for wind turbines may be found in the Scottish Natural Heritage publication: *Visual Assessment of Windfarms: Best Practice* (2002) and *Wind Energy and the Historic Environment* (English Heritage 2005). This may be particularly relevant in establishing study areas. The HES has also recently prepared guidance concerning archaeology, wind turbines and solar farms in Somerset. This is available as a downloadable pdf from the HES website.

6.3.4 Sources

Sources consulted should include, where appropriate, the following:

- The Somerset Historic Environment Record;
- English Heritage and Somerset County Council Extensive Urban Survey (EUS) available on the HES website;
- The Somerset Historic Landscape Characterisation (this can be viewed as a layer on the HER - contact the HES for detailed explanatory information);
- Archives, documents and cartographic evidence. Tithe map and apportionment details in particular, together with any other early maps should be examined, both for depicted evidence, and significant field and place-name evidence. These are available at the Somerset Heritage Centre. The HER has georectified images of the tithe maps on the website;
- The Somerset Archaeological and Natural History Society library (after consultation with the Honorary Librarian). The library is housed in the Somerset Heritage Centre;
- The Historic England Archives, Kemble Drive, Swindon;
- Aerial photographs and lidar data held by the South West Heritage Trust (accessible through the Somerset HER), the Somerset Heritage Centre and Historic England's aerial photographic collection;
- The Somerset Museums Service (but note that some other museums hold material from excavations in Somerset);
- Bore hole data or other records held by a developer, agent or site owner;
- Any information obtained during a site visit.



Lidar data (left) and aerial photograph of the area around the Priddy Circles

6.4 Fieldwalking and/or metal detecting survey

A fieldwalking survey should ideally be carried out on transects spaced at either 10m or 50m apart. Where archaeological finds are evident in the plough soil surface, material can also be collected on a smaller collection grid (eg 5m by 5m) to give a more detailed indication of the location of any likely buried remains. Both levels of fieldwalking should only be carried out in conditions offering suitable ground visibility. This would normally be after the land has been ploughed, harrowed and left to weather for suitable period of time. Please note the following requirements:

- A survey strategy must be formulated and agreed with the HES. This will include the choice of technique and areas to be surveyed.
- A measured plan, at an appropriate scale, must be produced showing the location of the areas assessed. The location plan should be related wherever possible to the National Grid or identifiable features on a large-scale Ordnance Survey map.
- Provision and agreement must be made with the appropriate person(s) or body for the time-limited retention of the material and its full analysis and recording, by appropriate specialists.
- All identified artefacts must be retained during the fieldwork with the exception of 19th-century and later building materials, which may be discarded after consultation with the Somerset Museum Service. Discard policy must be in accordance with the Society of Museum Archaeologists' *Selection, Retention and Dispersal of Archaeological Collections: Guidelines for Use in England, Wales and Northern Ireland* (1993). The discard policy will be noted in the archive.

- All finds are to be treated in accordance with current Museums and Galleries Commission and United Kingdom Institute for Conservation standards. All artefacts are to be processed according to the requirements of this document. The approval of the museum will be obtained concerning appropriate methods, specialists and materials.
- A list of the material recovered will be compiled and identification agreed with a suitably qualified and experienced specialist familiar with the classes of artefact recovered.
- Plots must be produced showing the density of artefacts of different classes and dates recovered across the survey area. This will enable an accurate assessment of the locations of artefact concentrations.
- A report containing a written description of the methodology employed; the results obtained; an interpretation of their significance in terms of underlying archaeological deposits; graphical representations of the results together with an interpretation and a copy of the location plan. The methodology used will be critically reviewed.
- The survey will result in an archive of artefact identifications in written and digital form, together with plans showing the location of artefact retrieval. Please contact the HER to agree a suitable file format for the digital data. Further guidance relating to digital archives may be found in *Caring for Digital Data in Archaeology: A Guide to Good Practice* (ADS and CDA, 2013).

6.5 Geophysical survey

Geophysical survey should be undertaken in accordance with current guidance (English Heritage 2008 and CIfA 2014). Current guidance stipulates the following:

- The survey should be repeatable;
- Grid intersections should be located on the ground to within +/-10cm;
- The survey grid should be independently relocatable on the ground by a third party, by measurement to local permanent features. In certain cases (eg where such features are absent) and with appropriate permission, it may be acceptable to emplace permanent markers. The grid should also be locatable on the OS 1:2500 map to the nearest 1m; and,
- Care must be taken that any survey markers, or other equipment, should not be a hazard to people or animals.

The techniques used in archaeological remote sensing are usually resistivity and magnetometry. Specific requirements for each type of survey are outlined below. Copies of geophysical survey reports must be submitted to the HES.

6.5.1 Magnetometer survey

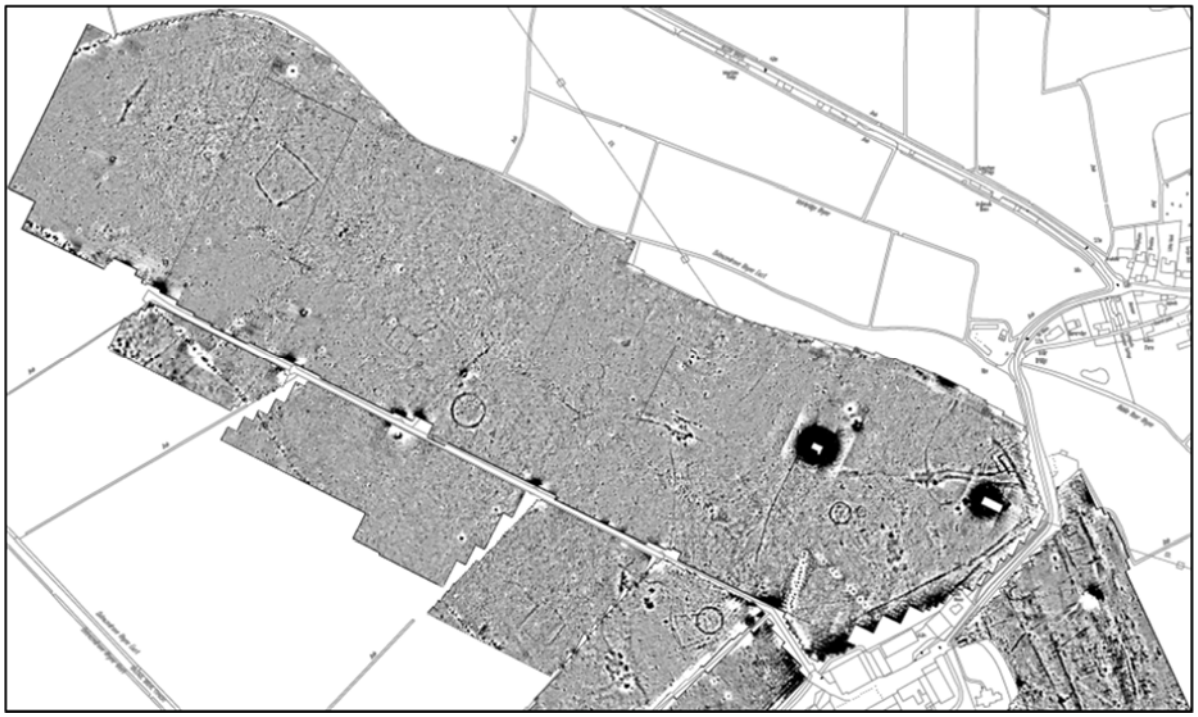
Magnetometer survey should generally be conducted using a fluxgate gradiometer with digital data storage and transfer facilities. Where another type of magnetometer is used, the reasons for its preference should be fully explained. The following key points should be noted:

- Area survey should be the preferred method of ground coverage;
- The preferred sampling interval for an area survey is 0.25m readings on 1m transverses; and,
- Scanning is not considered to be an acceptable method of assessing the viability of a survey. Detailed survey of limited areas should be carried out to produce initial results to inform the resulting strategy.

6.5.2 Magnetic susceptibility

A Magnetic Susceptibility survey (MS) should not take precedence over magnetometer survey where the latter is more practicable. It is ideally a form of reconnaissance survey, which can be carried out ahead of a magnetometer survey, to locate areas of highly magnetic soils. The chosen method(s) of MS measurement must be appropriate to prevailing ground conditions. The following must be taken into consideration:

- MS survey should not be undertaken as the only geophysical survey method;
- Areas of enhanced topsoil MS should be complemented by a magnetometer survey; and,
- Where possible, topsoil measurements should be compared and contrasted with those obtained from subsoil and local archaeological features.



Greyscale plot of geophysical survey at Aller

6.5.3 Resistivity survey

Resistivity survey should usually be conducted using an instrument with data storage and transfer facilities. Area surveys, using the Twin Probe (or Twin Electrode) configuration, are the preferred method of ground coverage. Other methods require special justification. The maximum acceptable sampling interval for area surveys is 1m.

7. GENERAL EXCAVATION METHODOLOGY

7.1 Strategy

Each excavation project will require the formation of a strategy. This should be agreed in writing (Project Design or Written Scheme of Investigation) with the HES before initiation of the project, in order to ensure that it conforms with all necessary requirements. This should take place whether the project is a pre-determination evaluation, or mitigation as part of a planning condition. The primary focus of an evaluation is to provide sufficient information on the extent, nature, character and significance of any archaeological remains as opposed to a detailed excavation. Results from an evaluation will, where appropriate, be used to design a mitigation strategy, which may include excavation or preservation *in-situ*. These potential requirements must be considered when applying the following methods.

7.2 Excavation

The excavation of archaeological trenches during field evaluation, and the removal of archaeologically sterile deposits in excavations, will normally begin with mechanical excavation. This will usually be a mechanical excavator equipped with a toothless bucket, normally 1.6m wide. Topsoil will be removed with any subsequent sterile deposits being removed in spits, until the most recent archaeologically interpretable horizon is encountered. This level will then be cleaned by a combination of mechanical and manual effort, as appropriate. All machine work must be carried out under archaeological supervision.

Archaeological excavation may require occasional further use of a mechanical excavator. This approach is only appropriate for the removal of homogeneous and non-archaeological layers, where it can reasonably be argued that more detailed attention would not produce information of value, and where their removal may give a view of underlying levels. These techniques are not appropriate on detailed stratigraphy. When used, the layers to be removed by machine must have been recorded first.

7.3 Hand cleaning

Once machine work has been completed, all faces of the trench require examination and should be cleaned using hand tools. Almost all archaeological deposits will be excavated by hand. Cleaning, examination and recording should take place in both plan and section. Consideration should be given to auger sampling of identified or potential deposits during evaluations and excavations.

7.4 Feature excavation

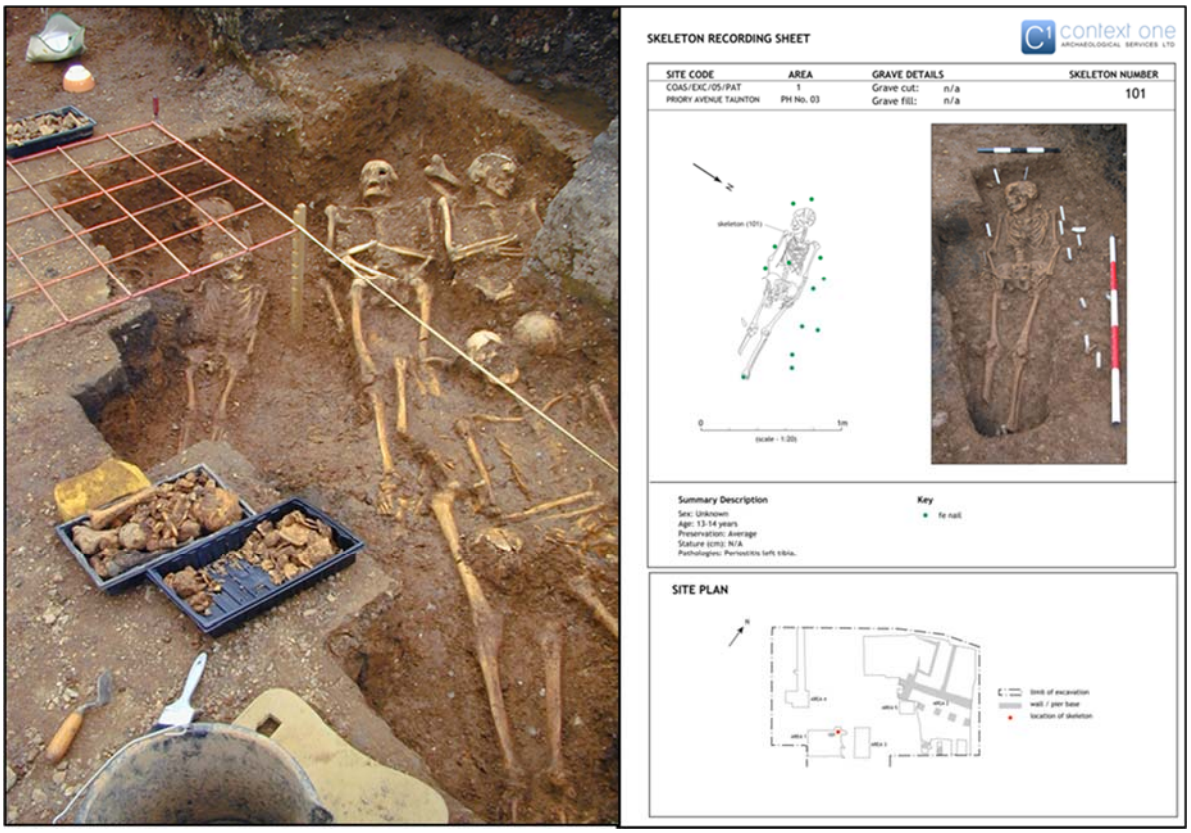
Within evaluation programmes, excavation of features should normally be limited to the minimum necessary to characterise the value or potential of the remains. Total removal of layers, deposits or features should only be undertaken to expose underlying features for recording. As an alternative to total excavation, significant levels should be partially excavated, half-sectioned or sampled for evidence of function and date. Whilst the need for preservation *in-situ* is considered paramount, this should not be at the expense of resolving the principal issues outlined in the WSI or PD. All features/deposits should be characterised and their stratigraphic relationships established and understood.

7.5 Human remains

Where human remains are encountered, wherever possible they will be left *in-situ*; where this is not possible, their excavation and removal should be undertaken on receipt of the appropriate licence from the Ministry of Justice. The Somerset Museum Service will accept human remains for

appropriate storage if the significance of the remains for future study warrants it. Otherwise arrangements must be made for reburial or cremation.

Specific guidance for the excavation, post excavation and health and safety issues relating to human remains and burial sites is outlined in the *Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England* (English Heritage and Church of England 2005) and in the Institute for Field Archaeologists Technical Paper No. 13, *The Excavation and Post Excavation Treatment of Cremated and Inhumed Remains* (McKinley and Roberts 1993).



The medieval cemetery at Taunton Priory, under excavation and skeleton record sheet

7.6 Environmental samples

Where deposits of palaeoenvironmental potential are encountered, including carbonised or waterlogged organic remains, these should be sampled as appropriate in accordance with relevant guidance (see in particular that by the Association of Environmental Archaeologists 1995 and Campbell *et al* 2011).

7.7 Treatment of natural deposits

As well as the excavation or sampling of anthropogenic (man-made) features, it may be necessary to examine naturally deposited material (geoarchaeological analysis).

Geoarchaeological studies '*can significantly enhance archaeological interpretations by making it possible for archaeologists to determine the effects of earth surface processes on the evidence for human activity at various different scales, and by providing evidence on soil resources for food production Thus, the aims of most geoarchaeological work are the understanding of both site*

formation processes and landscape changes. Geoarchaeology typically examines both soils and sediments (English Heritage 2007)**.**

7.8 Preservation in-situ

In situations where it is determined that archaeological deposits or features warrant preservation *in-situ*, suitable arrangements must be made to prevent their deterioration. The area to be preserved should be clearly defined and a suitable preservation strategy produced and agreed with HES. Occasionally HES may consider that the identified remains are of such a quality that they wish to see a detailed preservation *in-situ* strategy to ensure its suitability. Where development is to continue in the near vicinity, measures may need to be taken to ensure that accidental damage does not occur.

7.9 Recording

It is expected that a recognised *pro forma* recording system will be used for all on-site and post fieldwork procedures, with a single context system being the preferred model. The recording procedure must take into account the long-term archival requirements for archaeological records including any digital archive requirements. Due attention must be given to the drawn and photographic record. For all archival material the standards specified in Sections 2 and 12 of the Museums and Galleries Commission's *Standards in the Museum Care of Archaeological Collections* (Longworth1992) should be adhered to.

7.10 Survey control

The following requirements must be adhered to when preparing a site grid and site surveying:

- Horizontal survey control of the site will be by means of a Cartesian co-ordinate grid, using metric measurements. The location of the grid will be established, wherever possible, relative to the National Grid or identifiable features on a large-scale Ordnance Survey map;
- Separate survey grids may be maintained for each trench (or area) where appropriate;
- Vertical survey control is a requirement on all archaeological interventions and will be tied to the Ordnance Survey datum, or if this is impossible, to some fixed, permanent and identifiable object; and,
- Details of the method employed will be recorded, including the assumed height of the reference point.

7.11 Drawings

General conventions for site drawings should be as follows:

- All plans and drawings will be produced on dimensionally-stable media clearly marked with a unique site code and will be individually numbered. All scales used must be indicated.
- All plans will be drawn relative to the site grid and the grid-references of at least two marked points on the plan given.
- A measured plan, to an appropriate scale, will be made showing the location of all excavation areas relative to other features of the site, and related to the National Grid, where possible.
- A measured drawing of the exposed face of at least one of the longest sides of the trench will be made at an appropriate scale showing all deposits encountered whether natural or anthropogenic. If another side shows significant variation from this, it too will be drawn.
- Each excavation context will be recorded by means of a measured plan at an appropriate scale (usually 1:20) before it is removed in whole or part. Spot-heights will be taken on the deposit and their locations recorded on the plan.

- Each excavated section will be recorded by means of a measured section drawing at an appropriate scale (usually 1:10). The height of a datum on the drawing will be calculated and recorded.
- The locations and orientation of all section drawings will be recorded, either on a plan or relative to the site grid or both.
- Where the removal of deposits reveals a cut feature or structure, these must be recorded by means of plans and profile drawings at appropriate scales.

7.12 Written records

All written records must be marked with the unique site number. Written lists of all plans, drawings, photographs, special finds, samples etc. must be maintained. Each excavation context and feature will be recorded separately by means of a written description. The stratigraphic location of each, relative to its neighbours, will be recorded. Appropriate *pro forma* will be used. A Harris-Winchester matrix diagram should be employed where appropriate, to record stratigraphical relationships. This site record will be compiled and fully checked during the excavations.

7.13 Photographs

An adequate photographic record of the excavation will be prepared. This will include the following:

- Photographs, which illustrate the principal features and finds discovered, in detail and in context. The photographic record will also include working shots to illustrate more generally the nature of the archaeological operation mounted. Consideration should be made to the appropriateness of photographs for wider public dissemination.
- All photographs will be monochrome print, duplicated by either colour reversal (slide) film or digital format (contact the HES for details).
- Photographs of archaeological detail will feature an appropriately-sized scale, and preferably a board indicating the site code, subject and orientation. The size of the scale will be recorded in the photographic register.
- Each excavation context will be recorded photographically before it is removed in whole or part. Sections will be recorded photographically. Where the removal of archaeological contexts reveals a cut feature, this will be recorded photographically.

7.14 Specialists

To ensure the smooth running of an archaeological project from the outset, it is essential that close liaison takes place between the field team and their specialists. This will be of particular value when specialist advice might be needed, for example, if a fragile find requires lifting or environmental samples are to be taken.

Excavated Iron Age roundhouse at Cambria Farm, Taunton

7.15 Archaeological Science Contingency

In addition to normal contingency provisions allocated by the contracting archaeological unit, HES requires a compulsory archaeological science contingency (ASC) to be included in all projects. A standard level of 15% of the total tender for archaeological work (with a minimum level equivalent to the cost of obtaining one radiocarbon date) will normally be specified (or included in the PD or WSI). This level may be varied in response to the specific potential of the project, and must only be used for full analysis not assessment. The ASC must be clearly identified as a separate cost in tender documents. The ASC may be used for:

- Scientific dating (not including artefact typology);
- Geoarchaeological analysis;
- Biological analysis;
- Artefactual conservation and investigative analysis;
- Analysis of technological residues; or,
- Other science-based methods of investigation, which are considered appropriate.

The ASC may only be spent by the contractor after the HES has received and approved an assessment of potential and a proposal for analysis.

7.16 Reporting requirements, publication and dissemination of results

Please see The Report Chapter.

7.17 Deposition of archive

The archaeological archive (with the exception of digital material) resulting from fieldwork should be deposited with the Somerset Museums Service. This will be in accordance with their *Collections and Development Policy* and *Conditions for the Acceptance of Archaeological Archives,* found in Section 10.3 of this document, and within a timetable to be agreed.

Digital archive material must be deposited with a suitable Trusted Digital Repository that specialises in archaeological archives. Currently only the Archaeology Data Service (ADS) meets these criteria. Detailed guidance concerning digital archiving can be found in the ADS and Centre for Digital Antiquity publication *Caring for Digital Data in Archaeology: A Guide to Good Practice* (2013). Further

information can be found on the ADS online Guides to Good Practice http://guidestogoodpractice.org

Provision for the costs of depositing 'born-digital' and 'digitised' data with the ADS must form part of the fieldwork budgeting. Costs for the preparation and storage of the digital archive can be obtained from the ADS and estimated for simple archives using their online cost calculator.

8. TREATMENT OF ARCHAEOLOGICAL MATERIALS

8.1 Introduction

This section gives an outline of the minimum requirements for the handling of artefactual material retrieved from archaeological interventions.

8.2 Background

All staff, including all sub-contracted specialists, must be made aware of First Aid for Finds (Watkinson and Neal 1998) and the Museums, Libraries and Archives' Standards of Collection Care series (see http://www.collectionscare.org.uk) and should follow the procedures listed therein. It is imperative that the implications of these documents are noted at the tendering stage of any project because they can have significant financial and practical implications. The English Heritage publication *Environmental Archaeology* (Campbell *et al* 2011) provides detailed guidance concerning good practice for environmental archaeology.

8.3 Processing

8.3.1 Bulk finds

All bulk finds will be cleaned, marked and packaged as appropriate for each material, according to the standards of best practice.

8.3.2 Registered finds

All registered finds should be processed and packaged according to standards of best practice. All should be assigned and marked with a unique identifier (the museum accession number). Where appropriate, finds should be submitted for cleaning, stabilisation, identification and X-radiography. The register of finds will normally include all metalwork, worked bone, glass etc. with the addition of all material selected for citation in publication. The following is the minimum amount of information that should be recorded for each object:

- Site code and accession number;
- Context;
- Registration number;
- Material;
- Object description;
- X-radiograph number;
- Dimensions (and preferably an accurate sketch drawing); and,
- Comments, if appropriate.

8.3.3 Environmental samples

Arrangements should be made for the processing of all samples during the excavation or at the assessment stage. Unprocessed samples should not normally be retained for long-term storage and curation.

In the event that an exception is agreed with the recipient museum the samples must be prepared for long-term storage before delivery. All such samples must be labelled according to type (eg industrial, environmental etc.) and the reason for their retention clearly specified. Certain types of samples may be retained in specialist research laboratories.

Environmental specialists should be involved in the handling of samples. All material must be adequately recorded, labelled, packaged and stored. An assessment of the samples retrieved should

be made to give an overview of the type, abundance, quality, preservation and academic potential of the environmental material.

The following is the minimum amount of information that should be recorded for each sample:

- Site code and accession number (plus sample number if appropriate);
- Context;
- Sample type;
- Weight/volume; and,
- Comments, if appropriate.

Analysis of plant macrofossils

8.3.4 Pottery and ceramic building materials

All relevant publications relating to the minimum standards required should be referenced and used. This is particularly relevant where appropriate specialist guidance exists, for example the Medieval Pottery Research Group's *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramic*s (2001).

The following is the minimum information that should be recorded for each context:

- Site code, context and accession number;
- Date range;
- Fabric code or detailed fabric description;
- Diagnostic forms;
- Condition of group, where appropriate (eg smashed, burnt, abraded);
- Obvious associations with other contexts;
- Weight in grams;
- Suitability for illustration, if appropriate;
- Decoration, where applicable; and,
- Additional comments, if appropriate

Iron Age pottery from Hinkley Point excavations

All pottery should be submitted in context group except for material included in a fabric or type series and sherds cited in the publication. Each sherd should be clearly marked with the accession number as site identifier, context code and, where the sherd is cited, its individual accession number.

8.3.6 Faunal remains

Faunal remains should be submitted in context group, except for material cited in the publication. Each item should be clearly marked with the accession number as site identifier, context code and, where the item is cited, its individual accession number. The following should be considered:

- Quantification by species;
- Minimum number of individuals;
- Butchery;
- Frequency of species and parts of the skeleton represented; and,
- Evidence for disease and trauma.

8.3.7 Organic remains

Historic England has produced guidelines dealing with different categories of organic material (leather, wood etc). The most recent being *Waterlogged Organic Deposits: Guidelines on their Recovery, Analysis and Conservation* (English Heritage 2012). These should be used as a minimum standard for processing and reporting.

Mesolithic flint tool found at Silk Mills, Taunton

8.3.8 Lithics

The following is the minimum information that should be recorded:

- Site code and accession number;
- Context;
- Methods of recovery;
- Quantification and breakdown by category within context or context group, depending on scale and circumstances. Categories should reflect main stages of reduction sequence/chaîne opératoire, with finer subdivisions (eg particular kinds of core or finished implement) as appropriate.
- Definition of categories where they are unfamiliar, or more than one meaning is current;
- Raw materials used and likely sources;
- Condition;
- Flint and stone-working processes represented;
- Distributions, horizontal and stratigraphic, both of all worked lithics and of significant categories;

- Products present and absent;
- Activities likely to be represented;
- Periods at which they are likely to have occurred;
- A record of any intrinsically informative assemblages or artefacts, regardless of context
- Interpretation, including consideration of depositional practices, where appropriate; and,
- Illustrations, where appropriate (see Martingell and Saville1988).

8.4 The finds archive

At the end of the project, the artefactual element of the site archive should consist of the following:

- The finds themselves, correctly boxed, packaged and labelled;
- The basic documentary record (including a microform and computerised copy);
- The X-radiographs and other sampling or analytical reports;
- A finds report;
- Any drawings, photographs (prints and/or slides) and illustrations;
- A statement of the number and sizes of boxes in which the different categories of finds are stored;
- All samples stored in specialist laboratories should be listed along with the full address of the laboratory and a description of the sample type;
- A list of all codes used with a full expansion;
- Cross-references to publication(s); and,
- A copy of every published report relating to the project.

9. THE REPORT

9.1 Introduction

This section provides guidance on the preferred content of archaeological reports. While it is expected that much of the information listed here will be incorporated in to specific project reports, it is accepted that each project will have its own requirements. There are four broad categories of report:

- The evaluation, assessment or mitigation report, usually for submission in support of a planning requirement written to inform the client and planning authorities;
- The brief academic report, to notify the archaeological community of the work;
- The full academic publication, to analyse and synthesise the full implications of the fieldwork, which is addressed to the specialist archaeological community; and,
- The popular publication, to share the results of the fieldwork with the public.

These guidelines, while applicable in part to desk-based assessments, are largely aimed at field evaluation, watching brief and excavation reports. It is not expected that every report will follow the

Iron Age bone comb from Ham Hill

exact format given but they should contain the information suggested. The advice on report production within the *Management of Archaeological Projects* (English Heritage 1991) and *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England 2015) is also considered relevant.

9.2 Reports as part of the planning process

Most evaluation and assessment reports are prepared for submission in support of applications for planning permission, or in response to a planning requirement. They should therefore present the archaeological information in a way such that planners can appreciate the full archaeological impact of a proposed scheme. At the same time the report must ultimately satisfy the requirements of the client. It is not possible to establish detailed guidelines that will apply in all cases, and much will depend on the wishes and needs of the clients and planning authorities involved. Sometimes there are occasions when evaluation reports are needed before the results of fieldwork can be fully assessed, and it may be appropriate to produce interim reports. In cases where works has been carried out to a Scheduled Monument, all such reports should be made available to the client, the relevant planning authority and Historic England.

One paper copy and a digital version in .pdf/a format of each report must be supplied to the HES.

9.3 Report outline

A report must define the location, extent and significance of any archaeological remains and illustrate how these may be affected by any specific proposals. This often requires a different level of reporting than would normally be considered appropriate in archaeological reports produced for other reasons (as interim, archive or publication reports).

9.4 Draft report

In some cases, it may be advisable to discuss the contents of a report with the HES and the local planning authority at draft stage.

9.5 Report content

The final report should consist of the following sections:

- Cover page;
- List of contents, figures, tables, etc;
- Non-technical summary;
- Introduction;
- Planning background;
- Archaeological and historical background;
- A description of the methodology employed, and where appropriate an evaluation of the strategy (ie a confidence rating);
- Results;
- Discussion including a comment upon the archaeological significance of the results, with reference to other published archaeological research from the area such as the *South West Archaeological Research Framework* (Webster 2008);
- Relevant plans, sections and photographs;
- Bibliography; and,
- Appendices.

9.5.1 Cover page

The cover page of the final report should contain the following information:

- The full site address (or name if applicable);
- The site code and the museum accession number;
- An Ordnance Survey grid reference for the site;
- The date of production; and,

- The name of the author of the report and its originating body.

9.5.2 List of contents, summary and introduction

The report should be preceded by a list of all contents, including chapters, figures, plates and tables. There must be a non-technical summary of the context, findings and conclusions of the report, which covers all the main points within the report. A general introduction should include the following:

- Who commissioned the report;
- Why the report was needed (eg to inform the design of a redevelopment scheme, for submission in support of an application, to facilitate disposal/sale of a site, in order to meet existing planning constraints etc.);
- Constraints in the preparation of the report (such as working to the specification, limitations in site access/availability, funds, time etc.); and,
- Acknowledgements.

Digital manipulation of graphics

9.5.3 Planning background

There must be a summary of the planning background which led to the generation of the project. This should include:

- A brief summary of the planning history of the site and planning reference number;
- The local planning authority references to any current planning applications;
- The text of, or references to any relevant, outstanding planning conditions;
- Details of any other planning constraints (eg Scheduled Monuments, Listed Buildings, Tree Preservation Orders, Sites of Special Scientific Interest, etc); and,

- A clearly marked plan of the application area as proposed, or likely to be proposed.

9.5.4 Archaeological and historical background

The next section should be a brief archaeological background to the site and its immediate vicinity. This will allow for the project to be viewed in its context and should include:

- The principal archaeological reasons for the work being commissioned;
- A brief summary of the geological, historical, topographic and archaeological background, as relevant;
- A brief summary of HER records pertinent to the site; and,
- Reference to any assessment reports, PDs, WSIs or research designs prepared for the site.

9.5.5 Methodology

The report should contain a clear statement of the project's overall aims and objectives. In most cases this will have been stated in the Specification, PD, or WSI but may have changed, in agreement with the HES. The report must contain a clear statement of the archaeological methodology utilised in planning and implementing the project. Consideration should be given to the inclusion of the following:

- Any fieldwork conducted that was intended to assess known sites, or used as a prospection method;
- Any logistical constraints, such as services etc.;
- The use of predictive models in designing fieldwork;
- The reason why this type of exercise was conducted (ie why a field evaluation was prepared instead of a desk-based assessment or vice-versa, etc.);
- The areas sampled and studied (including a site location plan based on the 1:2500 Ordnance Survey) and a trench location plan at 1:200 or 1:100 showing the location of the areas investigated. Often it is useful to express the sample size excavated as a percentage of the study area;
- The methods employed (ie stratigraphic excavation, augering, fieldwalking etc.);
- The time and resources dedicated to the various elements of the investigation; and,
- Any deviations from the originally agreed programme of archaeological works (eg trench location or layout).

9.5.6 Results

The results must comprise a thorough description of the results of the project. This section should:

- Define and briefly describe the nature, location, extent and date of archaeological and environmental material covered.
- Include plans of principal archaeological horizons, structures and phases as well as potential deposits.
- Include plan and section drawings (include levels above Ordnance Datum on all main archaeological horizons and features, indicating clearly any significant changes in level or slope).
- Include a land use diagram, or simplified stratigraphic diagram, where complex changes in site use were identified.
- Avoid presenting excessive detail in the text by tabulating most information on context descriptions, archaeological levels, etc. (where such tables run to some length they should be appended to the report).

- Quantify the area/sample studied/recovered (as a percentage of the development area - and where possible by volume, including the number of stratigraphic units identified, bulk finds etc.);
- Contain where relevant, computer generated plots of geophysical survey data, interpretation and distribution plots, analysis and interpretation of fieldwalking and other data.
- Include specialist descriptions of artefacts and/or ecofacts fully cross-referenced to the register of finds, and names of authors.
- Contain photographs of the site, which should include at least a general view of the locality, a view of work in progress and a record of all archaeological deposits in both plan and section. All photographs should be of photographic quality or in high resolution scanned and in original format ie colour or black and white. Photocopies should not be used. More detailed information on site photographs is given in Section 6.13 above.
- Contain Harris-Winchester or similar matrices for complex stratigraphical problems.
- Contain archaeological discussion and conclusions.

In order to add further detail to the results where appropriate and necessary, consideration should be given to the inclusion of the following:

- Mapping the present site topography including evidence of ground slope/contours.
- Combining evidence gained from the site evaluation with a map regression exercise and other relevant information to map the likely extent and depth of previous ground disturbance by activities associated with basements, quarries, services and other modern features.
- Mapping those areas where constraints (such as areas of ground contamination, wildlife/ environmental interest, etc), limit or prevent access to archaeological deposits.
- Describing and mapping the anticipated extent of archaeological deposits and structures across the site, distinguishing between areas directly observed, those where knowledge can be projected and those where the evidence is inadequate.
- Mapping differences across the site in the likely quality (including a consideration of any likely difference in the quality of organic survival) and quantity (by depth, stratigraphic complexity, and/or density of finds) of the archaeological resource.
- Giving an indication of the possible impact and development footprint of any current redevelopment scheme or schemes on the archaeological remains (illustrating this by way of plan and schematic section).
- Estimating the percentage of surviving archaeological deposits threatened by any such proposals.
- Using reconstructed sections to illustrate differences in level between actual and proposed building footprints and their likely impact on buried archaeological remains.
- A critical review of the effectiveness of the methodology.

The report must also contain an assessment of importance of the findings of the project together with a consideration of the significance of the archaeology within a local, regional and national context (for example the South West Archaeological Research Framework - SWARF). Any assessment should avoid making any recommendations for further archaeological action regarding the site, unless otherwise required by the HES.

The terminology of the Secretary of State for the Environment's published non-statutory criteria for the scheduling of monuments (Ancient Monuments and Areas Act 1979) should be considered for

use in the assessment of national significance, where appropriate. Artefactual and environmental potential should also be assessed. The main body of the report must end with some conclusions and comments on the effectiveness of the project in meeting its original objectives. Some information is best presented in appendices. This is likely to include:

- A bibliography of sources consulted and referred to in the text (using the Harvard system). In some cases, it will also be appropriate to list sources consulted (eg websites) but not referred to in the text;
- Details of the present location and size of the archive (including, find, paper archive and digital archive) and plans for its future;
- Any bore-hole, archaeological assessment or archive reports that offer important supplementary information;
- Tables of archaeological information extracted from the main body of the report for reasons of length or to ease reference;
- Details of any mitigation strategy already proposed for the site (if available), including any archaeological project design and specification of works; and,
- Copies of any desk-based assessments prepared for the site (where these have not already been made available).

9.6.7 The finds report

A finds report should accompany all finds deposited with the Somerset Museum Service. The report should include all the following:

- A statement about the condition of the material recovered, noting whether site conditions may have been favourable or precluded the preservation of certain materials;
- A statement on how the finds were collected. Any value or bias that the collection and sampling strategies may have created should be noted;
- A statement on any disposal policy (this must be agreed with the Somerset Museums Service) and a list of material to be considered in the five-yearly review;
- A statement concerning the potential of the finds both to answer site based questions, regional research topics and problems intrinsic to the finds themselves;
- A statement outlining key objects or groups;
- A quantification of the data broken down into the major stratigraphic units of the site, if appropriate;
- A list of all the finds by material type;
- A list of all staff and specialists involved in the project;
- Recommendations for long-term curation and storage, highlighting any particularly vulnerable items;
- The conservation report and all associated records, if any active conservation work has been undertaken;
- A statement regarding any further work that should be done (academic or curatorial), to include any material that could be considered for disposal in the five-yearly review; and,
- Identification of any potentially hazardous components of the archive, which should come properly packaged according to the hazard posed.

9.6.8 Geophysical survey reports

English Heritage (2008) and the CIfA's guidance (2014e) concerning the production of a geophysical survey report should be followed. Both recommend the following:

- The project manager of any geophysical survey should have a minimum of three years supervisory experience of archaeological geophysics;
- The geophysicist who has undertaken the fieldwork should also be responsible for the interpretation and reporting of the results;
- The archaeological and geomorphological conditions on the site must be taken into account;
- The report must always attempt to identify the presence and/or absence of archaeological features and offer an explanation for their pattern; and,
- A clear distinction must be made between interpretation, which is scientifically founded and that which is based upon informed speculation.

Please note that an electronic copy of the raw data should be digitally archived for future interrogation. A copy of the report must be deposited with the Somerset HER.

9.7 Academic Publication

Provision will be made for the appropriate full academic publication of any significant results that will not form part of any further work. A summary report will be produced, to appear in the *Proceedings of the Somerset Archaeological and Natural History Society* (and where appropriate a national journal or other publication) even when an excavation encountered no archaeological deposits. This should be sent to the Somerset HER, before the end of the January following the calendar year in which the work ended. Provision for popular publication and dissemination will be made where appropriate (eg at the Somerset Archaeological and Natural History Society annual archaeology day conference, press coverage in consultation with the appropriate HES staff).

10. ARCHIVING

10.1 Introduction

Before the commencement of fieldwork it is essential that provision is made for long-term storage of the archive. It is essential that archaeological material be deposited in a museum which has expertise and resources to provide adequately for long-term conservation and reference. Up to the point of deposition, English Heritage's guidance note *Safeguarding Archaeological Information: Procedures for minimising risk to undeposited archaeological archives* (Brown 2011) should be followed.

10.2 Somerset Heritage Centre

The main repository for archaeological archives in Somerset is the Somerset Heritage Centre.

10.3 Conditions for the acceptance of archaeological archives

This document should be read in conjunction with Somerset Museums Service's *Collections and Development Policy*. The Somerset Museums Service collecting area covers the post-1974 county of Somerset. Only in exceptional circumstances (and with the agreement of the other museums service concerned) will material be accepted from outside this area. The South West Heritage Trust also manages the North Somerset Museum collection and while much of the advice on archive deposition given below applies to both, separate arrangements exist regarding accession numbers, ownership etc. Contact the Somerset Museums Service for advice on North Somerset matters. The Somerset Museums Service reserves the right to refuse to accept archives that do not meet the following conditions or cannot be cared for in an appropriate manner.

10.3.1 Notification

To arrange deposition of archive material, the HER must be contacted prior to commencement of work. This should be done by emailing historicenvironment@swheritage.org.uk giving the site name, grid reference, type of work proposed and planning reference number (if appropriate). The HER will provide a museum accession number and HER event number. From 1/4/2018 there will be an initial charge levied for archive storage (see Museum Storage Charges). The accession number will serve as the unique identifier/code for the site. All material from and relating to the site must be marked with this number in a manner agreed with the Somerset Museums Service, using archive-quality materials. The accession number should be cited on all correspondence and in all publications.

10.3.2 Donation

The archive must be donated fully and freely to the Somerset Museums Service, in perpetuity. Arrangements for this transfer of ownership will be undertaken by the body undertaking the fieldwork. It will be the responsibility of the project organiser to demonstrate that the person(s) or body, in whom title to the material rests, consents in writing to this transfer of ownership. This should be done using a SMS *Transfer of Title* form (available from the Somerset Museums Service). At this point the finds become the property of Somerset County Council and will be managed according to Somerset Museums Service standards.

10.3.3 Acceptance

Only complete archives will be considered, except in circumstances agreed with the Somerset Museums Service (SMS). The archive (finds and records) will be ordered, packed, fully indexed, cross-referenced and documented in accordance with professional standards and specifically to the standards and procedures operated by the SMS. Any process of selection or sampling must be done in consultation and agreement with the SMS and appropriate specialists. Such a process must be undertaken with reference to existing standards and be fully documented. Copyright of completed

texts, illustrations and photographs in whatever format will remain that of the originator but will be licensed to the Somerset Museums Service for the purposes of display, interpretation, provision of information and education within the Museums Service, other venues and the world-wide web, publication in appropriate journals, museum literature, research programmes and promotion of the Somerset Museums Service.

10.3.4 Requirements

At the project's expense, each artefact will be fully cleaned, conserved and stabilised before deposition, to a recognised standard, by a professionally qualified conservator. Copies of the conservation records will form part of the archive. All iron objects should be X-rayed and copies of the radiographs deposited. Any proposal involving partial or total destructive analysis of any of the finds must be discussed and agreed with the Somerset Museums Service and be conducted according to agreed procedures.

The following procedures must also be adhered to:

- The physical arrangements for the transport and care of material selected for specialist examination must be agreed between the fieldwork director, specialist and Somerset Museums Service. This is especially important where the specialist is not based with the fieldworker or a museum. Appropriate documentation and insurance must be arranged;
- Written records (texts, plans and other paper records) should be in standardised sizes and in appropriate acid-free bindings. Photographic material should be presented in archive quality files;
- Digital media will not be accepted as part of the archive. The digital component of the archive must be deposited with a suitable Trusted Digital Repository that specialises in archaeological archives. Currently only the Archaeology Data Service (ADS) meets these criteria.
- Two copies of an indexed inventory of the complete fieldwork archive should be provided. This should include lists of small finds, a list of containers of the bulk finds and a list of plans, maps, photographs etc.;
- Copies of all publications relating to the project and archive including interim reports and final publication must be provided free of charge to the Somerset Museums Service;
- All bags, boxes or other containers must bear the allocated accession number in permanent black ink;
- All artefacts are to be deposited in standard, acid-free, archival quality cardboard boxes with brass staples or polythene containers with appropriate acid-free packing, silica gel, etc. Unstable and untreated material must be packed in the appropriate microclimate. Finds and assemblages selected for publication should be packed in marked containers so as to be easily identifiable. The standard cardboard box sizes used by the Somerset Museums Service are:

  48 x 30 x 30 cm
  48 x 30 x 15 cm
  24 x 30 x 15 cm

- Where appropriate finds will be individually packaged in Stewart or similar containers with suitable archive-quality packaging and appropriate micro-environments;
- For the purposes of storage, all finds are to be grouped by material type. No container should weigh more than 8kg in total;

- All artefacts must be individually labelled in an appropriate manner for their material with the accession number. A full catalogue of this material will be provided on paper and in digital form to accompany the material;
- Under normal circumstances environmental samples will not be accepted for long-term storage;
- The whole archive (finds, records, photographs etc.) should be handed over to the Somerset Museums Service on a single occasion. Material should not come in advance unless for the purpose of conservation or specialist examination. If for any reason the archive is incomplete at the time of transfer this must be drawn to the attention of Somerset Museums Service staff and a date given for the delivery of the remainder. If any part of the archive is to be deposited elsewhere this must be discussed and agreed with the Somerset Museums Service and fully recorded;
- The Somerset Museums Service has the right to research, study, display, publish and provide public access to all information and finds contained in the archive immediately after receipt or after a period to be agreed; and,
- Provision of the capitalised costs of long-term storage must form part of the fieldwork budgeting.

10.3.5 Museum storage charges

From 1/4/2018 the long-term storage of archaeological archives, making them accessible for study in the future, will be charged at the rate of £50 + VAT per paper archive box or standard-sized finds box (48 x 30 x 15 cm). Larger size finds box (48 x 30 x 30cm) will be charged at £100 + VAT.

An initial charge of £100 plus VAT will be made when the accession number is issued and will cover the accessioning process and the storage of the first standard-size or paper archive box. Many projects will not require further payment but any additional boxes will be charged at the rate applicable at the time of obtaining the accession number (currently that given above). This will be collected at the time of deposition.

Deposition of archives where an accession number has not been obtained in advance will be charged at the rates in force at time of deposition.

In the event that a project is cancelled, the initial charge will be refunded. In the event that a project records nothing of archaeological significance (so that the project archive comprises only the report of the fieldwork) the box cost component of the initial charge will be refunded.

11. ACKNOWLEDGEMENTS, CONTACT DETAILS AND REFERENCES

11.1 The South West Heritage Trust

The Historic Environment Service, Somerset Museums Service and Finds Liaison Officer are based in the Somerset Heritage Centre near Taunton. Contact details are as follows:

Somerset Heritage Centre,
Brunel Way,
Norton Fitzwarren,
Taunton,
TA2 6SF

Telephone: 01823 278805 (SHC switchboard)

Historic Environment Service email: historicenvironment@swheritage.org.uk
Somerset Museums Service email: museums@swheritage.org.uk
Portable Antiquities Scheme email: pas@swheritage.org.uk

The online Somerset HER can be found at: www.somersetheritage.org.uk

11.2 Historic England

The regional Historic England Inspectors of Ancient Monuments can be contacted at the South West Regional Office:

Historic England
29 Queen Square
Bristol BS1 4ND

Telephone: 0117 975 0700

Email enquiries: southwest@historicengland.org.uk

A number of best practice and technical advice documents can be obtained from Historic England. For further information check the Historic England website: www.historicengland.org.uk

11.3 Acknowledgements

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11.4 Photography and image credits

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11.5 Abbreviations

ASC	Archaeological Science Contingency	PD	Project Design
HER	Historic Environment Record	PRN	Primary Record Number
HES	Historic Environment Service	SMS	Somerset Museums Service

HELM	Historic Environment Local Management	WSI	Written Scheme of Investigation
CIfA	Chartered Institute for Archaeologists		
IHBC	Institute of Historic Building Conservation		
LPA	Local Planning Authority		
NPPF	National Planning Policy Framework		

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