The standard and guidance for archaeological excavation was formally adopted as IFA approved practice at the Annual General Meeting of the Institute held on 22 September 1995.

## The Standard

An archaeological excavation will examine and record the archaeological resource within a specified area using appropriate methods and practices. These will satisfy the stated aims of the project, and comply with the Code of conduct, Code of approved practice for the regulation of contractual arrangements in field archaeology, and other relevant by-laws of the IFA. It will result in one or more published accounts and an ordered, accessible archive.

## **Definition of excavation**

The definition of archaeological excavation is 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.

## **Purpose of excavation**

The purpose of excavation is to examine 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.

### Occurrence

Excavation may arise:

- in response to a proposed development which would threaten the archaeological resource

- as part of the planning process (within the framework of appropriate national planning policy guidance notes) and/or development plan policy

- as part of an Environmental Impact Assessment (EIA) (see 3.1.3 below)

- outside the planning process (eg ecclesiastical development, coastal erosion, agriculture, forestry and countryside management, works by public utilities and statutory undertakers)

- within a programme of research not generated by a specific threat to the archaeological resource

- in connection with management plans and mitigation strategies by private, local and national or international bodies

Excavation may therefore be instigated or commissioned by a number of different individuals or organisations, including local planning authorities, national advisory bodies, government agencies, private landowners, developers or their agents, archaeological researchers, etc. **GUIDANCE** 

# 1 Introduction

**1.1** This guidance seeks to define best practice for the execution of excavations and concomitant reporting, in line with the by-laws of the IFA, in particular the Code of conduct and Code of approved practice for the regulation of contractual arrangements in field archaeology. It seeks to expand and explain general definitions in the Codes for the practice of fieldwork and reporting.

**1.2** The Standard and guidance apply to all types of excavations (land-based, inter-tidal and underwater) whether generated by

academic research, by local interest, through the planning process, by management proposals or by any other proposals which may affect the archaeological resource within a specified area.

**1.3** In addition, the guidance seeks to amplify directions given in appropriate national planning policy guidelines (see Appendix 6), and be compatible with current guidelines issued by regulatory authorities.

**1.4** The terminology used primarily follows PPG 16, PPG 15, PG (Wales) as amended, WO circular 60/96, WO circular 61/96, PPS 6, NPPG 5 and guidance issued by the Association of County Archaeological Officers (ACAO 1993), English Heritage (1991) and Historic Scotland (1996a) with amplifications where necessary. It also seeks to take account of differences in terminology, legal and administrative practice in different parts of the United Kingdom, Channel Islands and the Isle of Man. A glossary of terms used can be found in Appendix 1.

**1.5** This document provides guidance for work carried out in the United Kingdom, Channel Islands and Isle of Man. Although general guidance is given, this document cannot be exhaustive, particularly in its treatment of legislative issues. Archaeologists must ensure they are familiar with the specific legislation and common law pertinent to the area in which they are working. Archaeologists, commissioning bodies and others may find it useful to consult the relevant documents listed in Appendix 6, and can obtain further guidance from the appropriate advisory bodies listed in Appendix 7.

# 2 Principles: The Code of conduct and other by-laws of the IFA

**2.1** An archaeologist undertaking archaeological excavations must adhere to the five major principles enshrined in the IFA Code of conduct, and the rules governing those principles.

1. The archaeologists shall adhere to the highest standards of ethical and responsible behaviour in the conduct of archaeological affairs.

2. The archaeologist has a responsibility for the conservation of the archaeological heritage.

3. The archaeologist shall conduct his or her work in such a way that reliable information about the past may be acquired, and shall ensure that the results be properly recorded.

4. The archaeologist has the responsibility for making available the results of archaeological work with reasonable dispatch.

5. The archaeologist shall recognise the aspirations of employees, colleagues and helpers with regard to all matters relating to employment, including career development, health and safety, terms and conditions of employment and equality of opportunity.

**2.2** Further, the Code of approved practice for the regulation of contractual arrangements in field archaeology specifically addresses professional conduct in situations where work is sponsored or commissioned on a contractual basis, especially as part of development controlled by the planning process. It provides guidance on professional behaviour where more than one individual or body is competing for the same work, and seeks to ensure that the terms for all work are clearly defined, normally by contract.

# **3 Procedures**

# 3.1 Project identification

*3.1.1* Within the planning process, an appraisal (see Appendix 1 for definition) of the proposed area will have been carried out, normally by the planning archaeologist or curator. The preservation of archaeological remains is a material consideration in the planning process, and local authorities can reasonably request further information about archaeological matters so that 'an informed and reasonable planning decision can be taken' (PPG 16 para 21, PPG 15 para 2.11, 2.15, 2.17 and 3.23, PG Wales para 136, NPPG 5 para 14, PPS 6 para 3.13). Such information is normally provided through carrying out a desk-based assessment and/or field evaluation.

*3.1.2* Depending on the results of the assessment further archaeological work may be required and such requirements are normally determined by the planning archaeologist or curator (but see 3.2.8). These requirements will form part of an agreed mitigation strategy and may be implemented by way of a planning condition or other agreement.

*3.1.3* Environmental Impact Assessment (EIA) applies to projects potentially having significant environmental effects (EC Directive 85/337, and as implemented in the UK via various Statutory Instruments etc). EIA involves appraisal, deskbased assessment and in many instances field evaluation. The resulting Environmental Statement (ES) will contain recommendations for mitigating impact on the archaeological resource. The agreed mitigation strategies may include archaeological excavation and such work would not normally take place before a planning inquiry or public local inquiry.

*3.1.4* In response to a development outside the planning process, the principles of desk-based assessment and/or field evaluation, leading to the formulation of mitigation strategies as appropriate, should similarly apply.

*3.1.5* In a research context, excavation area(s) will have been identified and selected by an archaeologist on the basis of specific aspects or themes relating to defined research interests. This could include work undertaken through universities, central government agencies, local authorities, museums, independent trusts, amateur organisations and societies, private companies, groups or individuals.

*3.1.6* Management proposals by private landowners or others may also result in excavations, to obtain information in order to enhance or protect the understanding and management of the environmental or archaeological resource.

*3.1.7* However it arises an archaeologist should only undertake an excavation which is governed by a written specification or project design (see Appendices 2 and 3) agreed by all relevant parties, as this is the tool against which performance, fitness for purpose, and hence achievement of standards, can be measured. In Northern Ireland an archaeologist may only undertake an archaeological excavation governed by an excavation licence obtained from the EHS and held by the person responsible for directing the excavation.

3.1.8 The specification or project design is therefore of critical importance.

## 3.2 Briefs/project outlines, specifications and project designs

*3.2.1* The planning and preparation stage of any project is key to its success. This section addresses the initial design stages of an excavation.

*3.2.2* A brief (or project outline in Scotland) is an outline of the circumstances to be addressed, with an indication of the scope of works that will be required (IFA Code of approved practice for the regulation of contractual arrangements in field archaeology, ACAO 1993 Appendix D, 14–15; Historic Scotland 1996a, 2–6). It does not provide sufficient detail to form the basis for a measurable standard; but it could form the basis for a specification or a project design.

*3.2.3* A specification sets out a schedule of work in sufficient detail for it to be quantifiable, implemented and monitored (ACAO 1993 Appendix D, 15). It should be sufficient to form the basis for a measurable standard.

*3.2.4* A project design also sets out a schedule of works in sufficient detail for the work undertaken to be quantifiable, implemented and monitored, and therefore also forms the basis for a measurable standard. However, a project design may include additional information which covers contractual details such as staffing levels or cost relevant to the commissioning but not necessarily the monitoring body. A project design may be prepared in response to a brief/project outline or specification or it may be a research proposal independent of the planning framework (project designs and their contents are further addressed in Appendix 3, English Heritage 1991 Appendix 2, Historic Scotland 1996a, 7).

*3.2.5* A brief/project outline or a specification may form the basis for a project design. For excavations within the planning framework, the brief/project outline or specification will usually be prepared by the planning archaeologist or curator and issued by the commissioning body (the developers or their agents) to selected tenderers. The brief/project outline or specification may be prepared by the applicants or their agents, but it is essential that the planning archaeologist/curator has agreed the proposals so that they have been accepted as 'fit for purpose'.

*3.2.6* Briefs/project outlines, specifications and project designs must be prepared by suitably qualified and experienced persons, using specialist advice where necessary.

*3.2.7* In the case of EIA, the brief/project outline or specification will usually be prepared by the developers or their agents, discussed with the planning archaeologist/curator and issued to tenderers. This may also apply to management proposals.

*3.2.8* Proposals for excavations not prompted by a threat to potential archaeological remains will normally take the form of a project design prepared by the researching archaeologist, and agreed with any commissioning body. If there is no external commissioner there must nevertheless be a written design so that the validity of any models or questions posed can be properly assessed, or so that legal requirements (eg Scheduled Monument Consent) can be properly applied.

*3.2.9* No excavation should take place on the basis of a brief/project outline alone, as it could not achieve the appropriate standard, there being nothing to measure performance against.

*3.2.10* The specification or project design must be expressed in sufficiently robust terms and in sufficient detail to withstand challenges on archaeological or legal grounds.

*3.2.11* In preparing a specification or a project design the archaeologist must give full consideration to all available practicable methods of excavation (Annex 1), and decide upon the most appropriate and best available to meet the purpose of the work, seeking specialist advice where necessary. An archaeologist preparing a specification or project design must examine all appropriate sources, be fully apprised of all relevant legislation, and abide by it.

*3.2.12* In both the planning and execution of excavations, where there is no immediate threat to the archaeological resource, the archaeologist must ensure that the excavation causes the minimum damage or destruction necessary to meet the stated research aims of the project.

*3.2.13* The project design should include an agreed collection and disposal strategy for any digital content produced during the excavation as well as any artefacts and ecofacts (see also 3.3.8).

*3.2.14* It follows that such fieldwork may be properly terminated, as long as the resource is left in a stable condition, before the project design is fulfilled, if remains of such significance are discovered as to call into question the decision to excavate. In such circumstances the archaeologist should inform the relevant bodies and seek to ensure that appropriate management measures are taken (see also 3.3.1).

*3.2.15* The specification or project design must be suited to the project under consideration; any methods advocated must reflect the nature of archaeological remains likely to be found and should not become inflexible irrespective of site. Standard templates should therefore be used with care. Other considerations include 'reasonableness' in relation to scale of threat, presence of buildings, land use, value for money etc.

*3.2.16* When preparing a specification or project design, consideration should be given to the inclusion of appropriate contingency arrangements with respect to field procedures and thus often resourcing. In many cases it may not be possible to meet the project objectives without a reasonable degree of flexibility to apply professional judgement in the field. Commissioners and curators should be advised that overly rigid requirements might unavoidably result in a failure to meet archaeological and non-archaeological objectives. Contingency arrangements should not be open-ended but should be properly specified in their own right and reflect prior knowledge of

the site, the physical context of the site and the primary objectives of the excavation. Contractors must be in a position to justify in detail the eventual implementation of contingency arrangements.

*3.2.17* The specification or project design should contain, as a minimum, the following elements:

- non-technical summary
- site location (including map) and descriptions
- context of the project
- geological and topographical background
- archaeological and historical background
- reference to legislation
- general and specific aims of fieldwork
- field methodology
- collection and disposal strategy for artefacts and ecofacts
- arrangements for immediate conservation of artefacts
- post-fieldwork methodology and report preparation
- report preparation (method)
- publication and dissemination proposals
- copyright
- archive deposition
- timetable
- staffing
- Health and Safety considerations
- monitoring procedures
- contingency arrangements (if appropriate)
- licensing arrangement/criteria (for excavation in Northern Ireland)

*3.2.18* The contents and different weighting of detail between specification and/or project design are amplified in Appendices 2 and 3. Briefs/project outlines and specifications are also discussed in detail in ACAO (1993) and Historic Scotland (1996a, 2).

*3.2.19* An archaeologist responding to a tender which includes a brief/project outline or specification may refer to these in the project design, taking care to include sufficient detail.

*3.2.20* In all cases, the local archaeological curator (and where appropriate, the national agency curator) must be informed of fieldwork in his or her area. Unless there are overriding reasons against it, local archaeological societies etc should be informed of fieldwork.

*3.2.21* The specification or project design should identify relevant data standards for record organisation and content that will be used in information recording systems employed by the project.

# 3.3 Fieldwork

3.3.1 The specification and/or project design must be agreed by all relevant parties before work

commences. All work must conform to the agreed specification or project design. Any variations must be agreed in writing by all relevant parties.

*3.3.2* Sufficient and appropriate resources (staff, equipment, accommodation etc) must be used to enable the project to be completed successfully, within the timetable, to an acceptable standard, and comply with all statutory requirements. Any contingency elements must be clearly identified and justified. It is the role of the archaeologist undertaking the work to define appropriate staff levels.

*3.3.3* All techniques used must comply with relevant legislation and be demonstrably fit for the defined purpose(s).

*3.3.4* All staff, including subcontractors, must be suitably qualified and experienced for their project roles, and employed in line with relevant legislation and IFA by-laws (see Appendix 6). The site director and/or manager should preferably be a corporate member of the IFA.

*3.3.5* All staff, including subcontractors, must be fully briefed and aware of the work required under the specification, and must

understand the aims and methodologies of the project.

*3.3.6* All equipment must be suitable for its designated purpose and in sound condition, complying with Health and Safety Executive regulations and recommendations. It should be noted that some items of equipment are subject to specific statutory controls (diving equipment in particular is subject to the Diving Operations at Work Regulations (see Appendix 6)).

*3.3.7* Full and proper records (written, graphic, electronic, digital and photographic as appropriate) should be made for all work, using pro forma record forms and sheets as applicable. Digital records created as part of the project should comply with specified data standards. An archaeologist must ensure that digital information, paper and photographic records should be stored in a secure and appropriate environment, and be regularly copied or backed up, and copies stored in a separate location.

*3.3.8* Artefact and environmental data collection and discard policies, strategies and techniques must be fit for the defined purpose, and understood by all staff and subcontractors (see also IFA Standard and guidance for the collection, documentation, conservation and research of archaeological materials, IFA Finds Group 1992, Historic Scotland 1994).

*3.3.9* As a minimum, a site summary (see English Heritage 1991) or data structure report (see Appendix 1 and Historic Scotland 1996a) should be submitted to the appropriate Sites and Monuments Record, the National Archaeological Record and, where appropriate, the central government conservation organisation within six months of completion of the fieldwork or earlier, as may be specified by contractual or grant conditions. This should contain sufficient detail to help researchers to find and access the project archive. In Scotland, a summary interim report must be published in an annual, regional or national digest of fieldwork (Historic Scotland 1996f, 2). For the United Kingdom and Isle of Man as a whole, it is considered that fuller publication of the majority of projects is required.

*3.3.10* Where an excavation has been carried out as part of the planning process, the report must contain sufficient information to enable the planning archaeologist to determine whether or not any condition has been discharged.

*3.3.11* Health and Safety regulations and requirements cannot be ignored no matter how imperative the need to record archaeological information; hence Health and Safety will take priority over archaeological matters. All archaeologists undertaking fieldwork must do so under a defined Health and Safety Policy. Archaeologists undertaking fieldwork must observe safe working practices; the Health and Safety arrangements must be agreed and understood by all relevant parties before work commences. Risk assessments must be carried out and documented for every field project, in accordance with Management of Health and Safety at Work Regulations 1992. Archaeologists should determine whether field projects are covered by Construction (Design and Management) Regulations 1994, and ensure that they meet all requirements under the regulations. In addition they must liaise closely with the principal contractor and comply with specified site rules. Archaeologists are advised to note the onerous responsibilities of the role of a planning supervisor. For further guidance refer to the bibliography (Appendix 6).

*3.3.12* The archaeologist undertaking excavations must ensure that he or she has adequate insurance policies, public and employer's liability and some relevant from of civil liability indemnity or professional indemnity.

## 3.4 Post-excavation assessment

*3.4.1* There are several procedural systems in place, but certain principles apply to them all. Depending on the scale and content of the project, they may be more or less formal.

*3.4.2* In England a post-excavation assessment should normally be carried out after the completion of the fieldwork and site archive to assess the potential for further analysis and publication (English Heritage 1991, 15; see 3.4.5 on data structure reports for Scotland). This involves the assessment of the project against the original project design (see 3.2) to determine the extent to which the original research aims have been met, and the identification of any new research questions to be incorporated in a post-excavation project design (see 3.5).

*3.4.3* A post-excavation assessment report should be produced, and this report will form part of the project archive. It should include a statement of the quantity and perceived quality of the data in the site archive, a statement of the archaeological potential of the data to answer the project research aims, and recommendations on the data storage and curation requirements. Details of the post-excavation assessment report are given in Annex 2.

*3.4.4* Post-excavation assessment work must be carried out by suitably qualified and experienced staff, who must be apprised of the project design before commencing work. The level of assessment of records and materials should be appropriate to the aims and purpose of the project.

*3.4.5* In Scotland the primary product of an excavation is the data structure report (see Appendix 1, Annex 3 and Historic Scotland 1996b) with a costed assessment or project design

for further fieldwork and/or post-excavation and publication. This report does not have a precise equivalent in the United Kingdom (see Appendix 1). Copies of the data structure report should be

lodged with the local archaeological curator.

*3.4.6* Subject to confidentiality arrangements specified for the project, the archaeologist, either during fieldwork or as soon as possible after its conclusion, should prepare a structured description of the project suitable for publication or inclusion in national and local data archives.

# 3.5 Post-excavation project design

*3.5.1* The research aims of the project may be revised following whatever procedure is used for post-excavation assessment. Even if the research aims remain unchanged, the identification of material which would merit further study will require the project design (see 3.2) to be updated.

*3.5.2* In updating the project design, archaeologists should be aware of future research and/or resource management needs, together with requirements for the effective short- and longterm curation of the project archive (including retention/disposal considerations). The archaeologist should ensure that these are addressed and raised with the planning archaeologist or other relevant authorities.

*3.5.3* The post-excavation project design, or equivalent document, should form part of the project archive (see Appendix 4 for details).

# 3.6 Analysis

*3.6.1* All analysis must conform to the project design or postexcavation project design, any variation must be confirmed by all relevant parties in writing.

*3.6.2* All techniques used must be demonstrably fit for the defined purpose(s), and comply with relevant legislation.

*3.6.3* Those carrying out the work should be suitably qualified and experienced, and fully aware of the work required under the project design or post-excavation project design.

*3.6.4* All data generated as a result of the analysis phase should be included in the project archive. Data and data interpretation will form part of the publication (see 3.7).

# 3.7 Publication and dissemination

*3.7.1* The publication format should conform to the synopsis in the post-excavation project design.

*3.7.2* Subject to the post-excavation project design, the publication report should normally contain sufficient data and references to the project archive to permit interpretations to be challenged. Similarly, reports should normally integrate the results of specialist analysis with the site sequence, in order to ensure that important data are not overlooked, and an informative, interesting account is produced. The assistance of independent advisers may be sought to

enhance academic quality.

*3.7.3* Consideration should be given to publicising the results of the project through a range of outlets, from conventional archaeological publications to, for example, site viewing platforms, interpretation panels and lectures, open days and school visits, radio and television programmes, videos and popular publications and the Internet.

### 3.8 Monitoring

*3.8.1* All work must be monitored by the archaeological organisation undertaking the project and, if appropriate, by the national conservation agency, planning archaeologist and commissioning body, or by their nominated representatives. The guidance below is directed in general at monitors from outside the organisation undertaking the work, but many of the points apply equally to internal monitors or managers.

*3.8.2* A monitor should be suitably experienced and qualified, or have access to appropriate specialist advice.

3.8.3 Monitoring must be undertaken against the written specification and/or project design.

*3.8.4* Monitors, where they are not representing the commissioning body, should bear in mind the need for flexibility, within the stated parameters, in contractual matters such as staff numbers, budgets or timetable.

3.8.5 All monitoring visits must be documented, and agreed by each party.

*3.8.6* Non-compliance with the agreed specification or project design must be pointed out by the monitor to the archaeologists undertaking the work, and their client if appropriate, at the earliest opportunity (see ACAO 1993 Appendix E, 17).

*3.8.7* Monitors should be aware of their professional and moral duties regarding Health and Safety, in particular advising against and reporting bad and unsafe practice.

*3.8.8* All monitoring arrangements must be agreed at the outset of the project; the archaeologist undertaking fieldwork must inform the planning archaeologist or other monitor of the commencement of work with reasonable notice.

*3.8.9* Although monitors may choose to visit at any time, they should normally inform the archaeologist undertaking the work of any intended visits in advance. Monitors must respect reasonable requests from the client commissioning the work to attend only at prearranged times and, if necessary, in the company of the client's representative.

*3.8.10* Any costs for monitoring to be charged by the planning archaeologist or other monitor must be agreed in writing at the outset of the project.

### 3.9 Archives, ownership and deposition

*3.9.1* The requirements for archive preparation and deposition must be addressed at the outset of the project. In Scotland, all excavation documentary archives must be deposited in the National Monuments Record for Scotland, which will arrange to copy material to local museums etc.

*3.9.2* The proposed recipient museum or other repository must be contacted at the project planning stage, and arrangements for deposition of the project archive should be detailed in the specification and/or project design.

*3.9.3* The archive, including all retained artefacts and ecofacts, must be treated and packaged in accordance with the requirements of the recipient museum/repository and national guidelines (Museums and Galleries Commission 1992, Society of Museum Archaeologists 1992, UKIC 1983, 1984, 1988 and 1990, Ferguson and Murray 1997). The treatment of human remains will be governed by the relevant legislation and government regulations (Historic Scotland 1997a).

*3.9.4* In England, Wales, Northern Ireland and the Isle of Man ownership of objects rests with the landowner, except where other law overrides this (eg Treasure Act, 1996, Burials Act 1857). The archaeologist undertaking the fieldwork or the planning archaeologist must make this clear at the inception of the project (in the brief/project outline, specification or project design).

*3.9.5* It should be noted that different countries have, inter alia, differing reporting procedures for Treasure and differing requirements for finds deposition. Material cannot be exported from the Isle of Man without a licence. In Scotland all finds of archaeological objects must be reported to the Crown, normally via the Treasure Trove Advisory Panel or the Finds Disposal Panel. Archaeologists are advised to seek specific advice on excavation and export procedures as in some instances licences are required. In England, Wales, Northern Ireland and the Isle of Man ownership of objects rests with the landowner, except where other law overrides this (eg treasure Act 1996, Burials Act 1857). The archaeologist undertaking the fieldwork or the planning archaeologist must make this clear at the inception of the project (in the brief/project outline, specification or project design).

*3.9.6* Except in Scotland, it is the responsibility of the archaeologist undertaking the fieldwork to endeavour to obtain the written consent of the landowner for finds donation and deposition with the recipient museum.

*3.9.7* Except in Scotland, in the event that the landowner is unwilling, for whatever reason, to donate the finds to the appropriate recipient museum, the archaeologist undertaking the fieldwork must endeavour to ensure all artefacts and ecofacts are recorded, safely packaged and conserved where appropriate before transfer to the owner, and that their location and ownership are stated in the site archive and public record. It should be noted that the owner's explicit (written) permission is required before entering such personal information in the public record (see inter alia the Data Protection Act 1984).

*3.9.8* In Scotland all archaeological artefacts, irrespective of raw material, may be claimed on behalf of the Crown under common law. This applies no matter where, or on whose property,

artefacts are found. As noted in paragraph 3.5.3 of the IFA Standard and guidance for the collection, documentation, conservation and research of archaeological materials, all finds must be reported to the Treasure Trove Advisory Panel or, in the case of artefacts from fieldwork funded by Historic Scotland, to the Finds Disposal Panel. Ownership in either case is passed to the museum which receives the finds at the end of the allocation process.

*3.9.9* The rules of ownership applicable to material which has come from a vessel (ie all those classified as 'wreck') are dealt with under the Merchant Shipping Act 1995 (see Appendix 6). In cases of wreck material the Receiver of Wreck, in the Maritime and Coastguard Agency should be contacted.

#### 3.10 Other considerations

*3.10.1* It is advisable for excavation projects to be governed by a written contract or agreement, to which the specification or project design may be attached. Such contracts or agreements should include reference to the defined area of study outlined on a map; to the brief/project outline, specification or project design (see 3.2); to conditions for access; programme, method and timetable for payment; copyright arrangements and be signed and dated by all parties (Darvill and Atkins 1991).

*3.10.2* It is normal practice for both the copyright and ownership of the paper and digital archive from archaeological work to rest with the originating body (the archaeological organisation undertaking the work). The originating body deposits the material with the recipient museum or repository on completion of the contracted works, and normally transfers title and /or licences the use of the records at this stage. These arrangements may be varied by contract, and for the avoidance of doubt it is

advisable to include statements on ownership and copyright in a written contract or agreement.

*3.10.3* Material copied or cited in reports should be duly acknowledged, and all copyright conditions (such as those for Ordnance Survey maps and the National Grid) observed.

*3.10.4* All aspects of publicity must be agreed at the outset of the project between the commissioning body and the archaeological organisation or individual undertaking the project.

*3.10.5* The archaeologist undertaking the work must respect the requirements of the client or commissioning body concerning confidentiality, but the archaeologist must emphasise his or her professional obligation to make the results of archaeological work available to the wider community within a reasonable time.

{mospagebreak}

# ANNEX 1 Excavation techniques and recording techniques

This Standard covers the following methods of excavation:

- hand-excavated open areas and/or trenches

- machine-stripped and hand-excavated open areas and/or trenches
- auguring and probing

An excavation project may be supplemented by non-destructive means of investigation, such as:

- geophysical survey
- remote sensing
- geochemical survey
- earthwork survey
- field scanning (ie observation and mapping of artefact and other distributions)
- standing building survey

There are a number of techniques available for archaeological excavation. In many instances several techniques may be valid under the terms of the brief/project outline, and it will be necessary to explain the criteria for selection. The methods selected must be fit for the defined purpose and therefore related to the research objectives. Where the use of machinery is specified this must be under the direct supervision of an archaeologist.

Full and proper records (written, graphic, electronic, and photographic as appropriate) should be made for all work, using pro forma records and sheets appropriate to the work. A range of recording systems is available, and many archaeological contractors have produced manuals to govern their recording procedures and ensure internal consistency (eg the published report should contain a summary of the recording system used).

The recording system used should be one that is appropriate to the requirements of the project in question and should be agreed with relevant parties including the body that is to receive the archive. It should entail relating the site and excavation areas to the National Grid and the Ordnance Survey datum; relating all plan and section drawings to the site grid; maintaining written registers of all plans, drawings, photographs, special finds, samples, etc and compiling records on suitable, durable materials. Mere mechanical recording of material does not, however, absolve the archaeologist from the need to interpret, as far as possible on site, the nature and meaning of deposits, features and the site itself.

# ANNEX 2: Contents of post-excavation assessment report

The post-excavation assessment report is discussed in detail in MAP2 (English Heritage 1991), and its contents are listed here for

guidance. The level of detail required in the post-excavation assessment report will depend on the quantity and complexity of data and the extent to which those factors have required additional study of the material in order to form a reliable assessment.

A post-excavation assessment report will normally contain:

1 Introduction:

- scope of the project (eg sites involved)
- circumstances and dates of fieldwork and previous work
- comments on the organisation of the report
- 2 Original research aims

*3* Summary of the documented history of the site(s)

4 Interim statement on the results of fieldwork

5 Summary of the site archive and work carried out for assessment:

- site records: quantity, work done on records during postexcavation assessment

- finds: factual summary of material and records, quantity, range, variety, preservation, work done during postexcavation assessment

- environmental material: factual summary of human and animal bone, shell and each type of sample (eg bulk organic, dendrochronological, monolith), quantity, range, variety, preservation, work done on the material during postexcavation assessment

- documentary records: list of relevant sources discovered, quantity, variety, intensity of study of sources during postexcavation assessment

6 Potential of the data:

- a discursive appraisal of the extent to which the site archive might enable the data to meet the research aims of the project. Different classes of data should be discussed in an integrated fashion, sub-divided according to the research aims of the project

- a statement of the potential of the data in developing new research aims, to contribute to other projects and to advance methodologies

7 A summary of the potential of the data in terms of local, regional, national and international importance Additional information will normally include:

- supporting illustrations at appropriate scales

- sufficient supporting data, tabulated or in appendices, and/or details of the contents of the project archive, to permit the interrogation of the stated conclusions

- index, references and disclaimers

## ANNEX 3: Contents of a data structure report

A data structure report is a requirement in Scotland. Its contents are listed here for guidance. The level of detail required will depend on the quantity and complexity of data.

A data structure report should be produced speedily after each fieldwork exercise or season of

fieldwork. It provides a structure for the records of an excavation, and is the basis for further analysis and final archiving of the site archive. It includes:

### 1 Lists of data

- context numbers with brief descriptions
- other written documents
- plans, sections and other illustrations
- photographs (annotated)
- small finds lists, with context numbers and brief descriptions of important objects

This list is copied to the Queen's and Lord Treasurer's Remembrancer, forming the basis for allocating finds to a museum with a description and explanation of why environmental archaeology samples were taken.

### 2 A narrative account of the site sequence explaining

- the relationship between groups of contexts
- important finds
- provisional interpretations
- sequence diagrams, sketch plans and other diagrams as required
- environmental archaeology samples

In Scotland, the data structure report is accompanied by a site summary intended for publication in Discovery and excavation in Scotland published by the Council for Scottish Archaeology. For further information see Historic Scotland 1996a, 9.

### ANNEX 4: Recommendations for digital archives

Projects vary in their organisation and implementation, even where standards and best practice are employed. This annexe thus provides a checklist for the types of data to be included in the digital archive of an excavation. Where those data do not exist they need not be created. Where they are not available in digital format, they need not be digitised. The archive has two components: the minimum archive is the index level record; with other materials as appropriate. Thus, the archive should consist of:

### 1. Index level record

An index level record for the investigation conforming to relevant standards. The exact content and structure of that record should be developed in consultation with relevant heritage agencies and identified in the project design. Local circumstances will dictate form of delivery though digital supply should be preferred, in order that the record may be appended to existing databases without the need for manual data entry.

#### 2. Other associated data sets

Other associated data sets as identified should be included in the digital archive:

- project specification documents,
- updated project design documents,
- desk-based assessment report (where this has not already been archived)
- field evaluation report (where this has not already been archived),
- watching brief report (where this has not already been archived),
- post excavation report,
- comprehensive excavation report and site matrix,
- specialist databases,
- digital images,
- geo-spatial data sets including any digitised plans or maps.

The precise composition of the archive will vary with local circumstances. For example, existing standards, such as those from English Heritage (see 'The Management of Archaeological Projects ' 2nd

edition 1991 aka 'MAP2') may govern the content of the full archive.

### Data creation

All data created as part of a project design should follow standards and guidelines for good practice. Data that is being deposited in a digital archive and should be supplied in a form consistent with that archive's deposition guidelines.

Further guidance on the management and archiving of digital data can be obtained from the Archaeology Data Service, summarised in part in the 'Guide to Good Practices' series. "Digital Archives from Excavation and Fieldwork: Guide to Good Practice" is the most immediately relevant volume for excavation, though others may be more appropriate to the needs of specific projects. Contact details for the Archaeology Data Service are included in Appendix 7.

### More...

Generals appendices to standards (1 to 7) can be downloaded form our server [PDF] (in english).