

Heworth Hall, Shields Road
Gateshead, Tyne and Wear

Report on an Archaeological Watching Brief



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Trench excavation underway at Heworth Hall

Heworth Hall, Gateshead, Tyne and Wear

Report on an Archaeological Watching Brief

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EXECUTIVE SUMMARY

An archaeological watching brief was undertaken in June 2013, monitoring groundworks in advance of the construction of a new datacentre in the grounds of Heworth Hall, Shields Road, Gateshead, Tyne and Wear. The watching brief was undertaken in response to a condition placed on planning permission (DC/12/00924/FUL), against the potential disturbance of previously unidentified archaeological remains relating to the medieval and post-medieval village of Nether Heworth.

The only archaeological feature encountered during the watching brief was a small, stone-lined culvert of likely post-medieval date. Other than this no archaeological or palaeoenvironmental features or deposits, and no artefacts or ecofacts, were identified or recovered.

1. INTRODUCTION

1.1 PROJECT BACKGROUND

This report has been commissioned by Aspire Technology Solutions Ltd to outline the findings of a programme of archaeological monitoring (watching brief) on groundworks in advance of the construction of a new datacentre at Heworth Hall, Gateshead. The monitoring was undertaken to fulfil a condition of planning permission (DC/12/00924/FUL).

During the earlier redevelopment of the Hall itself, a desk-based assessment and historic building recording was undertaken (Town 2011). This report identified the earliest phase of the extant Grade II Listed Hall as being of c.1730 in date replacing an earlier farmstead. It is also noted that the location of the datacentre development to the east of the Hall may correspond with either the gardens associated with the Hall, or the southern extent of the adjacent village.

1.2 SITE LOCATION

The site is located in the car park of Heworth Hall, Shields Road, Gateshead, Tyne and Wear, NE10 0UX, to the north of the A184 (Felling Bypass) and to the south of the metro line. The trench is centred at NZ 2883 6198.

1.3 POTENTIAL SIGNIFICANCE

The potential archaeological significance of the site, and hence the reason for the monitoring works, lies principally in the possible presence of the medieval to post-medieval village of Nether Heworth, of which little is known. The adjacent Heworth Hall is a Grade II Listed building, formerly a Constitutional Club and now the head office of Aspire Technology Solutions Ltd.

1.4 AIMS OF THE PROJECT

The aims of the archaeological monitoring were:

- To record, excavate and environmentally sample any archaeological deposits of significance observed during the groundworks
- To ensure there is a permanent record of the work undertaken deposited with the local Historic Environment Record (HER) (this report)
- To ensure all work was undertaken in compliance with the Code of Conduct of the Institute for Archaeologists (IfA) (2000) and the IfA Standard and Guidance for Watching Briefs (revised 2001).

2. POLICY AND GUIDANCE FRAMEWORK

2.1 LEGISLATION

National legislation which applies to the consideration of cultural heritage within development and the wider planning process is set out in Table 1 below.

Table 1 Legislation relating to cultural heritage in planning	
Title	Key Points
Ancient Monuments and Archaeological Areas Act 1979 (amended by the National Heritage Act 1983 and 2002)	Scheduled Monuments, as defined under the Ancient Monuments and Archaeological Areas Act (1979), are sites which have been selected by a set of non-statutory criteria to be of national significance. Where scheduled sites are affected by development proposals there is a presumption in favour of their physical preservation. Any works, other than activities receiving class consent under The Ancient Monuments (Class Consents) Order 1981, as amended by The Ancient Monuments (Class Consents) Order 1984, which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering-up a Scheduled Monument require consent from the Secretary of State for the Department of Culture, Media and Sport.
Planning (Listed Building and Conservation Areas) Act 1990	Buildings of national, regional or local historical and architectural importance are protected under the Planning (Listed Buildings and Conservation Areas) Act 1990. Buildings designated as 'Listed' are afforded protection from physical alteration or effects on their historical setting.
Hedgerows Regulations 1997	The Hedgerow Regulations (1997) include criteria by which hedgerows can be regarded as historically important (Schedule 1 Part III).

2.2 POLICY

2.2.1 NATIONAL

The principal instrument of national planning policy within England is the National Planning Policy Framework (NPPF) (CLG 2012) which outlines the following in relation to cultural heritage within planning and development:

Table 2 Key passages of NPPF in reference to cultural heritage	
Paragraph	Key Points
7	Contributing to protecting and enhancing the historic environment is specifically noted as being a part of what constitutes 'sustainable development' – the "golden thread" which, when met, can trigger presumption in favour.
17	A core planning principle is to "conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for the contribution to the quality of life of this and future generations".

128	During the determination of applications “local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting”. This information should be proportionate to the significance of the asset and only enough to “understand the potential impact of the proposal on their significance”.
129	Paragraph 129 identifies that Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise.
132	It is noted that significance – the principal measure of inherent overall heritage worth – can be harmed or lost through development within its setting. Heritage assets are an irreplaceable resource and any adverse effects require “clear and convincing justification” relative to the significance of the asset in question.
135	At paragraph 135 it states that the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.
139	At paragraph 139 it states that non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.
141	In paragraph 141 amongst other matters it states that planning authorities should 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 the impact, and to make this evidence (and 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.

2.2.2 LOCAL

The local policies governing the conservation of the historic environment are contained within the Gateshead Unitary Development Plan (UDP) (2007), which remains the principal tool of local development until the implementation of the new Local Plan. A list of saved policies from the UDP prepared in 2012 as a response to the NPPF includes the policy below:

Table 3 Key policies of Gateshead Unitary Development Plan in relation to the current project	
Policy	Text
ENV21	<p>“Where archaeological remains survive, whether designated as a scheduled ancient monument or not, there will be a presumption in favour of their preservation in situ. However, where the significance of archaeological remains is such that their preservation in situ is not essential, or is not feasible, a programme of archaeological works aimed at achieving preservation by record will be required, the findings of which should be published” (Gateshead Council 2007, 157).</p> <p>It is noted in the 2012 Saved Policies document that, in line with NPPF paragraph 133, this policy should not be applied without taking due account of any substantial public benefits that would outweigh the harm to, or loss of, the heritage asset.</p>

2.3 GUIDANCE

2.3.1 NATIONAL

During the assessment and preparation of this document, the following guidance documents have been referred to, where relevant:

Table 4 National guidance documentation consulted	
Document	Key Points
PPS5 Practice Guide (CLG/DCMS/EH 2010)	Until the publication of bespoke and endorsed guidance for the implementation of the policies within NPPF, English Heritage have advised that the Practice Guide released to accompany Planning Policy Statement 5 (PPS5) in 2010 should be considered extant and applicable as many of the processes outlined relate to similar policies within NPPF.
Conservation Principles, Policies and Guidance (EH 2008)	This document sets out the guiding principles of conservation as seen by English Heritage and also provides a terminology for assessment of significance upon which much that has followed is based.
Standard and Guidance for Archaeological Watching Briefs (IfA revised 2008)	This document represents non-statutory industry best practice as set out by the Institute for Archaeologists. This work has been undertaken to these standards, as subscribed to by Solstice Heritage.

3. METHODOLOGY

3.1 FIELDWORK

The footprint of the outer walls of a proposed new single storey datacentre, measuring approximately 30.80m by 7.50m by 0.80m deep, were excavated on Saturday 1st June 2013. All groundworks were monitored by a suitably qualified archaeologist and a toothless ditching bucket was used for all excavations.

Where archaeological features and deposits were encountered, these were recorded to the standards outlined in the relevant IfA Standard and Guidance (see above). All features and deposits were recorded on *pro-forma* record sheets, drawn in plan and section at a suitable scale, and photographed. No deposits with palaeoenvironmental potential were noted. In addition to any specific features or deposits, a general record of the trench stratigraphy was made on a *pro-forma* record sheet.

3.2 POST-FIELDWORK

The primary site archive was compiled comprising site records and digital photography on cd. This has been used to compile this report, which will be deposited with the local HER as the principal record of the monitoring work undertaken. If considered to be of sufficient significance following discussion with the Tyne and Wear County Archaeologist, the documentary archive will be deposited with a suitable local collections museum within six months of the submission of this report. A suitable OASIS record will be completed for this work, including a digital version of the report uploaded, within the same timescale.

In the absence of any material culture, faunal or human remains, or deposits of palaeoenvironmental significance no further work was required to catalogue, process or assess such remains for integration within the report and archive. The procedures and strategy that would have been followed had such remains been encountered is set out within the attached specification (Appendix 2).

3.3 CHRONOLOGY

Where chronological and archaeological periods are referred to in the report, the relevant date ranges are broadly defined as follows:

- Palaeolithic (Old Stone Age): 1 million – 12,000 BP (Before present)
- Mesolithic (Middle Stone Age): 10000 – 4000 BC
- Neolithic (New Stone Age): 4000 – 2400 BC
- Bronze Age: 2400 – 700 BC
- Iron Age: 700 BC – AD 43
- Roman/Romano-British: AD 43 – 410
- Anglo-Saxon/Anglo-Scandinavian: AD 410 – 1066
- Medieval: AD 1066 – 1485
- Post-medieval: AD 1485 – 1750
- Industrial: AD 1750 – 1900
- Modern: AD 1900 – Present

3.4 ASSUMPTIONS AND LIMITATIONS

Data and information obtained and consulted in the compilation of this report has been derived from a number of secondary sources. Where it has not been practicable to verify the accuracy of secondary information, its accuracy has been assumed in good faith. All statements and opinions arising from the works undertaken are provided in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

3.5 COPYRIGHT

Solstice Heritage will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

4. RESULTS

4.1 GENERAL STRATIGRAPHY

The main outer wall trenches measured 800-850mm in width and were dug to a consistent depth of 750-800mm below a datum height within the car park (achieved by laser level), hence the actual trench depth varied from 700-850mm. Two cross trenches were also dug central to the footprint to a width of only 700mm.

The natural substrate (105) was encountered at a depth of between 450 and 630mm below ground surface (depending upon whether the tarmac surface was still intact) and consisted of, within the northern half of the building footprint, a tan coloured firm clay, while within the southern half was a greenish grey coloured firm clay.

Above the clay substrate lay a firm clay-silt relic soil (103), varying in depth between 220 and 300mm. This was sealed by a deposit of industrial backfill material (101) consisting of red shale, red ash, black ash and clinker, intermixed with an abundance of whole and broken red bricks (machine made, hence c.19th to early 20th century) and medium to large fragments of yellow sandstone blocks. There was a large proportion of demolition material within the red ashy material towards the northern part of the building footprint. Also observed in patches, a layer of disturbed or redeposited clay substrate (104) lay, between (103) and (105).

Above the red ashy material was a layer of tarmac (100) 100mm thick, though this had been removed by the machine over most of the footprint area in preparation for the groundworks.

4.2 ARCHAEOLOGICAL FEATURES

No archaeological features earlier than post-medieval and later disturbance were observed. The whole area had been thoroughly truncated by modern and older sewers and drains (at around 600-700mm depth) as well as other old services, including lead water pipes and 20mm diameter iron gas pipes.

An intact stone culvert (106) was observed running north-south towards the western end of the northern central cross trench, however it was not visible within the north-side trench of the building. It appeared again at the western end corner of the southern central cross trench, where it made a sharp turn westward (see Fig. zz). It was formed by either placing roughly hewn yellow sandstone blocks upright into a square cut (107) through the clay natural to form a channel between 120-160mm wide, utilising the clay as its base, or by using smaller blocks, two to three courses high, as the sides, capped throughout by large slabs 100-130mm thick. In the two places examined a further layer of broken sandstone pieces overlay the cover slabs, while similarly sized sandstone rubble also formed packing within the cut behind the upright slabs where required.

The deposits encountered were largely devoid of finds, except for some small glass fragments within the industrial waste deposit. A distinct absence of post-medieval pottery sherds and clay pipe fragments suggests that the former relic soil had not been subject to night soiling in the past and had always formed part of the lawn garden situated to the south of the Hall.

5. DISCUSSION

The archaeological monitoring undertaken indicates that the immediate area around Heworth Hall has been truncated by later service and sewer trenches. The presence of a stone culvert of likely post-medieval to industrial date indicates limited activity at some point during those periods, though other contemporary features may have been lost given the later truncation. The absence of post-medieval finds, common on many sites in the area, suggests a lack of night-soiling and the possibility that this part of the site may have formed part of the lawned garden associated with the Hall.

No earlier archaeological features or finds were noted, including any associated with the medieval settlement of Nether Heworth.

6. SOURCES

6.1 BIBLIOGRAPHY

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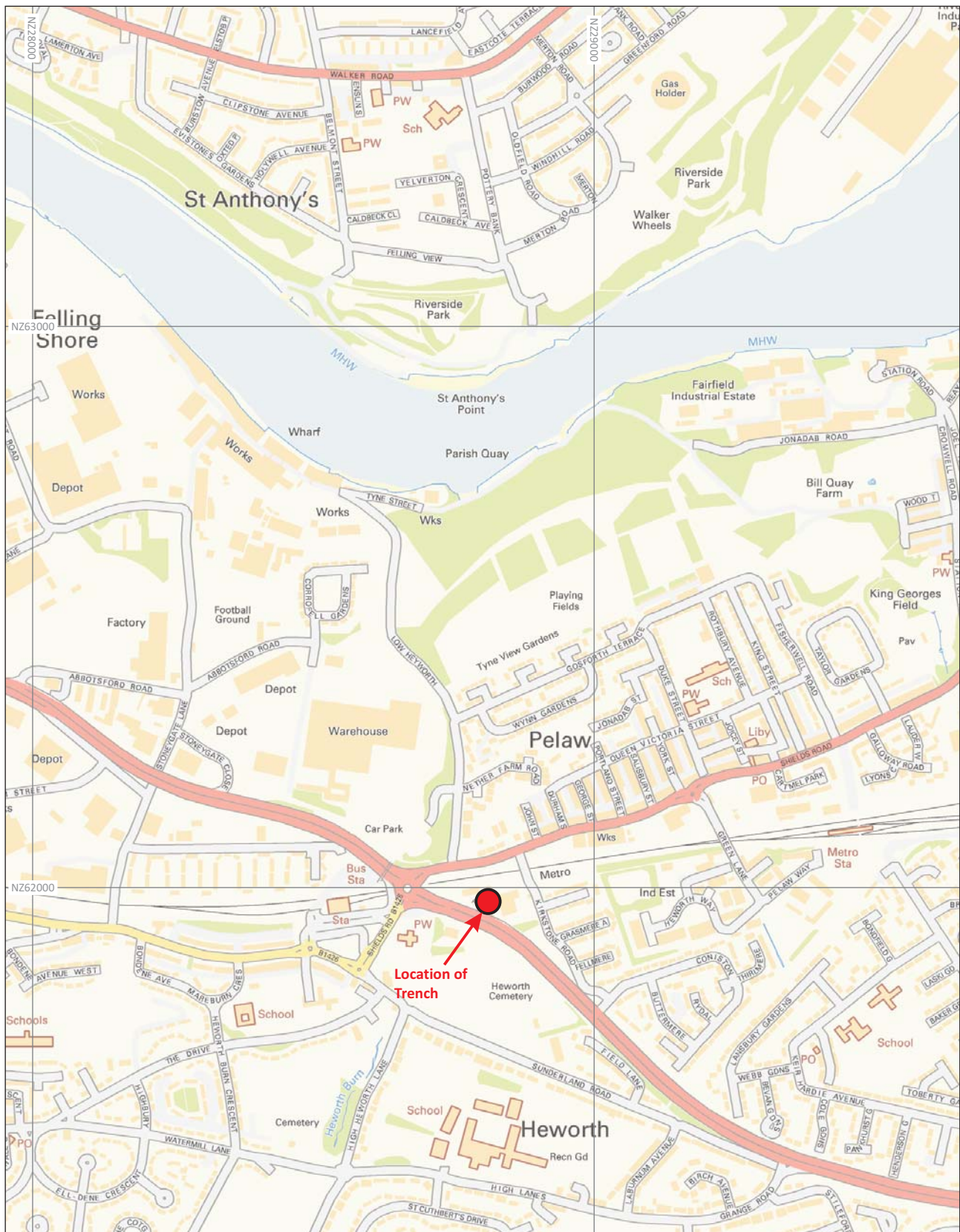
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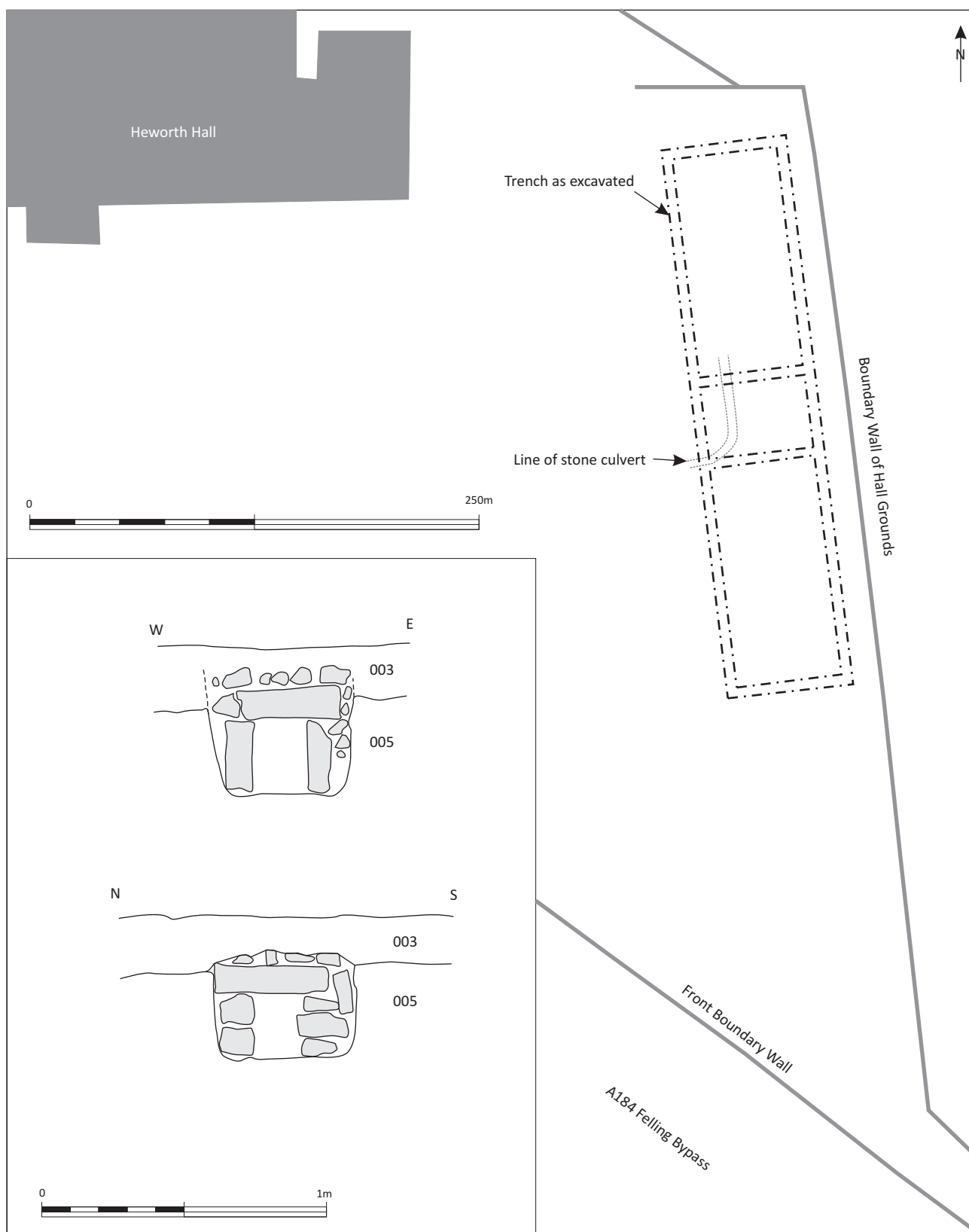
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APPENDIX 1 – FIGURES





<p>Project</p> <p>Heworth Hall, Gateshead, Tyne and Wear</p> <p>Archaeological Watching Brief</p>	<p>Legend</p> <p> Location of Trench</p>	<p>Solstice Heritage Crabtree Hall Business Centre Little Holtby Northallerton North Yorkshire DL7 9LN www.solsticeheritage.co.uk</p> 	
<p>Drawing</p> <p>Fig. 1 Site Location</p>	<p>0  500m</p>	<p>Drawn by</p> <p>JB</p>	<p>Date</p> <p>July 2013</p>




<p>Project</p> <p>Heworth Hall, Gateshead, Tyne and Wear</p> <p>Archaeological Watching Brief</p>	<p>Legend</p>		<p>Solstice Heritage Crabtree Hall Business Centre Little Holtby Northallerton North Yorkshire DL7 9LN www.solsticeheritage.co.uk</p> 	
<p>Drawing</p> <p>Fig. 2 Trench Plan and Feature Sections</p>			<p>Drawn by</p> <p>JB</p>	<p>Date</p> <p>July 2013</p>



Fig. 3 Section through the stone-lined culvert.



Fig. 4 Fully-excavated trench

APPENDIX 2 – SPECIFICATION

Prepared by Tyne and Wear Specialist Conservation Team

Tyne and Wear Specialist Conservation Team

Specification for Archaeological Watching Brief at Heworth Hall, Shields Road, Gateshead, Tyne and Wear.

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The Tyne and Wear Specialist Conservation Team is the curatorial service for archaeology, industrial archaeology and historic buildings throughout the Tyne and Wear districts. It helps and advises Newcastle, Gateshead, North Tyneside, South Tyneside and Sunderland Councils to carry out their statutory duties to care for the precious historic environment of Tyneside and Wearside. The Team can be found at the Strategic Housing, Planning and Transportation Division of the Environment & Regeneration Directorate of

Introduction

Site grid reference: NZ 2880 6196

The proposal to construct a new building in the garden of Heworth Hall is in an area of archaeological interest relating to the possible presence of the medieval village of Nether Heworth. As such, the excavation of the foundation trenches for the new structures need to be subject to an archaeological Watching Brief, as stipulated by the planning consent for the approval (DC/12/00924/FUL). All foundation trenches for walls, areas of levelling and ground lowering and deep (>500 mm) service trenches need to be archaeologically monitored.

The work will record, excavate and environmentally sample (if necessary) any archaeological deposits of importance found on the plot. The purpose of this brief is to obtain tenders for this work. The report must be the definitive record for deposition in the Tyne and Wear HER. All work must be carried out in compliance with the codes of practice of the Institute of Field Archaeologists and must follow the IFA Standard and Guidance for Watching Briefs (revised 2001).

A toothless bucket will be used on the plant employed on site to reduce damage to archaeological remains.

The North-East Regional Research Framework for the Historic Environment (2006) notes the importance of research as a vital element of development-led archaeological work. It sets out key research priorities for all periods of the past allowing commercial contractors to demonstrate how their fieldwork relates to wider regional and national priorities for the study of archaeology and the historic environment. The aim of NERRF is to ensure that all fieldwork is carried out in a secure research context and that commercial contractors ensure that their investigations ask the right questions.

The commissioning client will provide plans indicating the location of the proposed work.

Notification

The County Archaeologist needs to know when archaeological fieldwork is taking place in Tyne and Wear so that he can inform the local planning authority and can visit the site to monitor the work in progress. The Archaeological Contractor must therefore inform the County Archaeologist of the start and end dates of the Watching Brief. He must also keep the County Archaeologist informed as to progress on the site. The CA must be informed of the degree of archaeological survival. The Client will give the County Archaeologist reasonable access to the development to undertake monitoring.

The tasks

1 A construction timetable has yet to be agreed. Tenders for the Watching Brief should therefore be a cost per day including overheads such as travel costs and equipment. Contingency costs will be provided for environmental sampling and scientific dating per sample and for finds analysis. Any variation on the agreed timetable will be notified by the client, who will give a minimum of 48 hours notice of a change on the days

of site attendance. Close liaison between the parties involved will be needed to co-ordinate this element of the work.

2 The work involves undertaking a structured watching brief to observe and record any archaeological deposits and finds from this locality. The absence of deposits and finds must be recorded as negative evidence. **The Watching Brief will not aim to hinder the construction programme, however should archaeological remains be found, the appointed archaeologist must be allowed sufficient time to fully record (by photograph and scale plan and section), excavate and environmentally sample (if necessary) the archaeological deposits.** Within the course of the Watching Brief, it may be possible to record sections through the stratigraphy exposed during the construction work.

General Conditions

All staff employed by the Archaeological Contractor shall be professional field archaeologists with appropriate skills and experience to undertake work to the highest professional standards.

The Archaeological Contractor must maintain a Site Diary for the benefit of the Client, with full details of Site Staff present, duration of time on site, etc. and contact with third parties.

The Archaeological Contractor must be able to provide written proof that the necessary levels of Insurance Cover are in place.

Environmental Sampling and Scientific Dating

Scientific investigations should be undertaken in a manner consistent with “The Management of Archaeological Projects”, English Heritage 1991 and with “Archaeological Science at PPG16 Interventions: Best Practice for Curators and Commissioning Archaeologists”, English Heritage, 2003.

Aims of environmental sampling – to determine the abundance/concentration of the material within the features and how well the material is preserved, to characterise the resource (the site) and each phase, to determine the significance of the material and its group value, what crop processing activities took place on the site? What does this tell us about the nature of the site? Is there any evidence for changes in the farming practice through time? How did people use this landscape? Can we place certain activities at certain locations within the site? Function and date of individual features such as pits, hearths etc. Are the charred assemblages the result of ritual deposition or rubbish? Is the charcoal the result of domestic or industrial fuel?

Advice on the sampling strategy for environmental samples and samples for scientific dating etc. must be sought from Jacqui Huntley, English Heritage Regional Advisor for Archaeological Science (07713 400387) **before** the evaluation begins. The sampling strategy should include a reasoned justification for selection of deposits for sampling.

Deposits should be sampled for retrieval and assessment of the preservation conditions and potential for analysis of biological remains (English Heritage 2002). Flotation samples and samples taken for coarse-mesh sieving from dry deposits should be processed at the time of fieldwork wherever possible. Sieving recovers fish, amphibian,

small bird and mammal bone, small parts of adult mammals and young infused bones which may be under-represented otherwise. However it is noted that clay soils in this region make sieving difficult. Discuss the potential for sieving with Regional Advisor for Archaeological Science.

Environmental samples (bulk soil samples of 30 litres volume, to be sub-sampled at a later stage) will be collected by the excavator from suitable (i.e. uncontaminated) deposits. It is suggested that a large number of samples be collected during evaluation from which a selection of the most suitable (uncontaminated) can be processed. All tenders will give a price for the full analysis, report production and publication per sample.

Deposits will be assessed for their potential for radiocarbon, archaeomagnetic (guidance is available in the Centre for Archaeology Guideline on Archaeometallurgy 2001) and Optically Stimulated Luminescence dating. Timbers will be assessed for their potential for dendrochronology dating. Sampling should follow procedures in "Dendrochronology: guidelines on producing and interpreting dendrochronological dates", Hillam, 1998. All tenders will quote the price of these techniques per sample.

The following information should be provided with the environmental samples to be processed – brief account of nature and history of the site, aims and objectives of the project, summary of archaeological results, context types and stratigraphic relationships, phase and dating information, sampling and processing methods, sample locations, preservation conditions, residuality/contamination etc.

Laboratory processing of samples shall only be undertaken if deposits are found to be reasonably well dated, or linked to recognisable features and from contexts the derivation of which can be understood with a degree of confidence.

A range of features, and all phases of activity, need to be sampled for charred plant remains and charcoal. Ceramic features should not be avoided as the plant remains from these features may help to date them. Deep features should be sampled in spits to pick up changes over time. Part, or all of each of the contexts should be processed. In general samples should be processed in their entirety. All flots should be scanned, and some of the residues.

Pollen samples can be taken from features such as lakes, ponds, palaeochannels, estuaries, saltmarshes, mires, alluvium and colluvium, and from waterlogged layers in wells, ditches and latrines etc. Substances such as honey, beer or food residues can be detected in vessels. Activities such as threshing, crop processing and the retting of flax can be identified. When taken on site, pollen samples should overlap. Your regional science advisor can advise on the type of corer or auger which would be most appropriate for your site. Samples need to be wrapped in clingfilm and kept dark and cool. Make a description of the sediments in which the pollen was found, and send this with the sample to be assessed.

Coastal or estuary sites (even those which are now well drained) are suitable for sampling for foraminifera. Diatoms can also be found on marine sites, but also in urban settings (sewers, wells, drains, ditches etc). They only survive in waterlogged conditions. These aquatic microfossils are used as proxy indicators of the former aquatic ecological conditions on site, changes in sea levels and temperature, salinity, PH and pollution.

Forams are taken from cores, monolith tins or bulk samples. Diatoms are cut from monolith tins or cores or taken as spot samples.

Insects, which are useful as palaeoenvironmental indicators, survive best in waterlogged deposits such as palaeochannels and wells. They can provide information on climate change and landscape reconstruction as some species are adapted to particular temperatures, habitats or even particular trees. Certain insects can indicate the function of a feature or building (eg. Weevils, which were introduced by the Romans, often indicate granary sites, parasites will indicate the presence of particular animals such as sheep or horse, latrine flies survive in the mineral deposits in latrines, or in the daub of medieval buildings etc). Samples need to be sealed (eg. in a plastic box).

Where there is evidence for industrial activity, macroscopic technological residues should be collected by hand. Separate samples should be collected for micro-slugs (hammer-scale and spherical droplets). Guidance is available in the English Heritage "Archaeometallurgy" guidelines, 2001.

Buried soils and sediment sequences should be inspected and recorded on site by a recognised geoarchaeologist. Procedures and techniques in the English Heritage document "Environmental Archaeology", 2002 and "Geoarchaeology", 2004 should be followed.

Sampling strategies for wooden structures should follow the methodologies presented in "Waterlogged wood. Guidelines on the recording, sampling, conservation and curation of waterlogged wood" R. Brunning, 1996. If timbers are likely to be present on your site, contact a wood specialist beforehand. Pre-excavation planning – determine questions to ask, agree on a sampling strategy, allocate reasonable time and budget. Soil samples should be taken of the sediments surrounding the timber. Keep the timbers wet! Record them asap on-site – plan, photograph, record the size and orientation of the wood (radial, tangential, transverse), any toolmarks, joints, presence of bark, insect damage, recent breaks, and if another piece of wood was on top of or below the piece sampled. Both vertical and horizontal positioning of wood must be recorded. Wood samples can provide information on woodland management such as medieval coppicing, type of taxa (native or foreign), conversion technology (how the wood was turned into planks), building techniques and type of tools used.

Waterlogged organic materials should be dealt with following recommendations in "Guidelines for the care of waterlogged archaeological leather", English Heritage and Archaeological Leather Group 1995.

Animal Bone

Animal bone can explore themes such as hunting and fowling, fishing, plant use and trade, seasonality, diet, age structures, farrowing areas, species ratios, local environment.

Animal bone assemblages should be assessed by a recognised specialist.

The specialist will need to know a brief account of the nature and history of the site, an account of the purpose, methods (details of sampling) for recovery of animal bones, and the main aims and results of the excavation, details of any specific questions that the excavator wants the animal bone specialist to consider, information about other relevant

finds from the excavation (e.g. bone tools, fishing equipment, weaving equipment), specific information about each context that has produced significant quantities of animal bone (recovery method, phase, context type, position in relation to major structures, contamination by more recent material, some indication of the amount of bone (by weight or by container size). See “Ancient Monuments Laboratory Advisory Note, “Assessment of animal bone collections from excavations”, Sebastian Payne, 1991 and “The Assessment of a collection of animal bones”, S. Davis, n.d., Ancient Monuments Laboratory.

Human Remains

Human remains must be treated with care, dignity and respect.

Excavators must comply with the relevant legislation (essentially the Burial Act 1857) and local environmental health concerns. If found, human remains must be left in-situ, covered and protected. The archaeological contractor will be responsible for informing the police, coroner and County Archaeologist. If it is agreed that removal of the remains is essential, the archaeological contractor will apply for a licence from the Home Office and their regulations must be complied with.

Site inspection by a recognised osteologist is desirable for isolated burials and essential for cemeteries. The remains will be recorded in-situ and subsequently lifted, washed in water (without additives). They will be marked and packed to standards compatible with “Excavation and post-excavation treatment of cremated and inhumed human remains”, McKinley and Roberts, 1993. After excavation, the remains will be subject to specialist assessment.

Analysis of the osteological material should take place according to published guidelines “Human Remains from Archaeological Sites, Guidelines for producing assessment documents and analytical reports, English Heritage, 2002.

Some of the potential benefits from the study of human skeletons – demography, growth profiles, patterns of disease, genetic relationships, activity patterns, diet, burial practices, human evolution. New scientific techniques available include DNA and stable isotope analyses.

The final placing of the remains after scientific study and analysis will be agreed beforehand.

Further guidance is available in:

“Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England”, The Church of England and English Heritage, 2005 (www.english-heritage.org.uk/upload/pdf/16602_HumanRemains1.pdf)
“Church Archaeology: its care and management”, Council for the Care of Churches, 1999

The Advisory Panel on the Archaeology of Christian burials in England can provide free well-informed advice with consideration of relevant religious, ethical, legal, archaeological and scientific issues. Panel’s website:
<http://www.britarch.ac.uk/churches/humanremains/index.html>
or email the secretary simon.mays@english-heritage.org.uk

Treasure

Defined as:

- Any metallic object, other than a coin, provided that at least 10% by weight of metal is precious metal and that is at least 300 years old when found
- Any group of two or more metallic objects of any composition of prehistoric date that come from the same find
- All coins from the same find provided that they are at least 300 years old when found, but if the coins contain less than 10% gold or silver there must be at least ten
- Any object, whatever it is made of, that is found in the same place as, or had previously been together with, another object that is Treasure
- Any object that would previously have been treasure trove, but does not fall within the specific categories given above. Only objects that are less than 300 years old, that are made substantially of gold or silver, that have been deliberately hidden with the intention of recovery and whose owners or heirs are unknown will come into this category

If anything is found which could be Treasure, under the Treasure Act 1996, it is a legal requirement to report it to the local coroner within 14 days of discovery. The Archaeological Contractor must comply with the procedures set out in The Treasure Act 1996. Any treasure must be reported to the coroner and to The Portable Antiquities Scheme Finds Liaison Officer, Rob Collins (0191 2225076 or Robert.Collins@newcastle.ac.uk) who can provide guidance on the Treasure Act procedures.

Finds Processing and Storage

Finds shall be recorded and processed in accordance with the IFA Guidelines for Finds Work

Finds will be assessed by an experienced finds specialist.

The Archaeological Contractor will process and catalogue the finds in accordance with Museum and Galleries Commissions Guidelines (1992) and the UKIC Conservation Guidelines, and arrange for the long term disposal of the objects on behalf of the Client. A catalogue of finds and a record of discard policies, will be lodged with the finds for ease of curation.

Assessment should include x-radiography of all iron objects (after initial screening to exclude recent debris) and a selection of non-ferrous artefacts (including all coins). Refer to "Guidelines on the x-radiography of archaeological metalwork, English Heritage, 2006.

If necessary, pottery sherds and bricks should be recommended for Thermo-luminescence dating.

Finds processing, storage and conservation methods must be broadly in line with current practice, as exemplified by the IFA "Standard and guidance for the collection, documentation, conservation and research of archaeological materials", 2001. Finds should be appropriately packaged and stored under optimum conditions, as detailed in

the RESCUE/UKIC publication “First Aid for Finds” (Watkinson and Neal 1998). Proposals for ultimate storage of finds should follow the UKIC publication “Guidelines for the Preparation of Excavation Archives for Long-term Storage” (Walker 1990). Details of methodologies may be requested from the Archaeological Contractor.

Other useful guidance – “A Strategy for the Care and Investigation of Finds”, English Heritage, 2003, “Finds and Conservation Training Package”, English Heritage, 2003.

All objects must be stored in appropriate materials and conditions to ensure minimal deterioration. Advice can be sought from Jacqui Huntley of English Heritage (07713 400387) where necessary.

The report

The production of Site Archives and Finds Analysis will be undertaken according to English Heritage Guidelines (Managing Archaeological Projects 2nd Edition).

The archaeological contractor will provide a report of archaeological operations, including:

- a site location plan and grid reference
- brief description of recording procedures
- plans and sections of stratigraphy recorded (if practical)
- report on the finds (if any)
- environmental report (if relevant)
- colour photographs of the site and any significant archaeological features/finds
- a summary of the results of the work
- copy of this specification

The report will form an addition to the *Short Reports* files in the Tyne and Wear Historic Environment Record.

Three bound and collated paper copies of the report need to be submitted:

- one for the commissioning client
- one for the Planning Authority (Gateshead MBC)
- and one for deposition in the County HER at the address below. A digital copy of the report on CD is also required by the HER, in a plastic case and not attached to the report.

The report and CD for the HER must be sent by the archaeological consultant or their client directly to the address below. If the report is sent via the planning department, every page of the report will be stamped with the planning application number which ruins the illustrations. The HER is also often sent a photocopy instead of a bound colour original which is unacceptable.

Site Archive

The archive should be a record of every aspect of an archaeological project – the aims and methods, information and objects collected, results of analysis, research,

interpretation and publication. It must be as complete as possible, including all relevant documents, records, data and objects {Brown, 2007, 1}.

The site archive (records and materials recovered) should be prepared in accordance with Managing Archaeological Projects, Second Edition, 5.4 and appendix 3 (HBMC 1991), "Archaeological documentary archives" IFA Paper No. 1, "Archaeological Archives – creation, preparation, transfer and curation" Archaeological Archives Forum etc., Guidelines for the Preparation of Excavation Archives for Long Term Storage (UKIC 1990) and "Archaeological Archives – A guide to best practice in creation, compilation, transfer and curation" by Duncan H. Brown, Archaeological Archives Forum, July 2007.

Documentary Archive

The documentary archive comprises all records made during the archaeological project, including those in hard copy and digital form.

This should include written records, indexing, ordering, quantification and checking for consistency of all original context sheets, object records, bulk find records, sample records, skeleton records, photographic records (including negatives, prints, transparencies and x-radiographs), drawing records, drawings, level books, site notebooks, spot-dating records and conservation records, publication drafts, published work, publication drawings and photographs etc.

A summary account of the context record, prepared by the supervising archaeologist, should be included.

All paper-based material must at all times be stored in conditions that minimise the risk of damage, deterioration, loss or theft.

Do not fold documents

Do not use self-adhesive labels or adhesive or tape of any kind

High quality paper (low-acid) and permanent writing materials must be used.

Original drawings on film must be made with a hard pencil, at least 4H.

Do not ink over original pencil drawings.

Use polyester based film for drawings (lasts longer than plastic).

Store documents in acid-free, dust-proof cardboard boxes

Store documents flat

All documents must be marked with the project identifier (e.g. site code) and/or the museum accession number.

All types of record must use a consistent terminology and format.

Use non-metal fastenings, and packaging and binding materials that ensure the longevity of documents.

Copies of reports and appropriate drafts, with associated illustrative material, must be submitted for inclusion with the archive.

Material Archive

The material archive comprises all objects (artefacts, building materials or environmental remains) and associated samples of contextual materials or objects.

All artefacts and ecofacts retained from the site must be packed in appropriate materials.

All finds must be cleaned as appropriate to ensure their long-term survival

All metal objects retained with the archive must be recorded by x-radiograph (except gold or lead alloys or lead alloys with a high lead content and objects too thick to be x-rayed effectively e.t.c.)

All finds must be marked or labelled with the project and context identifiers and where relevant the small-finds number

Use tie-on rot-proof labels where necessary

Bulk finds of the same material type, from the same context, may be packed together in stable paper or polythene bags

Mark all bags on the outside with site and context identifiers and the material type and include a polyethylene label marked with the same information

Use permanent ink on bags and labels

Sensitive finds must be supported, where appropriate, on inert plastic foam or acid-free tissue paper. It is not advisable to wrap objects in tissue as the unwrapping could cause damage.

The archive will be placed in a suitable form in the appropriate museum (typically Museum of Antiquities for Newcastle and Tyne and Wear Museums for the rest of Tyne and Wear (check with these institutions) with the landowner's permission.

A letter will be sent to the County Archaeology Officer within six months of the report having been submitted, confirming where the archive has been deposited.

Monitoring

The Archaeological Contractor will inform the County Archaeologist of the start and end dates of the Watching Brief to enable the County Archaeologist to monitor the work in progress. The Client will give the County Archaeologist reasonable access to the development to undertake monitoring.

OASIS

The Tyne and Wear County Archaeologist supports the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an online

index/access to the large and growing body of archaeological grey literature, created as a result of developer-funded fieldwork.

The archaeological contractor is therefore required to register with OASIS and to complete the online OASIS form for their watching brief at <http://www.oasis.ac.uk/>. Please ensure that tenders for this work takes into account the time needed to complete the form.

Once the OASIS record has been completed and signed off by the HER and NMR the information will be incorporated into the English Heritage Excavation Index, hosted online by the Archaeology Data Service.

The ultimate aim of OASIS is for an online virtual library of grey literature to be built up, linked to the index. The unit therefore has the option of uploading their grey literature report as part of their OASIS record, as a Microsoft Word document, rich text format, pdf or html format. The grey literature report will only be mounted by the ADS if both the unit and the HER give their agreement. The grey literature report will be made available through a library catalogue facility.

Please ensure that you and your client understand this procedure. If you choose to upload your grey literature report please ensure that your client agrees to this in writing to the HER at the address below.

For general enquiries about the OASIS project aims and the use of the form please contact: Mark Barratt at the National Monuments Record (tel. 01793 414600 or oasis@english-heritage.org.uk). For enquiries of a technical nature please contact: Catherine Hardman at the Archaeology Data Service (tel. 01904 433954 or oasis@ads.ahds.ac.uk). Or contact the Tyne and Wear Archaeology Officer at the address below.

If you need this information in another format or language, please contact Jennifer Morrison, Archaeology Officer.