

An Archaeological Evaluation at the Cumberland Arms, Byker, Newcastle upon Tyne



Trench 1 post excavation

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ARS Ltd Report 2006/37

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EXECUTIVE SUMMARY

Archaeological Research Services Ltd (ARS Ltd) was commissioned by Mr Michael Hodson to carry out an archaeological evaluation on land at the Cumberland Arms, Byker, Newcastle upon Tyne in September 2006. The site is the subject of development proposals for extensions to both sides of the Victorian building. Due to the archaeological sensitivity of the site, which lies within the corridor of the Hadrian's Wall UNESCO World Heritage Site, two small evaluation trenches were required to test for surviving archaeological remains. In particular there was potential to encounter archaeological remains relating to Milecastle 3 or the access road known as the Military Way.

Trench 1, excavated to the west of the existing public house and closest to the supposed route of Hadrian's wall, revealed clean boulder clay only 0.75m (approx. 26.5m OD) below modern ground level. Mixed backfill containing pottery of the 18th or 19th centuries and undiagnostic fragments of clay pipe directly overlay this horizon, with a thin topsoil layer above. The absence of any soil horizon between the clay and the mixed backfill deposits may indicate that the site has been levelled at least once, removing earlier deposits, probably initially for housing development after 1870, and possibly during demolition of these properties in the 1960's.

Trench 2 revealed clean boulder clay at 0.6m (approx 26.9m OD) below modern ground level. Fragmentary wall footings probably from the 19th century terraced housing of which the Cumberland arms is the only surviving remnant were identified cutting into the boulder clay, and a horizon of mixed demolition debris with 18th or 19th century potsherds was directly overlying.

There was no evidence in either trench for features of prehistoric, roman, medieval or post-medieval date beyond that already described. If the Military Way did pass through the site, the trenches were unable to locate it. The proposed development area lies perhaps 35-50m to the south east of the most likely route of Hadrian's Wall, so the absence of remains of the wall or wall ditch in the evaluation trenches is not in itself surprising. Although there was a slight possibility that the milecastle identified by Stukeley lay within the proposed development site, it has been suggested in the recent archaeological assessment undertaken by Stobbs (2005) that this is likely to have been located further to the north.

1. INTRODUCTION

1.1. Location and Scope of Work

- 1.1.1 Archaeological Research Services Ltd (ARS Ltd) was commissioned by Mr Michael Hodson to undertake an archaeological evaluation on land at the Cumberland Arms, Byker, Newcastle upon Tyne in September 2006. The site is the subject of development proposals for extensions to both sides of the Victorian building. Due to the archaeological sensitivity of the site, which lies within the corridor of the Hadrian's Wall UNESCO World Heritage Site, two small evaluation trenches were required to test for surviving archaeological remains. In particular there was potential to encounter archaeological remains relating to Milecastle 3 or the access road known as the Military Way.



Fig. 1 Site location (Ordnance Survey data copyright OS, reproduced by permission, Licence no. 100045420)

1.2. Geology and Topography

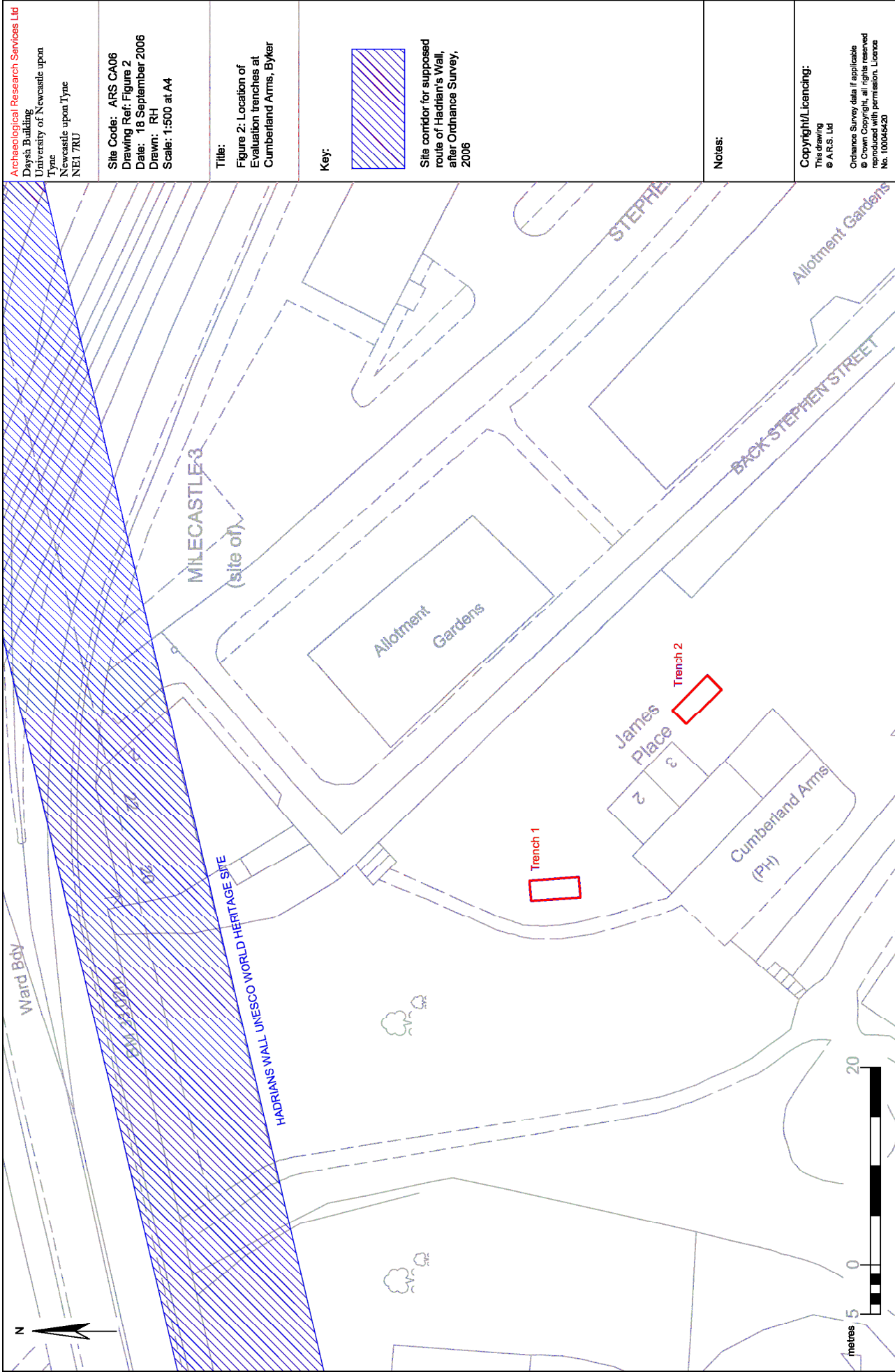
- 1.2.1 The solid geology of the site consists of Middle Coal Measures (Westphalian B). The Top Ryhope Little (TRL) and Ryhope Five Quarter (RFQ) seams are nearby (British Geological Survey (BGS) 1989). The BGS records drifts of Upper, or Pelaw Clay at the site, a boulder clay of glacial origin (BGS 1989).
- 1.2.2 The site is centred at NZ263646 just above the 25m contour at the crest of a steep incline descending southwest to the Ouseburn River. To the north of the site the ground ascends to 30m OD at Back Stephen St. The gradient continues to rise gently to the north, eventually achieving 42m OD at Shieldfield to the northwest of the site (NZ256646) and 36m at Shields Rd West (NZ266647), northeast of the site.

1.3 Archaeological and Historical Background

- 1.3.1 The site is located in an area of considerable archaeological interest and has been the subject of a detailed desk-based assessment (Stobbs 2005). This study identified the potential for prehistoric remains within the development site on the basis of recent work to the northeast (*ibid*: 10) which had uncovered evidence for pre-Roman agriculture.
- 1.3.2 The route of Hadrian's wall east of Newcastle is regarded as an addition to the original scheme probably contemporary with the fort at Wallsend. Despite widespread speculation, numerous trial trenches and observations of ground works in the vicinity, no remains of Hadrian's wall are known between the top of Byker Hill and the top of Stepney bank, a distance of 1.3km (Bidwell 1999, 97), and it is unclear how the wall crossed the Ouseburn river. Antiquarian sources strongly suggest, however, that the line of wall does continue along the projected alignment (Stobbs 2005, 11) crossing the Ouseburn near to the site. However, the actual alignment of Hadrian's wall in this area remains unproven, and consequently ground works in the vicinity of the development site are of considerable interest.
- 1.3.3 Stukeley (1776; cited by Stobbs 2005) records a milecastle adjacent to the Ouseburn very close to the study area. On the basis of the probable ancient topography of the area, Stobbs (2005, 12) suggests that the most likely location for the milecastle would be in the vicinity of the modern metro viaduct or BP filling station, some distance to the north of the site.
- 1.3.4 The area was considerably developed in the post-medieval period, though within the development area, no industrial development is known and the area of Stephen St and Byker Buildings was occupied by housing. The area was developed with poor quality terraces after 1870 of which the Cumberland Arms public house is the only surviving property. With exception of the Cumberland Arms, the Victorian housing was cleared in the 1960s for construction of maisonettes on the plot adjacent to the public house to the east. These were demolished in c.2001.

2. METHODS

- 2.1. An archaeological investigation was undertaken in order to determine whether there were any archaeological remains within the proposed development area. The specification provided by the Tyne and Wear County Archaeologist (TWCA) required the excavation of two trenches of dimensions 2m x 5m to be excavated to the depth of natural subsoil at the site. These were positioned in accordance with a plan provided by TWCA (Fig. 2).
- 2.2. The trenches were opened by mechanical excavator using a toothless ditching bucket. Deposits were removed in spits so that any horizons into which archaeological features might be cut could be observed. This process was continued until the boulder clay natural geological horizon could be observed. The excavation continued 0.2m below the top of this horizon in order to be certain that this deposit represented the natural geological horizon. Each separate layer encountered was given a unique context number (a Harris matrix can be found in Appendix I and a full context register can be found in Appendix II) and the whole trench was then cleaned using hand tools in order to expose any potential archaeological features or deposits.
- 2.2. The trenches were then photographed in colour transparency film, black and white print and digital formats. A section drawing was completed for each trench at a scale of 1:10 and the trenches were recorded with above ordnance datum (AOD) levels.



3. RESULTS

3.1. Trench 1

- 3.1.1 Trench 1 measured 5m by 2m and was excavated to a depth of 1m below modern ground surface. A firm, homogenous, yellow-brown clay (102), which was identified as natural boulder clay, was encountered at a depth of 0.75m below modern ground surface. Excavation was continued to 1m in order to confirm this. The depth of this deposit could not be confirmed within the remit of the evaluation exercise. A dark-brown to black mixed sandy silt deposit (101) containing quantities of building rubble and coal waste, with occasional fragments of post-medieval pottery and clay pipe, overlay (102). This layer varied in thickness between 0.6 and 0.8m and was identified as a layer of building rubble and mixed domestic debris backfilled following demolition of earlier buildings at the site. A layer of loose, dark-brown topsoil (100) approximately 0.2m in thickness overlay (101). The only archaeological finds recovered were clearly later post-medieval in date (18th -19th centuries) and were derived from mixed backfill (101).

3.2. Trench 2

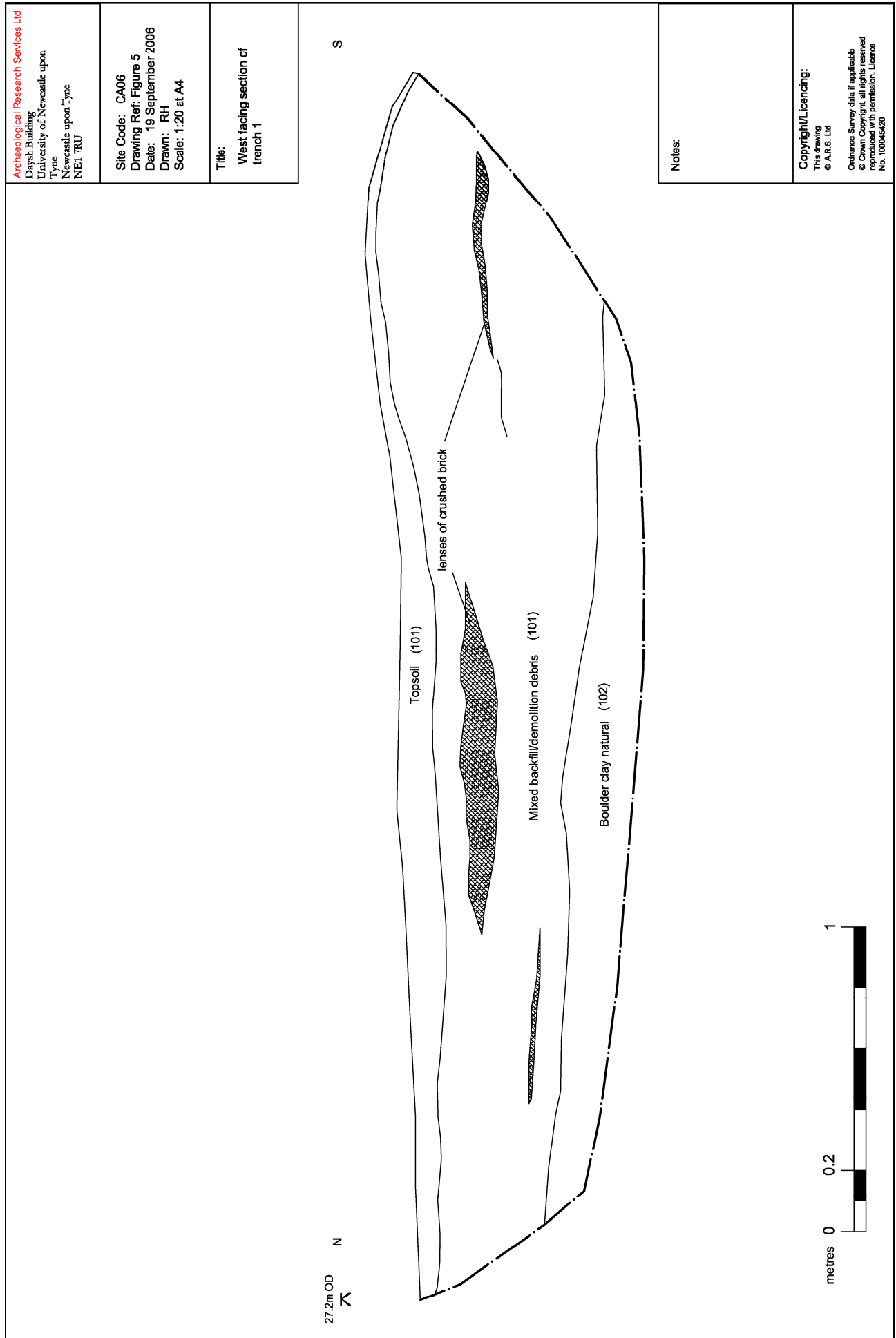
- 3.2.1 Trench 2 measured 5m by 2m and was excavated to a depth of 1m below modern ground surface. A firm, homogenous, yellow-brown clay (202), which was identified as natural boulder clay, was encountered at a depth of 0.6m below modern ground surface. A narrow foundation trench [203], containing rough unmortared sandstone blocks (204) ran north-south across the trench at right angles to it 2m from the western end of the trench. When excavated, this feature survived to a maximum two courses, and retained no structural integrity. This feature was fully recorded prior to its removal to allow excavation down to the boulder clay horizon, and was of certain post-medieval date on the basis of a large number of post-medieval potsherds recovered from amongst the stones of the wall footing (204). This feature is likely to be a surviving remnant of the footings of demolished 18th or 19th century housing at the site. A dark-brown to black mixed sandy silt deposit (201), containing building rubble and mixed debris overlay this feature, backfilling the wall foundation trench [203]. A layer of loose, dark-brown topsoil (200) approximately 0.2m in thickness overlay (201). The only archaeological finds recovered were clearly later post-medieval in date (18th -19th centuries) and were derived from the wall trench [203].

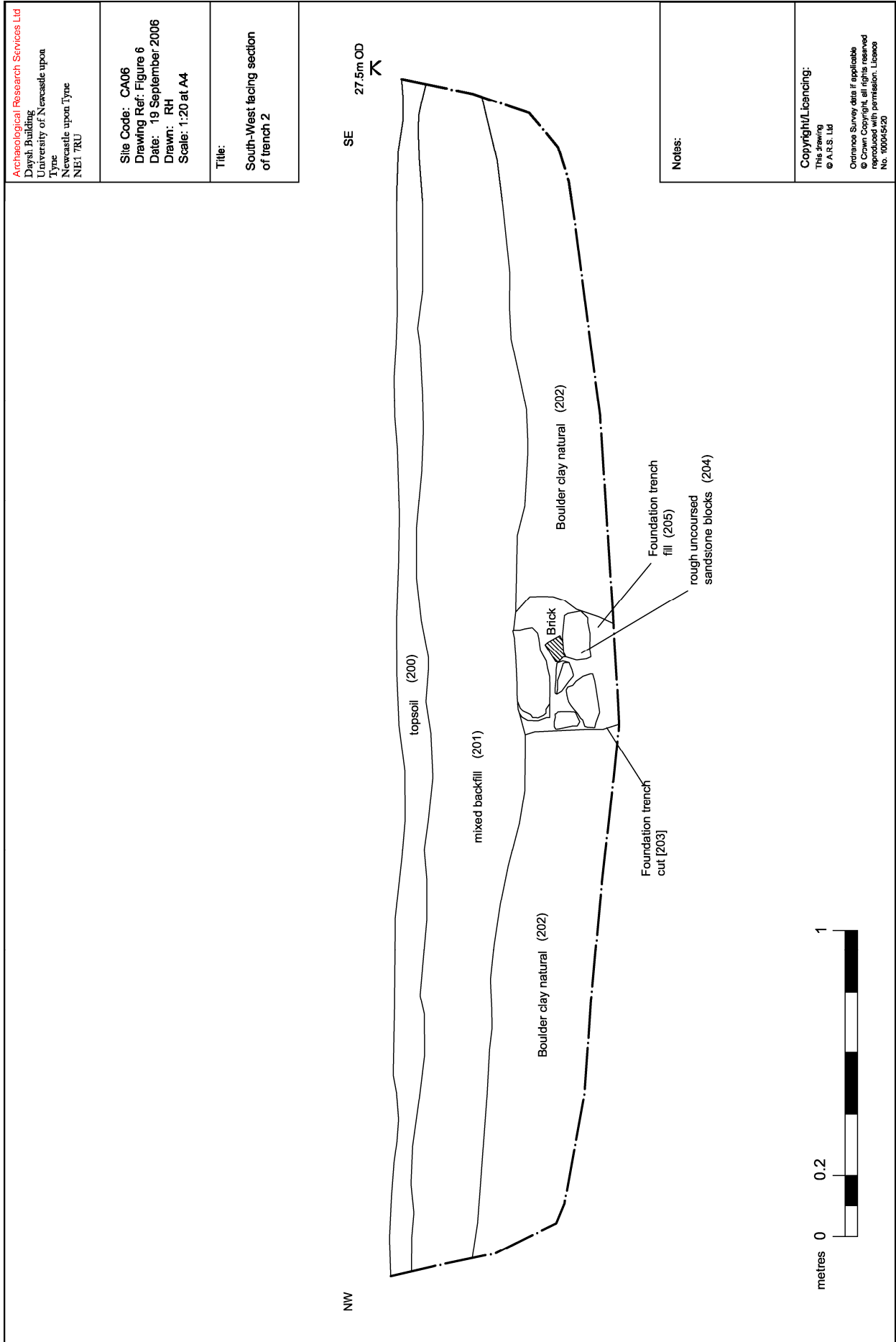


Fig. 3 Trench 1 looking North, scale 2m



Fig. 4 Trench 1 looking south, scale 2m





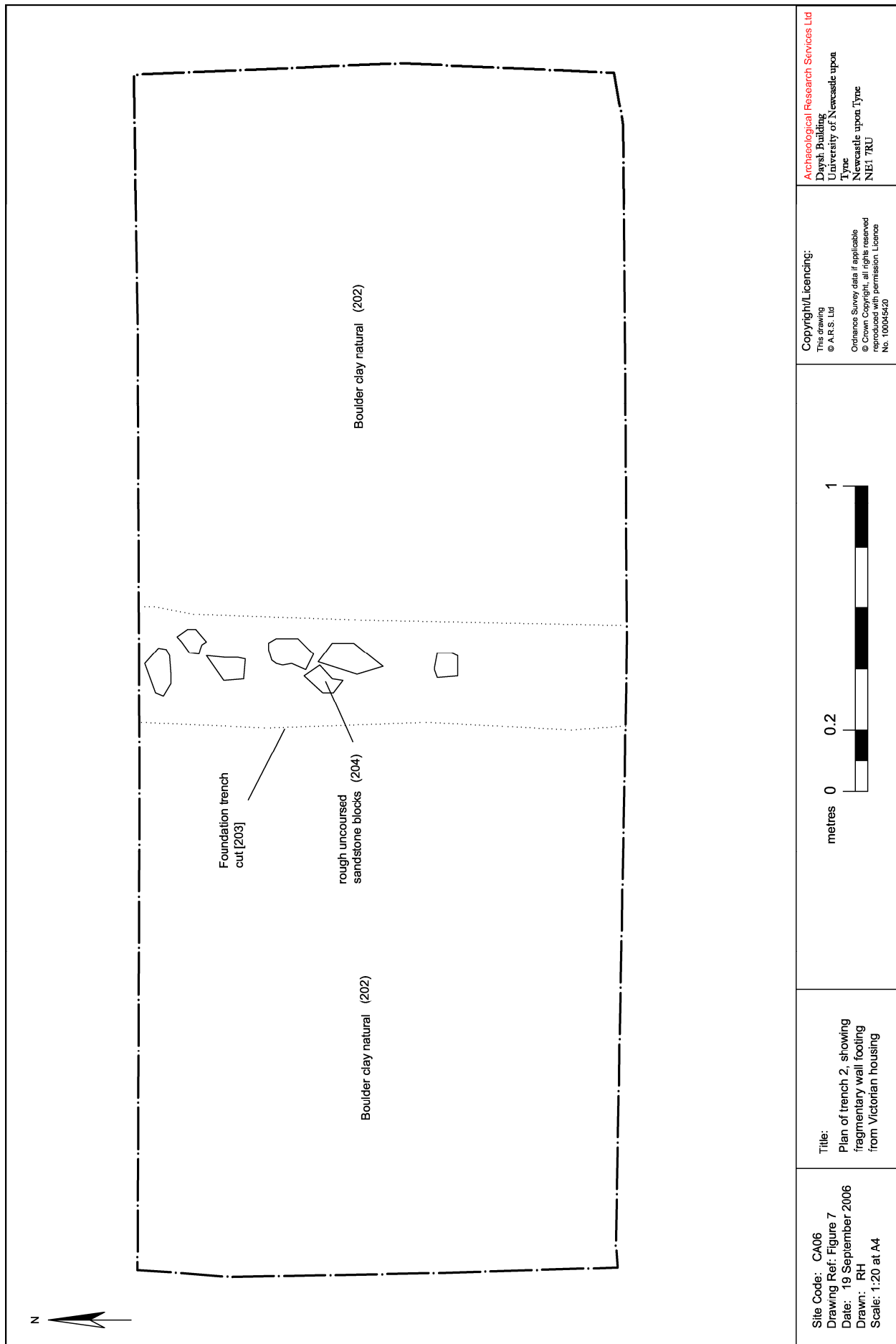




Fig. 8 Trench 2 looking north-west, scale 2m

4. DISCUSSION

- 4.1 Detailed archaeological assessment of the Cumberland Arms site and adjacent plots (Stobbs 2005) identified prehistoric, Roman, and post medieval archaeological potential. As the exact route of Hadrian's wall across the Ouseburn was uncertain, the possibility that the wall or associated features and structures might lie within the proposed development area needed to be considered. The milecastle described by Stukeley (*ibid*) was probably situated on the higher ground overlooking the Ouseburn River close to this location, though Stobbs (*ibid*, 12) suggests that the milecastle is likely to have been situated further to the north, close to the modern metro bridge or BP filling station. The possibility that the access road known as the Military Way might be encountered was also considered.
- 4.2 No archaeological remains of prehistoric date were identified during the evaluation. If such remains did survive, they may have been destroyed by later developments at the site.
- 4.3 Despite the proximity of the supposed line of Hadrian's wall, no archaeological remains of Roman date were identified during the evaluation. If such remains did survive, they may have been destroyed by later development.
- 4.4 It is of interest that trench 1, the trial excavation located closest to the supposed line of Hadrian's wall, revealed natural boulder clay at a depth of 0.75m below modern ground level, with post-medieval demolition debris, including 18th or 19th century pottery and clay pipe stems immediately overlying. Prior to the industrialisation of Byker and the Ouseburn area during the 18th and 19th centuries the site is likely to have been agricultural land (Stobbs 2005). The absence of any evidence of a soil horizon between the clay and the post-medieval demolition layers probably indicates that the area has been considerably truncated, earlier horizons being removed down to the level of the clay in order to provide solid foundation for housing.
- 4.5 The fragmentary wall footings found in trench 2 are almost certainly the remains of demolished terraced housing built after 1870. Terraces of this date commonly have sandstone foundations or cellaring. In this trench, clean boulder clay was encountered only 0.6m below modern ground level.
- 4.6 Evaluation results from both trenches located the boulder clay horizon at between approx. 26.5m OD, and approx. 26.9m OD, around 0.7m below ground level. Backfilled debris and fragmentary wall footings relating to demolished 19th century housing directly overlay this horizon, probably a result of extensive levelling and truncation, initially for construction of the 19th century properties, and after for their demolition.

5. ARCHAEOLOGICAL POTENTIAL OF THE SITE

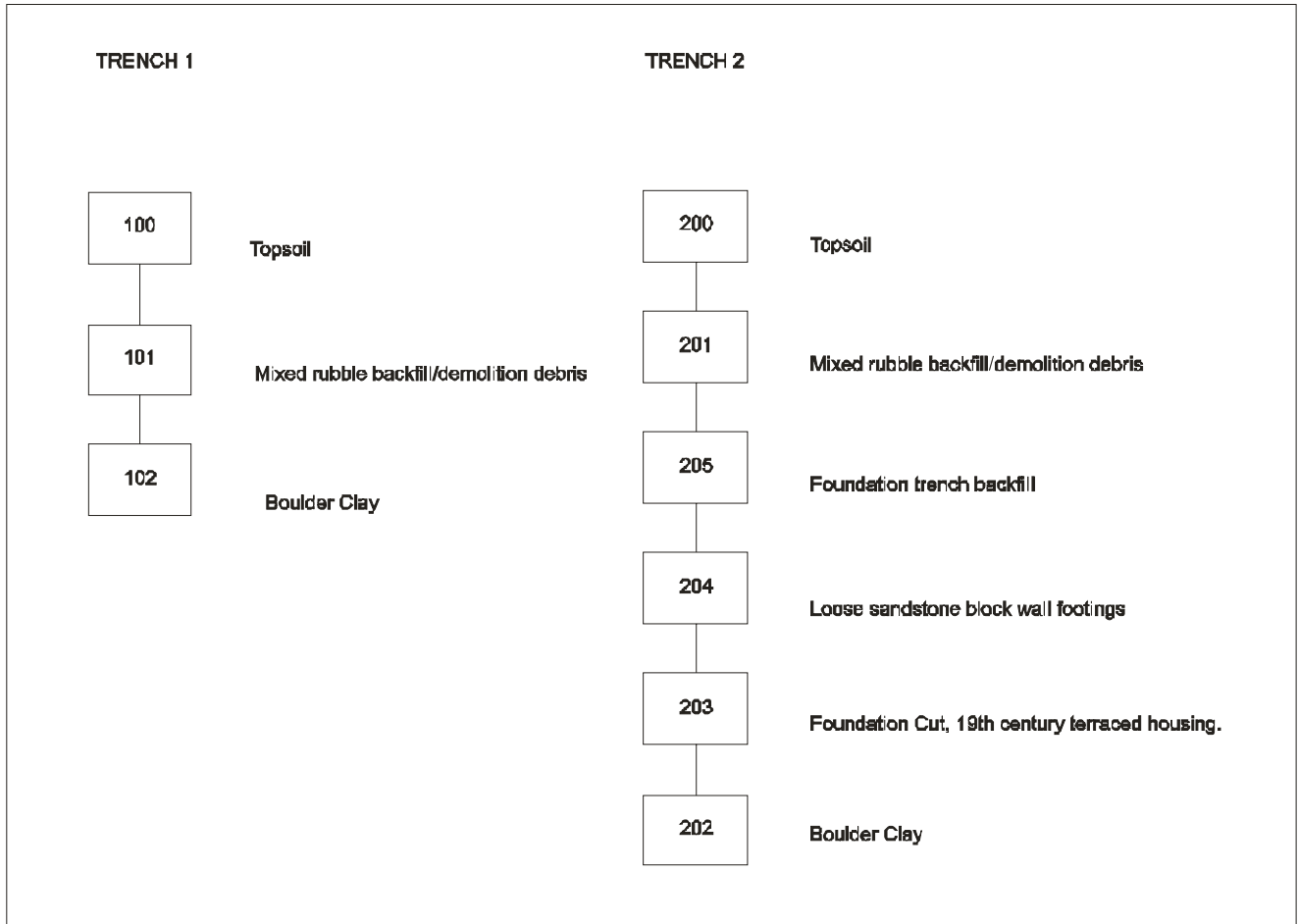
- 5.1 It can therefore be concluded, that despite the well recognised archaeological sensitivity of the area, the evaluation trenching has produced no evidence to demonstrate the survival of archaeological deposits at the site.

6. REFERENCES

British Geological Survey 1989. *Geological Survey 1:50,000 scale solid and drift mapping, Sheets 20 and 21*. BGS, Keyworth, Notts.

Bidwell, P. 1999, Hadrian's *Wall 1989-1999. A Summary of Recent Excavations and Research*. Cumberland and Westmorland Antiquarian and Archaeological Society and The Society of Antiquaries of Newcastle upon Tyne.

Stobbs, G. 2005, *Byker Buildings/Stephen Street, Byker, Newcastle upon Tyne, Archaeological Assessment*. Tyne and Wear Museums Archaeology Department unpublished client report.

APPENDIX I: Harris Matrix**APPENDIX II: CONTEXT REGISTER**

Context Number	Trench	Finds	Description
100	1, 2 and 3	-	Topsoil
101	1, 2 and 3	pottery	Mixed backfill/demolition debris
102	1	-	Natural boulder clay
200	2	-	Topsoil
201	2	-	Mixed backfill/demolition debris
202	2	-	Natural boulder clay
203	2	-	Wall trench cut
204	2	-	Sandstone blocks
205	2	pottery	Wall trench backfill

APPENDIX III: WRITTEN SCHEME OF INVESTIGATION

SPECIFICATION FOR EVALUATION WORK TO RECORD SUSPECTED ARCHAEOLOGICAL DEPOSITS AT THE CUMBERLAND ARMS, BYKER BUILDINGS, NEWCASTLE

INTRODUCTION

The Cumberland Arms public house is situated on the western edge of Byker, and is the subject of development proposals for extensions to both sides of the Victorian building. The location is adjacent to the known line of Hadrian's Wall, within the setting corridor of the UNESCO World Heritage Site. A Desk Top Assessment to appraise the likelihood that important archaeological deposits survive on the site has recommended that further archaeological work will be required. Given the fairly limited degree of new building, and the fact that the area has been overbuilt in the past, two small evaluation trenches are required to test the possibility of survival of elements recorded elsewhere to the south of the curtain wall. There is a possibility that Milecastle 3 may have been located at this point of the wall, but more likely is the presence of the access road known as the Military Way.

Two archaeological excavations are needed to provide information on the character of archaeological deposits on this site. The work must be carried out by a suitably qualified and experienced archaeological organisation. The work will record and environmentally sample any archaeological deposits of importance found on the plot. The report of the trial trenching must be the definitive record for deposition in the Tyne and Wear HER, and it must contain recommendations for any further archaeological work needed on this site.

The commissioning client will provide a site location plan showing the position of the evaluation trenches.

ARCHAEOLOGICAL BRIEF

The work can be split into two sections;

- 1) evaluation of archaeologically sensitive deposits
- 2) post-evaluation analysis and report production including recommendations for further work on the site, if appropriate

1) Archaeological evaluation

The dimensions of the trench are 2m x 5m in plan. Trench position should be accurately surveyed prior to excavation and tied in to the national grid. The trench should be excavated to the depth of natural sub-soil.

Tasks

Hand excavation, recording and environmental sampling (as stipulated below) of deposits down to the depth specified above. Excavation is to be carried out with a view to avoid damage to any archaeological features which appear to be worthy of preservation *in-situ* i.e. if features associated with Hadrian's Wall are found, the surrounding deposits can be investigated, but any extant structural remains are must be left *in-situ*. Early consultation with the county archaeologist is needed should structural remains be discovered. Excavation is to be carried out by single context planning and recorded on *pro forma* context sheets. Features over 0.5 m in diameter can be half sectioned.

The spoil can be kept close-by and rapidly backfilled into the trench at the conclusion of this work.

Fieldwork - General Conditions

1. The Archaeological Contractor will provide an outline methodology of excavation and provide details of recording procedures employed. Stratigraphy shall be recorded even when no archaeological features have been recognised.
2. 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 to a maximum of 2. It is suggested that a larger number of samples be collected during excavation from which a selection of the most suitable (uncontaminated and dated) can be processed. All tenders will quote for the full analysis, report production and publication of 2 samples.

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.

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 (0191 3743643) before the evaluation begins.

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.

3. 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.
4. 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 should be followed.
5. 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.
6. 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.
7. Animal bone assemblages should be assessed by a recognised specialist.
8. Human remains must be treated with care 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. The

final placing of the remains after scientific study and analysis will be agreed beforehand. 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. Site inspection by a recognised specialist is desirable for isolated burials and essential for cemeteries. Further guidance is available in "Church Archaeology: its care and management", Council for the Care of Churches, 1999 and in "Human Remains from Archaeological Sites...", English Heritage, 2002.

9. Should gold or silver objects or coin hoards be found, then the Archaeological Contractor must comply with the procedures set out in The Treasure Act 1996. Any treasure must be reported to The Portable Antiquities Scheme Finds Liaison Officer, Rob Collins, Museum of Antiquities, University of Newcastle, who can provide guidance on the Treasure Act procedures.
10. The Archaeological Contractor must detail measures taken to ensure the safe conduct of excavations, and must consult with the client's structural engineers concerning working in close proximity to the foundations of the surrounding buildings. The Client may wish to see copies of the Archaeological Contractor's Health and Safety Policies.
11. The Archaeological Contractor must be able to provide written proof that the necessary levels of Insurance Cover are in place.
12. The Archaeological Contractor must maintain a Site Diary for the benefit of the Client, detailing the nature of work undertaken on a day by day basis, with full details of Site Staff present, duration of time on site, etc. and contact with third parties.
13. 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.

Finds Storage

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.

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.

2) Post-excavation and report production

1. The Archaeological Contractor must produce an interim report of 200 words minimum, two weeks after the completion of the field-work, for the Client, and the

County Archaeologist. This will contain preliminary recommendations for any further work needed on site.

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

3. A full report with the following features should be produced within six months of the completion of the field-work. All drawn work should be to publication standard.

- * Location plans of trenches and grid reference of site
- * Plans showing major features and deposit spreads, by phase, and section locations
- * Sections of the two main trench axes and through excavated features
- * Tables and matrices summarising feature and artefact sequences.
- * Archive descriptions of contexts, grouped by phase (not for publication)
- * Deposit sequence summary (for publication/deposition)
- * Descriptions and illustrations of artefacts
- * Laboratory reports and summaries of environmental data, with collection methodology.
- * A consideration of the results of the field-work within the wider research context.

4. Three bound and collated copies of the final report need to be submitted, one for the commissioning Client, one for Mike Collins of English Heritage, 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.

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 evaluation at <http://ads.ahds.ac.uk/project/oasis/>. 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.

THE TENDER

Tenders for the work should contain the following:-

1. Brief details of the staff employed and their relevant experience
2. Details of any sub-contractors employed
3. A quotation of cost, broken down into the following categories:-
 - * Costs for the excavation, incl. sub-headings of staff costs on a person-day basis, transport, materials, and plant etc.
 - * Post-excavation costs, incl. storage materials
 - * Cost of Environmental analysis of 2 samples
 - * Estimated cost for full publication of results in an archaeological journal
 - * Overheads
4. An indication of the required notification period (from agreement to start date) for the field-work; the duration of fieldwork and the expected date for completion of the post-excavation work (a maximum of 6 months after completion of the fieldwork)

MONITORING

The Archaeological Contractor will inform the County Archaeologist of the start and end dates of the evaluation to enable the CA to monitor the work in progress.

Should archaeological remains of Roman date be encountered, the County Archaeologist and Mike Collins must be informed immediately. If further archaeological evaluation is required on this site, then the archaeological contractor must submit a written scheme of investigation for approval by the CA before extending the size of the trenches.

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