

**An Archaeological Watching Brief on land
adjacent to
Lanton Quarry, Northumberland.**



ARS Ltd Report 2009/40
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EXECUTIVE SUMMARY

In June 2009 Archaeological Research Services Ltd were commissioned by NEDL to carry out an archaeological watching brief at Lanton Quarry in Northumberland. The monitoring was carried out during the excavation of a trench for the installation of electrical services.

The watching brief was undertaken on excavations for a single trench measuring approximately 200m in length. The trench was located to the north of a minor road that connects the quarry entrance to the A697. It crossed the road at approximately 100m from the A697 and continued on the south side.

During the watching brief a small section of a stone wall was uncovered that had already been partially demolished when the road was built. Apart from this there were no other surviving archaeological remains in the area of the watching brief and no artefacts or ecofacts were recovered.

1. INTRODUCTION

1.1. Location and scope of work

1.1.1. In June 2009 Archaeological Research Services Ltd were commissioned by NEDL to undertake an archaeological watching brief on land adjacent to Lanton Quarry, Northumberland (Fig. 1) on behalf of Tarmac Northern Ltd. The work was carried out during the excavation of a single trench for the installation of electrical services. The trench measured approximately 200m in length and was located to the north of a minor road that connects the quarry entrance to the A697. It crossed the road at approximately 100m from the A697 and continued on the south side.

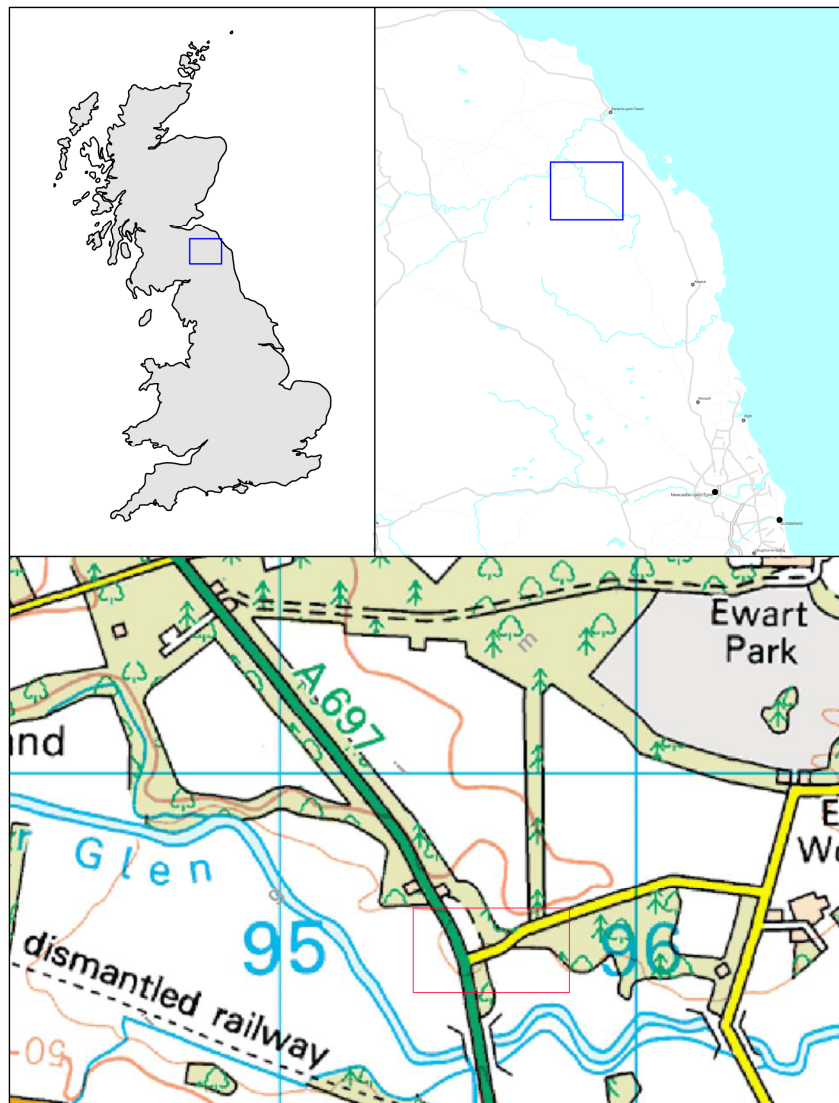


Fig. 1 Site location

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1.2 Location and topography

The Lanton Quarry site lies in the Milfield Basin north-east of the Cheviot Hills and approximately three km north of Wooler (see Fig 1). The area of the watching brief is situated at OS grid reference NT 956 304. The Milfield plain is

an area of low-lying ground which contains a complex sedimentary sequence, with glaciodeltaic and glaciofluvial sand and gravel deposits fanning out from the valley of the River Glen to form a series of terraces (Passmore *et al.* 2002). Inset below the gravel terraces is the in-filled glacial lake, Lake Ewart, which forms an extensive alluvial floodplain. Eight hundred metres to the north-east of the site lies the present channel of the River Till, and beyond that the land rises to the Fell Sandstone escarpment that borders the basin on its eastern side.

2. METHODOLOGY

- 2.1 The specification required that a watching brief should be carried out to observe any excavations taking place in order to identify any potential archaeological remains. This involved monitoring the excavation of a single trench measuring approximately 200m in length.
- 2.2 The trench was dug using a mechanical digger and a back acting toothless ditching bucket that measured 0.2m wide and a circular saw and a pecker were used to penetrate the tarmac road surface. The trench ran parallel to the north of the road until it crossed the tarmac and continued to run down the opposite side of the road to the south. The trench was dug to a depth of approximately 0.8m across the entirety of the site although this varied slightly in places.
- 2.3 A single context recording system was employed. Each layer encountered was given a unique context number and a full written description (a Harris matrix is shown in Appendix II and a full context register is shown in Appendix III). A series of digital photographs were taken throughout the watching brief.

3. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 3.1 Numerous and extensive archaeological remains are known from the vicinity of the quarry site, dating from all periods with important remains from the Mesolithic, Neolithic, Bronze Age and Anglo-Saxon periods.
- 3.2 There is widespread evidence of Mesolithic activity within the area, perhaps best illustrated by the substantial volumes of worked stone tools recovered during large-scale field walking programmes across the Milfield Basin (Waddington 1999) and the surrounding Till-Tweed catchment (Passmore and Waddington in press; Passmore and Waddington forthcoming). The glaciofluvial terraces, with the flood plain of the River Glen immediately to the south and west of the quarry, would have been extremely favourable for exploitation by Mesolithic groups.
- 3.3 The Milfield Basin would have remained an attractive focus for settlement into the Neolithic, as is attested by the concentration of archaeological sites dating to this period in the area around Lanton Quarry. These include the extensive 'ritual landscape' comprising mortuary enclosures, henges, burial monuments and associated features, together with settlement sites and possible Neolithic pit alignments. There are eight henges or henge-type monuments in the Milfield Basin of which three - Milfield South, Coupland and Marleyknowe - appear to be linked by a bounded avenue or 'droveway' (Harding 1981; Passmore and

Waddington in press). Previous excavations in the area around the site, have produced Early and Late Neolithic ceramic assemblages (e.g. Coupland Passmore and Waddington in press), Thirlings (O'Brien and Miket 1991), Cheviot Quarry (Johnson and Waddington in press) and Yeavinger (Hope-Taylor 1977). Fieldwalking within the proposed site of Lanton quarry also produced Mesolithic and Neolithic/Early Bronze Age lithics as well as Carinated Bowl ceramics (Waddington 1999).

- 3.4 Bronze Age activity from the vicinity of the quarry is evidenced by the numerous ring ditches and burial mounds, which include a barrow cemetery at Whitton Hill (Miket 1985) and the recent discovery of two Bronze Age roundhouses at Cheviot Quarry (Johnson and Waddington in press) and a further example during the previous phase of work on this site.
- 3.5 There is good evidence for Iron Age settlement in the lowlands in the form of crop-marks of substantial, and often complex, fort sites, together with potential field systems and stock control boundaries. Recognition of roundhouses and enclosed settlements is hindered by their invisibility on aerial photographs and now only coming to be recognised as a result of large-scale open area excavation. Romano-British settlement sites are also known from the surrounding vicinity in the form of both upstanding and crop-mark remains of enclosed rectangular farmsteads.
- 3.6 Anglo-Saxon activity is well attested across the landscape, with the royal palace site of Yeavinger (Hope-Taylor 1977) to the west and the replacement palace site at Maelmin (Gates and O'Brien 1988) to the north of the quarry. Excavations at Thirlings, to the north-east, produced evidence for extensive early medieval settlement (O'Brien and Miket 1991) and two burials were found at nearby Galewood Farm in 1852. Excavations at New Bewick demonstrated the presence of a sunken-featured building amongst a crop-mark complex of many other such buildings (Gates and O'Brien 1988) and excavations at Cheviot Quarry found three Early Medieval post-built buildings that date from the later 5th - early 6th centuries A.D. (Johnson and Waddington in press). A substantial Early Medieval settlement was uncovered as part of the previous phase of work on this site (see below 3.7).
- 3.7 Evaluations have been carried out previously on the site, including two large scale excavations in 2006 & 2008/9 (Stafford 2006 & Cockburn *et al.* 2009). The excavations in 2006 revealed evidence for Neolithic settlement based on pottery associations, and comprised of four trapezoidal structures and three triangular structures with other associated hearths and pits. The Neolithic archaeology was clearly divided into two areas of activity with northern and southern concentrations. One Late Bronze Age roundhouse was present with two possible associated rectangular structures as well as one possible Iron Age roundhouse with large associated pits. A concentration of Early Medieval archaeology was discovered in the southern part of the site which consisted of two rectangular Post-Built Buildings and two square Post-Built Buildings with six Sunken-Featured Buildings and associated pits and postholes. One solitary Sunken-Featured Building was discovered 170m north of the settlement. The 2008 excavations revealed evidence for a concentration of Neolithic and Early Bronze

Age activity at the northern end of the site as well as an Iron Age stone-built cist that contained the skull and leg bones of a female.

4. RESULTS

- 4.1 A single trench was dug which is shown on the plan in Fig. 2.
- 4.2 The trench was dug through the embankment to either side of the road leading from the site. The topsoil (001) consisted of very dark brown/black stony soil, beneath which was a layer of dark brown soil (002) with small stone inclusions. The natural (004) consisted of orange/brown sand and was consistent throughout the site.
- 4.3 The tarmac road surface (005) was 0.1m deep and lay above two layers of hardcore. The first layer of hardcore (006) was black in colour and 0.5m deep. The second layer of hardcore (007) consisted of grey gravel and existed beyond the limits of the excavation.
- 4.4 On the northern side of the road a small section of stone wall (003) was discovered in the trench 1m from the road surface (fig. 4). The wall projected from the northern section of the trench but did not continue into the southern section. The wall was very degraded and tumbled and had presumably been partially demolished when the modern road was laid.

5. CONCLUSION

- 5.1 The watching brief revealed a small section of stone wall that had been partially demolished when the road was laid. Apart from the section of wall there were no surviving *in-situ* archaeological remains of significance in the areas of the watching brief and no artefacts or ecofacts were recovered

6. PUBLICITY, CONFIDENTIALITY AND COPYRIGHT

- 6.1. Any publicity will be handled by the client.
- 6.2. Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

7. STATEMENT OF INDEMNITY

- 7.1 All statements and opinions contained within this report arising from the works undertaken are offered 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.

8. ACKNOWLEDGEMENTS

- 8.1. Archaeological Research Services Ltd would like to express special thanks to Tarmac Ltd, NEDL, Murphy and RJ Utility Services Ltd.

9. REFERENCES

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APPENDIX I: FIGURES

Fig 2



Fig.3 Northern section of trench.



Fig.4 Section of stone wall in trench.

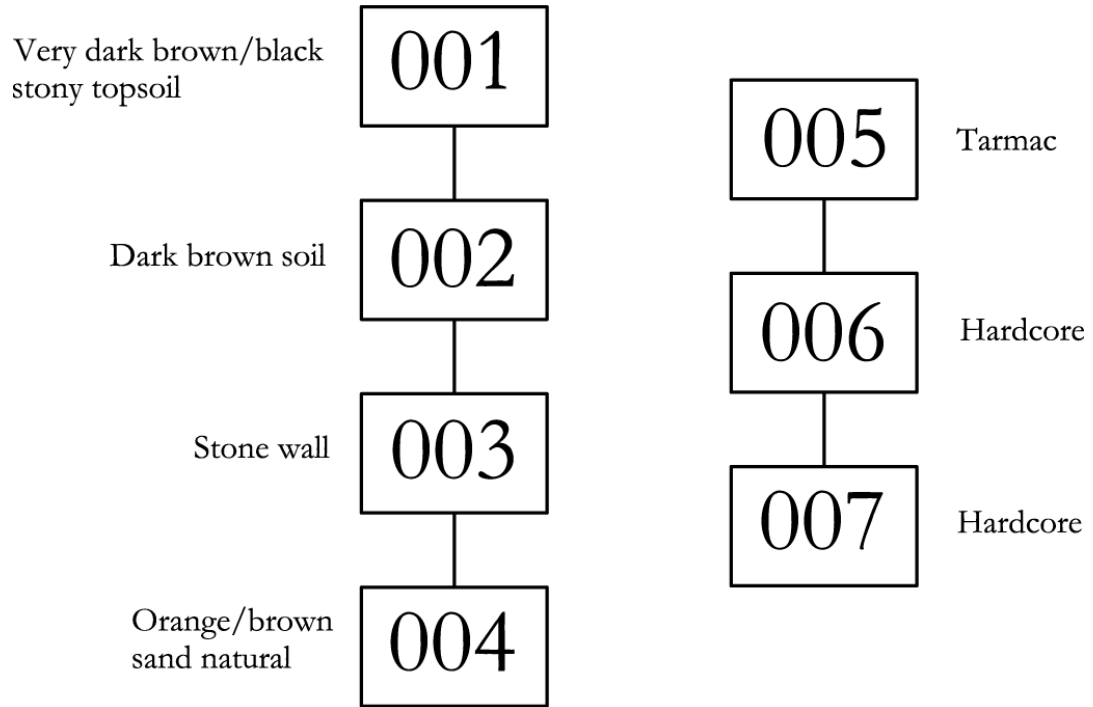


Fig.5 Section of trench in road.



Fig.6 View of trench looking west.

APPENDIX II: HARRIS MATRICES



APPENDIX III: REGISTERS

Context register

Context No.	Trench	Description
001		Very dark brown/black stony topsoil
002		Dark brown soil
003		Stone wall
004		Orange/brown sand natural
005		Tarmac
006		Hardcore
007		Hardcore

Written Scheme of Investigation: Archaeological Watching Brief, Lanton Quarry, Northumberland

1. Introduction

- 1.1. This Written Scheme of Investigation (WSI) has been prepared by Archaeological Research Services for CE Electric U.K., Tarmac Northern Ltd and Northumberland County Council. It consists of a specification for an archaeological watching brief at the Lanton Quarry site at Akeld, Northumberland (Fig. 1).



Figure 1. Site location.
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- 1.2. As part of the permitted development of the Lanton Quarry site, NEDL have consulted with Northumberland County Council, Who deemed a watching brief necessary while undertaking the installation and excavation of electrical services on the Lanton Quarry site (Fig. 2, Appendix I). The proposed development is situated at OS grid reference NT 95209 31262. Evaluations have been carried out previously on the site, including two large scale excavations in 2006 & 2008/9 (Stafford 2006 & Cockburn et al 2009). These works have produced evidence for dispersed Mesolithic activity across the site and for a concentration of Neolithic-Early Bronze Age activity at the north end of the site. The artefactual material included arrowheads, scrapers, retouched and serrated blades as well as cores, flakes and blades consistent with domestic activity. To the immediate north and east of the site are two 'ritual complexes'; the one to the north at Ewart consists of a henge monument, pit alignments and possible mortuary enclosure while that to the east consists of a henge monument and ring ditch features. It is considered likely that the remains at the Lanton site correspond to the use of these monument foci and have the potential to shed important light on the nature of settlement and land-use around these sites.
- 1.3. This written scheme of investigation details the works to be undertaken during an archaeological watching brief at the site as requested by Karen Derham, Assistant County Archaeologist for Northumberland.

2. Site Specific Requirements

- 2.1. The client for this work is CE Electric U.K., on behalf of Tarmac Northern. The nature and extent of the works has been confirmed with the client.
- 2.2. The overall aim of the watching brief will be:
 - To establish the presence/absence, nature, depth and character of any possible archaeological features.
 - To make suggestions to preserve archaeological features by record, where necessary.
 - To determine if further archaeological interventions are required.
- 2.2. Should significant archaeological remains be discovered a course of action will be discussed with Nick Best or Karen Derham, Assistant County Archaeologists and approved prior to further work being undertaken on the site.
- 2.3. In the event of the discovery of archaeological remains which are of a greater number or extent than anticipated, work will cease and NCC Conservation Team and a representative of the developer will be notified. An assessment will be made of the importance of the remains and provision made for their recording or preservation in situ as appropriate.

3. Project Management and Standards

- 3.1. The project will be carried out in compliance with the codes of the Institute of Field Archaeologists (IFA) (2000) and will follow the IFA Standard and Guidance for Excavations (1995).

- 3.2. All staff employed on the project will be suitably qualified and experienced for their respective project roles and have practical experience of archaeological excavation and recording. All staff will be made aware of the archaeological importance of the area surrounding the site and will be fully briefed on the work required by this specification. Each member of staff will be fully conversant with the aims and methodologies and will be given a copy of this written scheme of investigation to read. All members of staff employed by Archaeological Research Services Ltd are fully qualified and experienced archaeologists, this will ensure that appropriate decisions regarding environmental and dating sampling will be made in the field.

4. Methods

- 4.1 Archaeological Research Services Ltd will provide an archaeological officer at all times during any ground works within specified area to undertake the watching brief. A mechanical excavator will be used for the groundworks and the archaeologist on site will ensure that a toothless ditching bucket will be used. The on site archaeologist will be given the opportunity to stop site work in order to investigate potential archaeological features and adequate time will be allowed for recording any such features.
- 4.2 A written, drawn and photographic record will be maintained during the watching brief and all significant archaeological remains will be recorded and/or retrieved. The onsite drawings will follow the archaeological drawing conventions in MoLAS' *Archaeological Site Manual* (2002). All excavations will be recorded in accordance with normal principles of archaeological evaluation upon pro forma context sheets. All significant architectural features will be photographed (with scale) *in situ* and their location recorded on a plan of the site.
- 4.3 Where archaeological features and/or deposits are identified during the watching brief, then a sufficient quantity of the said features will be investigated by hand to allow their date, nature and degree of survival to be ascribed. All features thus investigated will be recorded in plan and section and significant archaeological finds recovered will be retained for analysis. Any archaeological features identified will be photographed and drawn in plan at a scale of 1:20 and in section at a scale of 1:10. The stratigraphy, where relevant and apparent, will be recorded within the area of the excavation.
- 4.4 In the event of human burials being discovered, they will be left *in-situ*, covered and protected and the coroners' office informed. If removal is essential, work will comply with relevant Home Office regulations.
- 4.5 Appropriate procedures under the relevant legislation will be followed in the event of the discovery of artefacts covered by the provisions of the Treasures Act 1996.
- 4.6 Deposits that have the potential for providing environmental or dating evidence will be assessed while the work is in progress. An environmental sampling strategy has been agreed with the English Heritage Scientific advisor for North-East England, Jacqui Huntley. The sampling strategy comprises the following:

- All intact archaeological contexts will be sampled. Small pit features will be 100% sampled while bulk samples of 40 litres will be taken from larger feature contexts, such as linear ditch fills.
 - Any samples recovered will be floated on site in graduated sieves with the smallest being 500µm and the flots and residues collected. Samples will be analysed by B Johnson of Archaeological Research Services Ltd and an assessment report prepared in accordance with Management of Archaeological Projects 2 (HBMC 1991).
- 4.7 During and after the excavation, all recovered artefacts and environmental samples will be stored in appropriate materials and storage conditions to ensure minimal deterioration and loss of information (this will include controlled storage, correct packaging, regular monitoring of conditions and immediate selection for conservation of valuable material).

5. Recording

- 5.1 The site will be accurately tied into the National Grid and located on a 1:2500 or 1:1250 map of the area.
- 5.2 A full and proper record (written, graphic and photographic as appropriate) will be made for all work, using pro-forma record sheets and text descriptions appropriate to the work. Accurate scale plans and section drawings will be drawn at 1:50, 1:20 and 1:10 scales as appropriate.
- 5.3 The stratigraphy of the trenches will be recorded even where no archaeological deposits have been identified.
- 5.4 All archaeological deposits and features will be recorded with above ordnance datum (AOD) levels.
- 5.5 A photographic record of all contexts will be taken in colour transparency and black and white print and will include a clearly visible, graduated metric scale. A register of all photographs will be kept.
- 5.6 Where stratified deposits are encountered, a 'Harris' matrix will be compiled.

6. Access

- 6.1 Archaeological Research Services Ltd have given the Assistant County Archaeologist notice of the commencement of fieldwork.
- 6.2 Archaeological Research Services Ltd will afford access to the Assistant County Archaeologist or their representative at all times, for the purposes of monitoring the archaeological evaluation.
- 6.3 Archaeological Research Services Ltd will maintain regular communication with the Assistant County Archaeologist to ensure that the project aims and objectives are met.

7. Finds Processing and Storage

- 7.1. All finds processing, conservation work and storage of finds will be carried out in compliance with the IFA guidelines for Finds Work (2001) and those set out by UKIC (1990).
- 7.2. Artefact collection and discard policies will be appropriate for the defined purpose.
- 7.3. Bulk finds which are not discarded will be washed and, with the exception of animal bone, marked. Marking and labelling will be indelible and irremovable by abrasion. Bulk finds will be appropriately bagged, boxed and recorded. This process will be carried out no later than two months after the end of the excavation.
- 7.4. All small finds will be recorded as individual items and appropriately packaged (e.g. lithics in self-sealing plastic bags and ceramic in acid-free tissue paper). Vulnerable objects will be specially packaged and textile, painted glass and coins stored in appropriate specialist systems. This process will be carried out within two days of the small find being excavated. Prehistoric pottery will not be cleaned or be subject to any abrasion or loss of adhering residues.
- 7.5. During and after the excavation all objects will be stored in appropriate materials and storage conditions to ensure minimal deterioration and loss of information (including controlled storage, correct packaging, and regular monitoring, immediate selection for conservation of vulnerable material). All storage will have appropriate security provision.
- 7.6. The deposition and disposal of artefacts will be agreed with the legal owner and the Museum of Antiquities prior to the work taking place. All finds except treasure trove are the property of the landowner.
- 7.7. All retained artefacts and ecofacts will be cleaned and packaged in accordance with the requirements of the recipient museum.

8. Site archive

- 8.1. The archive will be compiled in an orderly fashion to the standards and format set out in Management of Archaeological Projects 2 (HBMC 1991) and in accordance with the Guidelines for the Preparation of Excavation Archives for Long Term Storage (UKIC 1990). The archive will be deposited with the Great North Museum within 6 months of the fieldwork once all post-excavation work is completed and the final report produced.

9. Report

- 9.1. Results of the watching brief will be included in the overall Lanton Quarry publication. A small report will also be produced. One copy of the report will be

submitted to the client, and two hard copies (one bound and one unbound) and one digital copy will be submitted to the Northumberland SMR within fourteen working days of the completion of the fieldwork. Each report will be bound with each page and paragraph numbered and will include as a minimum the following:

- executive summary
- a site location plan to at least 1:10,000 scale with 10 figure central grid reference
- contractor's details including date work carried out
- nature and extent of the proposed development, including developer/client details
- description of the site location and geology
- trench plans to a suitable scale and tied into the national grid so that features can be correctly orientated
- discussion of the results of field work
- context & feature descriptions
- features, number and class of artefacts, spot dating & scientific dating of significant finds presented in tabular format
- plans and section drawings of the features drawn at a suitable scale
- additional plans/map extracts to display noted and recorded archaeological features as appropriate
- recommendations regarding the need for, and scope of, any further archaeological work, including publication
- bibliography

11. OASIS

- 11.1 ARS Ltd will complete an on-line OASIS form for this watching brief. ARS Ltd is a registered contractor on the OASIS system and has uploaded archaeological reports before.

12. Dissemination/Publication

- 12.1 A summary will be prepared for 'Archaeology in Northumberland' and submitted to Sarah MacLean by the beginning of December of the year in which the work is completed.
- 12.2 A short article will be prepared for a local journal if appropriate.

13. References

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