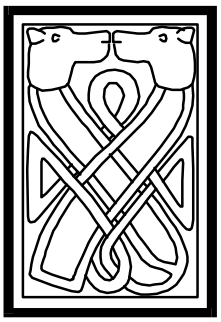
BAMBURGH RESEARCH PROJECT



LAND TO THE WEST OF CANNO MILL, KIRKNEWTON, NORTHUMBERLAND

REPORT OF ARCHAEOLOGICAL MONITORING AND RECORDING

Compiled for The Environment Agency by The Bamburgh Research Project: Commercial Projects Section

BRP 09/02 April 2009

Contents:

SUMMARY

This report has been compiled by The Bamburgh Research Project for The Environment Agency and sets out the results of the archaeological monitoring undertaken in March 2009, during the groundworks associated with the construction of a flood defence bund on land to the west of Canno Mill, Kirknewton, Northumberland (NGR NT 90194 31787) (Figures 1 and 2).

The watching brief commenced on Monday 23rd March and continued for five days to Friday 27thMarch. The construction of the new flood defence required the excavation of subsoil material from the haugh land to the west of the mill and its construction into a bund along the edge of the road to the south. The topsoil on the site was striped and mounded separately in so that it could be re-laid following the bund construction. Topsoil comprised a sandy silt up to 300mm thick and overlay layers of alluvial subsoil of silty sand. No features of archaeological interest were identified and no finds were present.

The position of the stripping activity directly to the west of the mill building lay in an area that was considered to have the potential to contain evidence of water management for the mill. No trace of a millrace or any other feature was identified despite quite an extensive area of stripping. This and the absence of any finds from the monitoring of a considerable excavated volume could be explained if the subsoil had been re-worked by the action of the river since the mill went out of use, effectively removing any evidence of medieval activity. The present need for flood defences clearly indicate an active water system.

LAND TO THE WEST OF CANNO MILL, KIRKNEWTON, NORTHUMBERLAND

REPORT OF ARCHAEOLOGICAL MONITORING

1.0 INTRODUCTION

1.0.1 This report has been compiled by The Bamburgh Research Project, Commercial Section for The Environment Agency. The document sets out the results of the monitoring of the groundworks associated with the construction of flood defence bund on land adjacent to Canno Mill, Kirknewton, Northumberland, undertaken during March 23rd to 27th 2009.

1.0.2 The work was undertaken in compliance with a Written Schedule of Investigation compiled by the Bamburgh Research Project in March 2009 in response to a brief issued by the Northumberland County Council Conservation Team. The Northumberland County Council Conservation Team reference number is: B26/2; 9030. The OASIS record number is: bamburgh1-58373.

2.0 THE SITE

2.1 Location

2.1.1 The site is located immediately west of Canno Mill on the River Glen 300m to the north east of the B6351, 2km north west of the Hamlet of Kirknewton and 11km west north west of Wooler (NGR NT 90194 31787) (Figures 1 and 2).

2.2 Archaeological background

2.2.1 Canno Mill has been in existence since the medieval period when in was owned by the Priory of Kirkham an Augustinian House. Later sold to the Strother family, in whose hands it remained till the 18th century. The mill buildings lie to the east of the area in which the new bund is to be constructed. Earthworks were reported in the area of the development by the Northumberland County Council Conservation Team during a site visit in 2004 and historical mapping indicates that the mill race extended across this areas.

2.2.2 The general area of Kirknewton contains a wide variety of archaeological sites dating from the from the prehistoric to the post medieval periods but no features other than those associated with the mill are associated with the immediate vicinity of the site.

3.0 METHODOLOGY

3.1 Monitoring during excavation

3.1.1 A suitably experienced archaeologist, familiar with the archaeological background to the site, was present to record any items of interest that were revealed. All work was carried out in compliance with the codes of practice of the Institute of Field Archaeologists (IFA) and followed the IFA Standards for Watching Briefs. The work undertaken conformed to the methodology listed below.

3.2 General standards

3.2.1 All archaeological features identified during the monitoring, would be sample excavated according to their type and form:

50% of all discrete features.
50% of waterlogged deposits.
25% of stratified deposits.
25% of the area of linear/curvilinear features with a non-uniform fill
10% of the area of linear/curvilinear features with a uniform fill

3.2.2 A 40 litre bulk palaeoenvironmental sample would be taken from all features recognised as suitable for the preservation of palaeoenvironmental remains.

3.2.3 Secure contexts would be sampled for dating where appropriate, whether on site or as sub samples of bulk samples.

3.2.4 Pottery and Animal Bone would be collected as bulk samples whilst significant artefacts would be three-dimensionally recorded prior to processing. All finds would be recorded and processed according to the BRP system and submitted for post-excavation assessment. Finds recovery and storage strategies were in accordance with published guidelines (English Heritage 1995 and IFA Guidelines for Finds Work). Had artefacts of gold or silver been recovered they would be treated in accordance with the 1996 Treasure Act and appropriate procedures would be followed.

3.2.5 In the event of Human burials being revealed they would be left *in situ* and treated in an appropriate manner. Consultation with the County Archaeological Officer would be sought to determine further action.

3.2.6 Any archaeological features encountered would be hand-cleaned, excavated and recorded:

1. A photographic record of the site was taken using black and white print, colour slide film at 35mm format. In addition a digital photographic record was compiled.

2. A written description of features was compiled using the BRP *pro forma* context recording system.

3.2.8 Arrangements will be made with the appropriate museum for the deposition of the site

archive within 6 month of the completion of the post-excavation report.

4.0 RESULTS

4.1 Monitoring during excavation

4.1.1 The construction of the new flood defence required the excavation of subsoil material from the haugh land to the west of the mill and its construction into a bund along the edge of the road to the south. The topsoil on the site was striped and mounded separately in order for it to be re-laid following the bund construction. Topsoil comprised a dark grey-brown sandy silt up to 300mm thick and overlay layers of alluvial subsoil of a medium red-brown silty sand. No features of archaeological interest were identified during the monitoring process and no finds were present.

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5.0 CONCLUSIONS

5.0.1 The position of the stripping activity directly to the west of the mill building lay in an area that was considered to have the potential to contain evidence of water management for the mill. No trace of a millrace or any other feature was identified despite quite an extensive area of stripping. This and the absence of any finds from the monitoring of a considerable excavated volume could be explained if the subsoil had been re-worked by the action of the river in the modern period, effectively removing any evidence of medieval activity. The present need for flood defences represent a clear indication of the energy of the water system on the mill area.

Text and illustrations: Graeme Young
BRP 09/02 April 2009

REFERENCES

Published and unpublished sources

BRP	Finds Manual, 2000
BRP	Health and Safety Document
English Heritage	*Management of Archaeological Projects 2*, 1991.
English Heritage	*A strategy for the Care and Investigation of Finds*. Ancient Monuments Laboratory, 1995.
IFA 2000	Code of Conduct

APPENDIX I

**LAND TO THE WEST OF CANNO MILL,
KIRKNEWTON,
NORTHUMBERLAND**

**ARCHAEOLOGICAL WATCHING BRIEF
WRITTEN SCHEDULE OF INVESTIGATION**

2.0 INTRODUCTION

1.0.1 This Written Schedule of Investigation has been compiled by The Bamburgh Research Project, in March 2009, for the Local Levy Team at the Environment Agency regarding the construction of a bund to protect the sole access track to Canno Mill, Northumberland, from flooding. The document sets out the project design for an archaeological watching brief to be conducted during groundworks associated with the scheme.

1.0.2 The Written Schedule of Investigation details the proposed scheme of works for the watching brief and has been prepared in order to fulfil a requirement for the planning application, as laid out in the brief issued by The Northumberland County Council Conservation Team. The NCCCT reference number is: B26/2; 9030.

2.0 THE SITE

2.1 Location

2.1.1 The site is located immediately west of Canno Mill on the River Glen 300m to the north east of the B6351, 2km north west of the Hamlet of Kirknewton and 11km west north west of Wooler (NGR NT 90194 31787) (Figures 1 and 2).

2.2 Archaeological background to the site

2.2.3 Canno Mill has been in existence since the medieval period when in was owned by the Priory of Kirkham an Augustinian House. Later sold to the Strother family, in whose hands it remained till the 18th century. The mill buildings lie to the east of the area in which the new bund is to be constructed. Earthworks were reported in the area of the development by the Northumberland County Council Conservation Team during a site visit in 2004 and historical mapping indicates that the mill race extended across this areas.

2.2.4 The general area of Kirknewton contains a wide variety of archaeological sites dating from the from the prehistoric to the post medieval periods but no features other than those associated with the mill are associated with the immediate vicinity of the site.

2.2 Impact of the development

2.2.3 The development involves the excavation and temporary storage of topsoil and the extraction of subsoil from the haughland to the north of the trackway to the mill in order to form a defensive bund along the side of the trackway giving access to the mill. Subsequently the topsoil will be replaced as part of the reinstatement. Excavation will be conducted along the line of the bund to a depth of 500m below ground level or to bedrock in order to allow the laying of plastic sheeting to prevent water seepage beneath the bund. The bund itself will be 90m long, 0.8m high and 1m across at the top. In addition a ramp across the bund will be constructed to allow access to the trackway that leads to the riverside of the mill buildings. (Figure 2).

2.2.4 The groundworks will cause disturbance to some depth in the area in which the subsoil is to be quarried and along the line of the new bund and therefore has the potential to impact on any archaeological features present including possibly the mill race.

3.0 OBJECTIVES

3.0.1 In the light of the potential for the construction work to impact, in places, upon preserved archaeological remains it is proposed that a continuous watching brief be conducted during the ground work associated with the construction of the bund and ramp and the landscaping, placement of site cabins and machine access in accordance with the specification laid out in the brief issued by the County Council Conservation Team.

4.0 METHODOLOGY

4.1 Watching brief during excavation

4.1.1 During the groundworks associated with the subsoil quarrying and the construction of the new bund a suitably experienced archaeologist, familiar with the archaeological background to the site, will be present to record any items of interest that are revealed. Where appropriate all excavation and will be carried out by a machine using a toothless ditching bucket. All work will be carried out in compliance with the codes of practice of the Institute of Field Archaeologists (IFA) and should follow the IFA Standards for Watching Briefs. This watching brief will conform to the following methodology.

4.2 Contingency

4.2.1 In the event of the discovery of unexpected archaeological remains over and above those predicted by previous archaeological work on the adjoining site, work will cease and the County Archaeological Officer/representative of the developer will be notified in order that an assessment of the importance of the remains and any provision for their recording may be made.

4.2.2 A contingency for excavation comprising up to 25 person days can be invoked following consultation with the County Archaeologist.

4.3 General standards

4.3.1 All archaeological features identified during the monitoring, or following the implementation of the contingency will be sample excavated according to their type and form:

50% of all discrete features.
50% of waterlogged deposits.
25% of stratified deposits.
25% of the area of linear/curvilinear features with a non-uniform fill
10% of the area of linear/curvilinear features with a uniform fill

4.3.2 A 40 litre bulk palaeoenvironmental sample will be taken from all features recognised as suitable for the preservation of palaeoenvironmental remains.

4.3.3 Secure contexts will be sampled for dating where appropriate, whether on site or as sub samples of bulk samples. Any concentrations of charcoal or other carbonised material recovered on site will usually be retained.

4.3.4 Pottery and Animal Bone will be collected as bulk samples whilst significant artefacts will be three-dimensionally recorded prior to processing. All finds will be recorded and processed according to the BRP system and submitted for post-excavation assessment. Finds recovery and storage strategies will be in accordance with published guidelines (English Heritage 1995 and IFA Guidelines for Finds Work). Should artefacts of gold or silver covered by the 1996 Treasure Act be recovered, appropriate procedures will be followed.

4.3.5 In the event of Human burials being revealed they will be left *in situ* and treated in an appropriate manner if possible. Any burial requiring excavation will be exposed, recorded and lifted in total. After consultation with the County Archaeological Officer, if excavation is required, work will comply with the relevant home Office regulations.

4.3.6 Any archaeological features encountered will be hand-cleaned, excavated and recorded:

3. A photographic record of the site will be taken using black and white print, colour slide film at 35mm format. In addition a digital photographic record will be compiled.

4. A written description of features will be recorded using the BRP *pro forma* context recording system.

5. All features will be drawn at an appropriate scale using pre-printed permatrace. Plans will normally be drawn at a scale of 1:20 and sections at a scale of 1:10.

4.3.7 All archaeological features and horizons will be accurately tied into the Ordnance Survey grid. All levels will be tied in to Ordnance Datum.

4.3.8 Arrangements will be made with the appropriate museum for the deposition of the site archive within 6 month of the completion of the post-excavation report.

5.0 MONITORING

5.0.1 Access will be made available at all reasonable times to the archaeological representatives of the Northumberland County council Conservation Team to inspect the excavation site.

5.0.2 Access to the site will be on the basis of prior notification and subject to any relevant health and safety considerations.

6.0 POST-EXCAVATION WORK, ARCHIVE AND REPORT COMPILATION

6.0.1 On completion of the excavation an assessment of the site records and finds will be undertaken in accordance with English Heritage (1991) guidelines. This will include:

- collation of all site records
- compilation of a report
- production of context, photographic, finds and illustration databases
- analysis of the finds assemblage by relevant specialists
- environmental assessment of selected bulk samples

6.0.2 The assessment report, with each page and paragraph numbered and with cross referenced illustrations, will include:

- summary of the project background
- site location
- methodology
- results of the watching brief
- site location plans and illustrations of results at appropriate scales
- interpretation of the results in an appropriate context
- post-excavation assessment of the site archive
- catalogue and assessment of the artefactual archive
- catalogue and assessment of the faunal remains
- catalogue and assessment of the palaeoenvironmental samples recovered
- appendix containing a list and summary of each recorded context

6.0.3 A copy of the report should be submitted by the archaeologist to the commissioning client, and two copies, one bound and one unbound, to the County SMR within 2 months of completion of the work. A summary will be prepared for 'Archaeology in Northumberland' and an article will be submitted to a local or national journal if appropriate.

6.0.4 The site archive will be prepared to the standard specified in the Management of Archaeological Projects, appendix 3 (HBMC 1991) and in accordance with the Guidelines for the Preparation of Excavation Archives for Long Term Storage (UKIC 1990). A summary account of the context record will be included and written by the supervising archaeologist. The archive will be deposited at the specified museum within 6 months of completion of the work on site.

6.0.4 An online OASIS form will be completed for the project as part of the post-excavation assessment process.

7.0 PERSONNEL

7.0.1 The designated project manager Graeme Young, is one of the five directors of the Bamburgh Research Project. A graduate of Newcastle University, with 21 years of experience in field archaeology including directing a number of excavations of urban medieval sites in Newcastle and Durham. He is an Associate Member of the Institute of Field Archaeologists.

7.0.2 Additional field staff, with appropriate archaeological experience, will be engaged as required.

8.0 SUB-CONTRACTED SPECIALISTS

8.0.1 Although it is not possible to predict the range of artefacts that may be recovered provision has been made for the analysis of the most common artefacts.

Material	**Specialist**
Medieval pottery	Jenny Vaughan
Post-medieval pottery	Jenny Vaughan
Prehistoric pottery	Blaise Vyner
Roman Pottery	Blaise Vyner
Animal bone	Durham University Archaeological Services
Palaeoenvironmental	Durham University Archaeological Services
Conservation	Karen Barker

9.0 HEALTH AND SAFETY

9.0.1 The Bamburgh Research Project complies with the 1974 Health and Safety Act and its subsequent amendments in all its operations. The SCAUM manual and the Bamburgh Research Project Health and Safety Policy Document is followed for all site works. A designated and appropriately trained first aider is present at all times during working hours. A First Aid kit, Accident Book and telephone are provided for each project. Safety footwear is mandatory on all excavation sites. Where required safety helmets and reflective jackets are provided. It is policy for a vehicle to be present at an excavation and staff must be appropriately equipped for bad weather.

9.0.2 All staff undergo a safety induction prior to commencing work on site. A written risk assessment is undertaken specific for each site. The safety assessment is reviewed on a daily basis and changes to the working conditions monitored continually during adverse weather conditions.

Text: Graeme Young.
BRP 09/02 March 2009

REFERENCES

Published and unpublished sources

BRP	Finds Manual, 2000
BRP	Health and Safety Document
English Heritage	*Management of Archaeological Projects 2*, 1991.
English Heritage	*A strategy for the Care and Investigation of Finds*. Ancient Monuments Laboratory, 1995.
IFA 2000	Code of Conduct
IFA 2001	Standard and Guidance for Archaeological Watching Briefs.