An Archaeological Evaluation at West Fenton Farm, Wooler, Northumberland



Trench One after excavation

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EXECUTIVE SUMMARY

In July 2007 Archaeological Research Services Ltd were commissioned by the Tweed Forum to undertake an archaeological evaluation on land at West Fenton, Northumberland. The work was carried out prior to the proposed breaching of the flood defences along the Fenton Burn in order to create an opportunity to develop floodplain habitats along the east side of the River Till.

Three evaluation trenches were excavated along the line of the proposed new course of the Fenton Burn but no features of archaeological significance or buried land surfaces were revealed.

The sedimentary sequence in each trench was recorded, and each contained alluvial deposits that varied from fine silt-clays at the top of the sedimentary sequence and changed to sands and gravels at the base of the excavated trenches. Each trench was excavated to a depth of at least 1.3m below the present ground surface and the water table was encountered at approximately this depth in each trench. A sondage was excavated in the western end of Trench One and showed that increasingly coarse sand and gravel deposits continued to a depth of at least 2.2m in this area. Two monolith tins were collected from the sedimentary sequence in Trench Three and could provide palaeoenvironmental indicators if further work is undertaken on these deposits.

1. INTRODUCTION

1.1. Location and scope of work

1.1.1. In July 2007 Archaeological Research Services Ltd were commissioned by the Tweed Forum to undertake an archaeological evaluation of land at West Fenton Farm, Wooler, Northumberland (Fig. 1). The work was carried out prior to the proposed breaching of the flood defences of the Fenton Burn to create an opportunity to develop floodplain habitats. This would entail the restoration of the Fenton Burn at West Fenton as part of a larger 'Fenton Floodplain project'.

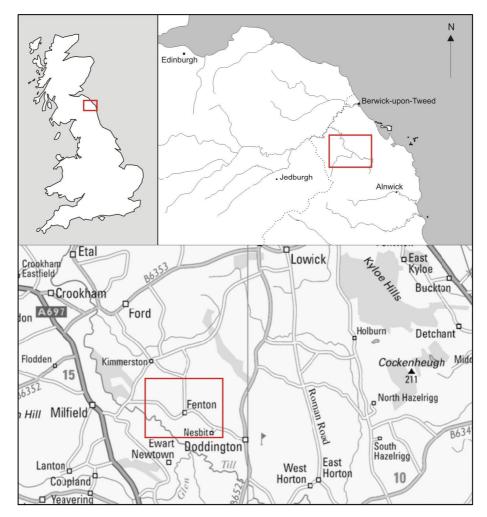


Fig. 1 Site location Ordnance Survey data copyright OS, reproduced by permission, Licence no. 100045420

1.1.2. The site for the proposed reinstatement of the Fenton Burn is centred at NT96973323 and lies at 38m above Ordnance Datum (aOD). The site covers approximately 9.6 hectares and lies just south of West Fenton Farm and southeast of an old graveyard recorded on modern Ordnance Survey maps.

1.2. Geology and Soils

- 1.2.1 Consultation of the geomorphological mapping work undertaken for the Milfield Basin Geoarchaeology Project GIS, discussion of which is presented in *Planning for the Future* (Waddington and Passmore 2006), indicates that the study area is situated entirely on Holocene alluvial terraces and flood plain deposits. Such deposits may contain buried archaeological remains, and may also be subject to the potential erosion of archaeological remains. They also have the potential to contain buried Holocene land surfaces (palaesols) and organic deposits, as well as local reworking and truncation of older Holocene surfaces.
- 1.2.2 The solid geology of the area consists of Tournaisian and Visean carboniferous sequence of sedimentary rocks (British Geological Survey 2007).

2. HISTORICAL BACKGROUND

- 2.1 Numerous and extensive archaeological features are known from the vicinity of West Fenton, particularly dating from the Mesolithic (Waddington 1999), Neolithic (Harding 1981; Miket 1981; 1987; Waddington 1999; Waddington 2000) and Anglo-Saxon periods (Gates and O'Brien 1988; O'Brien and Miket 1991; Keeney 1935). Mesolithic material, characterised by worked stone tools, have been recovered from extensive fieldwalking programmes across the Milfield Basin (Waddington 1999). Neolithic monuments include the extensive ritual landscape of henges at Milfield North (NT933349), Milfield South (NT939225), Coupland (NT940330), Marleyknowe (NT942322), Ewart Park (NT956317) and Akeld (NT958307), of which Milfield South, Coupland and Marleyknowe are linked by a double ditched causeway. Excavations at Coupland, Thirlings, and Yeavering have produced early and late Neolithic ceramic assemblages, and Thirlings produced evidence for Neolithic structures, as have excavations at Cheviot Quarry (Johnson and Waddington forthcoming), Lanton Quarry (Johnson and Stafford unpub.) and Whitton Park (Waddington 2006). Bronze Age activity from the vicinity of the development site is evidenced by numerous ring ditches and burial mounds, which include a barrow cemetery at Whitton Hill. An Iron Age multivallate fort is located at Nesbit, 1km to the east. Anglo-Saxon activity is extensive across the landscape, with the royal palace site of Maelmin, the replacement for the palace site at Yeavering, to the north-west of the development area. Excavations at Thirlings, to the south-west, produced evidence of extensive early medieval settlement and two burials were found at Galewood Farm in 1852. Later activity in the vicinity relates to the agricultural use of the plain, with nucleated settlements, one possibly near Milfield village and one beneath the present ornamental gardens at Ewart Park.
- 2.2 The archaeological potential of a number of nearby sites has recently been investigated in connection with earlier planning applications (Cheviot Quarry, Lanton Quarry and Whitton Park) and have revealed evidence for significant archaeological remains, although these sites are situated on the sand-and-gravel terraces, rather than alluvial deposits.
- 2.3 Consultation of the aerial photograph mapping undertaken for the Milfield Basin Geoarchaeology Project GIS indicates a number of features of archaeological significance in the immediate vicinity of the development site (Fig. 2). These are areas of medieval ridge-and-furrow cultivation to the west and north, the site of

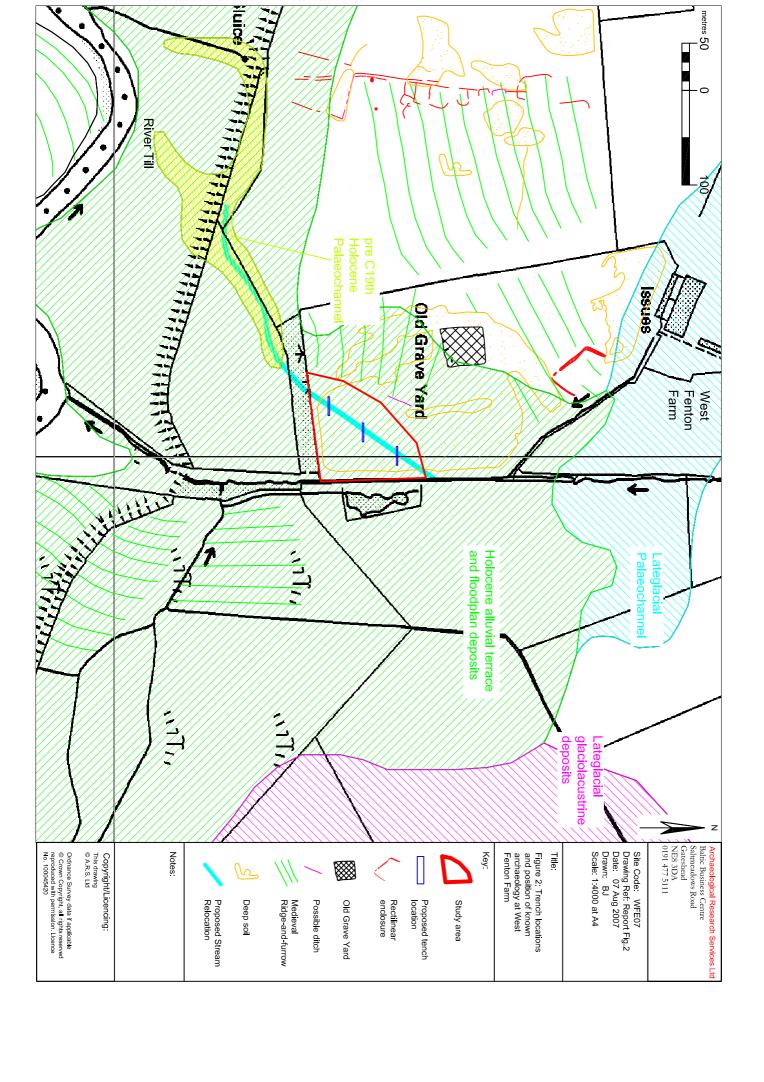
- an old graveyard, probably of medieval date and associated with Fenton Chapel of which no trace survives, approximately 70m to the north-west and the ditch of a rectilinear enclosure approximately 130m to the north, which may be late Iron Age or Romano-British, or possibly part of the early 19th century farmhouses which stood here. A possible ditch of unknown date lies immediately to the north-west of the development area.
- 2.4 Given the proximity of this site to known archaeology, there was a possibility that the site contained significant archaeological remains, perhaps forming part of the important prehistoric landscape of this area. However given the geomorphological situation of the development it was more likely that the area contained potentially buried palaesols and organic deposits that could inform on the palaeoenvironment of this area of the Milfield plain.

3. METHODOLOGY

3.1 An archaeological evaluation was carried out in order to determine whether there were any archaeological remains within the proposed development area which would be lost to flooding. This involved the excavation and recording of three archaeological trenches measuring 20m by 2m (Fig. 2), which were aimed at establishing the presence or absence of archaeological remains, their quality, depth and preservation.

The overall aim of the trial trenching was:

- to establish the presence/absence, nature, depth and character of any possible archaeological features
- to make suggestions, where possible, about further mitigation which may be necessary to preserve archaeological features *in situ*, or
- to make suggestions to preserve archaeological features by record, where necessary
- to determine if further archaeological interventions are required
- to determine whether any palaeosols or significant organic deposits have been buried by later alluvial deposits
- 3.2 The trenches were opened up by a machine using a 2m wide, toothless ditching bucket. The earth was removed in successive spits, and the process was monitored by an archaeologist in order to assess whether any significant archaeological features were exposed.
- 3.3 The trenches were photographed using colour transparency film and black and white print film, as well as digital format. The trench was recorded with above Ordnance Datum (aOD) levels.
- 3.4 The water table was encountered at a depth of *c*.1.3m below the present day ground level, which presented difficulties in fully recording the three trenches.



4. RESULTS

4.1 Trench One

4.1.1 This trench was located in the north of the investigation area and was orientated east-west. During the excavation process the trench began to fill with water from the base after excavation down to 1.3m below the modern ground surface. Water flooding into the trench caused undercutting of the trench walls, which collapsed almost immediately after they were opened (Fig. 3). Recording the trench was therefore deemed unsafe. However, there were no archaeological features, or buried land surfaces revealed during the machine excavation of this trench.



Figure 3. Trench One after opening, looking east.

4.1.2 It was noticed that the deposits within the trench became increasingly coarse, from a fine silt-clay beneath the modern plough horizon, through to coarse sands and fine gravels at depths below 1.3m from the present ground level. A sondage was excavated at the eastern end of this trench, using the machine, to a depth of approximately 2.5m below the present ground level (Fig. 4), which revealed increasingly coarse sands and gravels.



Fig. 4 Sondage excavated in western end of Trench 1 showing silts and clays (brown and orange) and coarse sands and gravels (greys). The photograph also shows the rapidly inflowing water causing collapse to the sides of the trench.

- 4.2 Trench Two
- 4.2.1 This trench was located 24m south of Trench One, and was orientated east-west. The maximum depth of this trench was 1.38m. The excavation revealed no archaeological features or palaeosols. The recording of the section could only be continued to a depth of 1.21m below current ground surface (Figs. 5 and 6).
- 4.2.2 The stratigraphic sequence recorded in Trench Two is as follows.

Depth in metres		
below modern		
ground level		

ground level	
0.00 - 0.28 0.28 - 0.38	Topsoil. Gradational boundary. Silt with some fine sand (10YR 4/2 – dark greyish brown), manganese staining noted within the unit. No apparent bedding or preferred structure or clastic inclusions were recorded. Gradational boundary.
0.38 - 0.58	Clay with silt and some fine sand (10YR 4/2 dark greyish brown). No apparent bedding or preferred orientation of the few small clasts (<1mm) recorded in the unit. Between 0.46m to 0.53m Fe staining has produced a mottled appearance and limited manganese nodules noted. Gradational boundary.
0.58 - 0.72	Clay with fine sand (10YR 4/2 dark greyish brown). No apparent bedding or preferred structure or clastic inclusions were recorded. Extensively mottled appearance due to Fe staining (10YR4/6 – dark yellowish brown). Gradational boundary.
0.72 - 0.80	Clay with fine and medium sand (10YR 5/1 grey). Manganese and Fe staining were noted. No apparent bedding or preferred structure or clastic inclusions were recorded. Gradational boundary.
0.80 - 0.97	Medium sand (10YR5/1 grey) with considerable Fe staining. No apparent bedding or preferred structure or clastic inclusions were recorded. Gradational boundary
0.97 - 1.20	Medium sand with clay (predominantly 10YR 4/6 changing to 10YR 5/1 grey). Fe staining frequently recorded producing a mottled appearance. No apparent bedding or preferred structure or clastic inclusions were recorded. Boundary to underlying unit below water level and not recorded.

All units were invaded by modern roots which reached down to the water table.



Figure 5. Trench Two looking east, scale = $2 \times 2m$



Figure 6. Trench Two north facing section, scale = 0.5m bands

- 4.3 Trench Three
- 4.3.1 This trench was located 24m south of Trench Two, and was orientated east-west. The maximum depth of this trench was 1.4m. The excavation of the revealed no archaeological features or palaeosols. The recording of the section could only be continued to a depth of 1.31m below current ground surface (Figs. 7 and 8). A full stratigraphy report of the section is as follows



Figure 7. Trench Three looking east, scale = $2 \times 2m$



Figure 8. Trench Three north facing section, scale = 0.5m bands

4.3.2 Two monolith tins were collected from the north facing section of Trench Three, comprising a total depth of 0.98m of sedimentary sequence.



Figure 9. Two monolith tins in position, prior to extraction

The sedimentary sequence is recorded below. Possible levels for undertaking palynological work are indicated in blue.



0.00 - 0.31 Topsoil. Gradational boundary.

0.31 - 0.46 Silt with clay and fine sand (7.5 YR 3/2 dark brown). Patchy Fe staining and manganese nodules are noted throughout unit. Gradational boundary

0.46 - 0.60 Clay with silt and fine sand, (colour change from 7.5 YR 3/2 to 10 YR 5/2 gradational through unit). Modern roots present. No clastic inclussions, no bedding or prefered orientation noted. Gradational boundary.

0.60 - 0.73 Clay with silt and fine sand (10 YR 4/2 dark greyish brown). Extensive mottled apparance due to Fe staining. No clastic inclussions, no bedding or prefered orientation. Gradational boundary.

0.73 - 0.81 Clay with sand and silt (10 YR 5/2 greyish brown), patchy Fe staining. No clastic inclusions, no bedding or prefered orientation. Sharp boundary.

Proposed level for pollen assessment



1.30

0.73 - 0.81 Clay with sand and silt (10 YR 5/2 greyish brown), patchy Fe staining. No clastic inclusions, no bedding or prefered orientation. Sharp boundary.

0.81 - 1.18

Medium sand with silt and clay (10YR 6/2 light brownish grey with 10YR 5/8 where Fe has oxidised in roughly equal proporations). Fe staining throughout unit, with a solitary platy sub-rounded clast (ca. 2.5 cm) noted. Non-laterally extensive fine to medium sand lens (10YR 6/3 pale brown) between 1.04 - 1.07m depth noted. Sand displays no bedding or prefered orientation. Manganese staining/nodules confined between 0.97 - 1.12. Sharp boundary.

1.18 - 1.30

Medium sand with silt and clays (10YR 6/2 light brownish grey). Mottled apparance due to Fe and manganese staining. Inclusion of small (<1cm) sub-rounded platy clasts and very fine gravel (<0.5mm), but no prefered orientation observed. Gradational boundary.

1.30 - 1.38 (not collected in monolith tin)

Medium to coarse sand and fine gravels with silts and clay fraction. (10YR 6/2 light brownish grey). Coarsening downwards and clast size incresing (>1cm).

Boundary to underlying unit below water line and not recordable.

Proposed level for pollen assessment

5. DISCUSSION

- 5.1. Given the location of the site, on Holocene alluvial deposits, there was a possibility that archaeological features and buried land surfaces may have survived within the sedimentary sequence, however there were no surviving *in-situ* archaeological remains, palaeosols or other organic deposits within the three trenches excavated at West Fenton.
- All three trenches exposed c.1.4m of intercalated sands, gravels, silts and clays 5.2 and the sedimentary sequence reflects a depositional environment dominated by fluvial activity. All three trenches recorded a broadly similar stratigraphy that described a fining-up sequence that has been capped by the modern topsoil. The topsoil reflects contemporary agriculture and land management practices. The change in the sediments from the underlying coarse sands and fine gravels to silt and clays reflects a change in hydrological conditions at the site. The underlying sands and gravels were deposited by a moving body of water; however, due to the size of the gravel (< 1.5cm) a relatively low energy regime most likely reflects the environment of deposition. Overlying the sands and gravels are medium to fine sands which were also deposited by relatively slow moving water, but no clasts were recorded implying lower velocities of water movement. The silts and clays denote a significant change in the environment of deposition at the site, as sediment of this size need very slow to standing water to be deposited. Standing pools of water within an active floodplain are not unusual and may reflect periods of channel movement or vegetation development that impedes the flow of water, such as areas of marsh and/or wetlands. Within the stratigraphic sequence, above the basal sand and gravels, there is evidence for post-deposition fluctuations in the water table. There are numerous manganese deposits intercalated with iron oxide staining. These deposits describe phases of wetting, to produce the manganese nodules, and drying, allowing exposure to air that promotes oxidation of ferrous material. Therefore, the stratigraphic sequence at West Fenton describes a complex environmental history ranging from flowing water to possibly wetland/marshy conditions with a variable local water level that has produced distinctive post-deposition horizons.

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 thank all those involved in this project, in particular Alaister Laverty of the Tweed Forum and Tom Gledhill of English Nature for their assistance, support and interest throughout the project.

9. REFERENCES

Gates, T. and O'Brien, C. 1988. Cropmarks at Milfield and New Bewick and the Recognition of Grubenhauser in Northumberland. *Archaeologia Aeliana* 16(5th series): 1-9.

Harding, A. 1981. Excavations in the prehistoric ritual complex near Milfield, Northumberland. *Proceedings of the Prehistoric Society* 46: 87-135.

Institute of Field Archaeologists. 1995. Standard and Guidance for archaeological excavation.

Institute of Field Archaeologists, 2000. Code of Conduct.

Institute of Field Archaeologists, 2001. Standard and Guidance for the collection, documentation, conservation and research of archaeological materials.

Johnson, B. and C. Waddington. in press. Excavation of Prehistoric and Dark Age sites at Cheviot Quarry, Milfield Basin, Northumberland. *Archaeological Journal*

Keeney, G. S. 1935. Anglo-Saxon burials at Galewood, within Ewart, near Milfield. *Proceedings of the Society of Antiquaries of Newcastle upon Tyne* 4th Series 7: 15-17.

Miket, R. 1981."Pit Alignments in the Milfield Basin, and the Excavation of Ewart 1. *Proceedings of the Prehistoric Society* 47: 137-146.

Miket, R. 1987. *The Milfield Basin, Northumberland 4000 BC - AD 800*, Mlitt Thesis (unpub.) University of Newcastle Upon Tyne.

O'Brien, C. and R. Miket 1991. The Early Medieval Settlement of Thirlings, Northumberland. *Durham Archaeological Journal* 7: 57-91.

Waddington, C. 1999. A Landscape Archaeological Study of the Mesolithic-Neolithic in the Milfield Basin, Northumberland. Oxford, British Archaeological Reports, British Series 291.

Waddington, C. 2006. A Neolithic-Early Bronze Age Settlement at 3 Whitton Park, Milfield, Northumberland. *Archaeologia Aeliana* 35 (5th series): 11-25.

Waddington, C. and Passmore, D. 2006. Planning for the Future. Guidance for Managing the Archaeological and Palaeoenvironmental Resource in the Till-Tweed Valleys, Northumberland, UK. Archaeological Research Services Ltd and English Heritage.

UKIC (United Kingdom Institute for Conservation). 1990. Guidelines for the Preparation of Archives for Long-Term Storage.

Websites

The British Geological Survey (BGS) website "www.bgs.ac.uk"

APPENDIX I: SPECIFICATION

Project Design, Archaeological Evaluation, West Fenton Farm, Northumberland

1. Introduction

- 1.1. Plans are proposed for the restoration of the Fenton Burn at West Fenton as part of the larger Fenton Floodplain Project, which aims to re-connect the River Till with it's natural floodplain. This project design details the works to be undertaken during an archaeological evaluation at the site in accordance with the brief prepared by the Tweed Forum.
- 1.2 The proposed development is situated at OS grid reference NT96973323, and lies at *c*.38m aOD, within a rich archaeological landscape that contains some of the most notable archaeological sites in Northumberland. There have been no previously recorded archaeological works on this site.
- Numerous and extensive archaeological features are known from the vicinity of 1.3 the development site, particularly dating from the Mesolithic (Waddington 1999), Neolithic (Harding 1981; Miket 1981; 1987; Waddington 1999; Waddington 2000) and Anglo-Saxon periods (Gates and O'Brien 1988; O'Brien and Miket 1991; Keeney 1935). Mesolithic material, characterised by worked stone tools, have been recovered from extensive fieldwalking programmes across the Milfield Basin (Waddington 1999). Neolithic monuments include the extensive ritual landscape of henges at Milfield North (NT933349), Milfield South (NT939225), Coupland (NT940330), Marleyknowe (NT942322), Ewart Park (NT956317) and Akeld (NT958307), of which Milfield South, Coupland and Marleyknowe are linked by a double ditched causeway. Excavations at Coupland, Thirlings, and Yeavering have produced early and late Neolithic ceramic assemblages, and Thirlings produced evidence for Neolithic structures, as have excavations at Cheviot Quarry (Johnson and Waddington forthcoming), Lanton Quarry (Johnson and Stafford unpub.) and Whitton Park (Waddington 2006). Bronze Age activity from the vicinity of the development site is evidenced by numerous ring ditches and burial mounds, which include a barrow cemetery at Whitton Hill. Anglo-Saxon activity is extensive across the landscape, with the royal palace site of Maelmin, the replacement for the palace site at Yeavering, to the west of the development area. Excavations at Thirlings, to the south-west, produced evidence of extensive early medieval settlement and two burials were found at Galewood Farm in 1852. Later activity in the vicinity relates to the agricultural use of the plain, with nucleated settlements, one possibly near Milfield village and one beneath the present ornamental gardens at Ewart Park
- 1.4 The archaeological potential of a number of nearby sites has recently been investigated in connection with earlier planning applications (Cheviot Quarry, Lanton Quarry and Whitton Park) and have revealed evidence for significant archaeological remains.
- 1.5 Consultation of the aerial photograph mapping undertaken for the Till-Tweed and Milfield Basin Geoarchaeology Project GIS indicates a number of features of archaeological significance in the immediate vicinity of the development site (Fig. 1). These are areas of medieval ridge-and-furrow cultivation to the west and north, the site of an old graveyard, probably of medieval date and associated with

- Fenton Chapel of which no trace survives, approximately 70m to the north-west and the ditch of a rectilinear enclosure approximately 130m to the north, which may be late Iron Age or Romano-British, or possibly part of the early 19th century farmhouses which stood here. A possible ditch of unknown date lies immediately to the north-west of the development area.
- 1.6 Consultation of the geomorphological mapping work undertaken for the Till-Tweed and Milfield Basin Geoarchaeology Project GIS, discussion of which is presented in *Planning for the Future* (Waddington and Passmore 2006), indicates that the study area is situated entirely on Holocene alluvial terraces and flood plain deposits. These deposits may contain buried archaeological remains, and may also be subject to the potential erosion of archaeological remains. There is a high potential to find buried Holocene land surfaces and organic deposits, as well as local reworking and truncation of older Holocene surfaces.
- 1.6 Given the proximity of this site to known archaeology, there is a possibility that this site will contain significant archaeological remains, perhaps forming part of the important prehistoric and / or Anglo-Saxon landscape of this area.

2. Site Specific Requirements

- 2.1. The client for this work is the Tweed Forum who are proposing to breach flood defenses to create an opportunity to develop a mosaic of floodplain habitats. The client has provided a plan of the study area which has been consulted to determine the trench locations.
- 2.2 The work to be undertaken comprises three archaeological trenches (Fig. 1) which aim to ascertain whether there are any archaeological constraints which may affect the planned development. This will be done by establishing the presence or absence of archaeological remains, their quality, depth and preservation.
- 2.2. The evaluation will comprise three evaluation trenches each measuring 20m long by 1.5m wide distributed across the study area.
- 2.3. The overall aim of the trial trenching will be:
 - to establish the presence/absence, nature, depth and character of any possible archaeological features
 - to make suggestions, where possible, about further mitigation which may be necessary to preserve archaeological features *in situ*, or
 - to make suggestions to preserve archaeological features by record, where necessary
 - to determine if further archaeological interventions are required
- 2.4. Should any changes in the trench dimensions or location become necessary, they will be discussed with the Tweed Forum's representative and approved prior to work commencing on the site.
- 2.5. Access arrangements for mechanical excavation equipment will be confirmed with the client and tenant farmer prior to work commencing.

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. Copies of CVs of those involved with the project are included as separate documents.

4. Methods

- 4.1. Topsoil and unstratified modern material will be removed by a machine using a wide, toothless ditching bucket, under continuous archaeological supervision. The topsoil or recent overburden will be removed down to the first significant archaeological horizon in successive level spits. No machinery will track over areas that have been stripped.
- 4.2. The trenches will be cleaned using appropriate hand tools in order to expose surviving archaeological features and deposits.
- 4.3. All archaeological features and deposits will be recorded on a pre-excavation plan before excavation, sampling and recording.
- 4.4. All features exposed will be excavated by hand. Sampling will typically comprise 50% of every discrete feature; 25% of linear/curvilinear features with non-uniform fill and 10% of linear features with a uniform fill.
- 4.5. 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.
- 4.6. 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.
- 4.7. 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).
- Monolith samples for pollen assessment and other environmental indicators could be taken from any buried soils. Any samples recovered will be analysed by ARS Ltd and a report prepared in accordance with MAP2 (HBMC 1991).
- 4.8. 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. Contingency

- 5.1. If the evaluation raises questions of an unexpected nature, attempts will be made to deal with the problem by agreed modification of this specification while the fieldwork is in progress.
- 5.2. A contingency sum has been provided for the excavation of an additional 15m x 1.8m of trenching to answer particular issues that may arise during fieldwork. The activation of this contingency will only be undertaken after discussion with, and with the agreement of the client.

6. Recording

- 6.1. The site will be accurately tied into the National Grid and located on a 1:2500 or 1:1250 map of the area.
- 6.2. 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.
- 6.3. The stratigraphy of the trench and test-pit will be recorded even where no archaeological deposits have been identified.
- 6.4. All archaeological deposits and features will be recorded with above ordnance datum (AOD) levels.
- 6.5. 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.

6.6. Where stratified deposits are encountered, a 'Harris' matrix will be compiled.

7. Access

- 7.1. Archaeological Research Services Ltd will give the Natural England Advisor and the County Archaeologist for Northumberland County Council 10 working days (or less if so agreed) notice of the commencement of fieldwork.
- 7.2. Archaeological Research Services Ltd will afford access to the Natural England Advisor, the County Archaeologist for Northumberland County Council or their representative at all times, for the purposes of monitoring the archaeological evaluation.
- 7.3. Archaeological Research Services Ltd will maintain regular communication with the Natural England Advisor, the County Archaeologist for Northumberland County Council and other interested parties to ensure that the project aims and objectives are met.

8. Finds Processing and Storage

- 8.1. 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).
- 8.2 Artefact collection and discard policies will be appropriate for the defined purpose.
- 8.3 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.
- 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.
- 8.5 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.
- 8.6 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.

8.7 All retained artefacts and ecofacts will be cleaned and packaged in accordance with the requirements of the recipient museum.

9. Site archive

9.1 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 Museum of Antiquities within 6 months of the fieldwork once all post-excavation work is completed and the final report produced.

10. Report

- 10.1 Two bound copies and one digital copy of the report will be submitted to Natural England and additional copies, both digital and hard copy will be submitted to the Environment Agency, Northumberland County Council Conservation Team and the landowner Mr Henderson, as appropriate, 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
 - Stewardship agreement number and OASIS reference number
 - 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
 - a trench plan 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 evaluation. 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

Gates, T. and O'Brien, C. 1988. Cropmarks at Milfield and New Bewick and the Recognition of Grubenhauser in Northumberland. *Archaeologia Aeliana* 16(5th series): 1-9.

Harding, A. 1981. Excavations in the prehistoric ritual complex near Milfield, Northumberland. *Proceedings of the Prehistoric Society* 46: 87-135.

Institute of Field Archaeologists. 1995. Standard and Guidance for archaeological excavation.

Institute of Field Archaeologists, 2000. Code of Conduct.

Institute of Field Archaeologists, 2001. Standard and Guidance for the collection, documentation, conservation and research of archaeological materials.

Johnson, B. and C. Waddington. in press. Excavation of Prehistoric and Dark Age sites at Cheviot Quarry, Milfield Basin, Northumberland. *Archaeological Journal*

Keeney, G. S. 1935. Anglo-Saxon burials at Galewood, within Ewart, near Milfield. *Proceedings of the Society of Antiquaries of Newcastle upon Tyne* 4th Series 7: 15-17.

Miket, R. 1981."Pit Alignments in the Milfield Basin, and the Excavation of Ewart 1. *Proceedings of the Prehistoric Society* 47: 137-146.

Miket, R. 1987. *The Milfield Basin, Northumberland 4000 BC - AD 800*, Mlitt Thesis (unpub.) University of Newcastle Upon Tyne.

O'Brien, C. and R. Miket 1991. The Early Medieval Settlement of Thirlings, Northumberland. *Durham Archaeological Journal* 7: 57-91.

Waddington, C. 1999. A Landscape Archaeological Study of the Mesolithic-Neolithic in the Milfield Basin, Northumberland. Oxford, British Archaeological Reports, British Series 291.

Waddington, C. 2006. A Neolithic-Early Bronze Age Settlement at 3 Whitton Park, Milfield, Northumberland. *Archaeologia Aeliana* 35 (5th series): 11-25.

Waddington, C. and Passmore, D. 2006. Planning for the Future. Guidance for Managing the Archaeological and Palaeoenvironmental Resource in the Till-Tweed Valleys, Northumberland, UK. Archaeological Research Services Ltd and English Heritage.

UKIC (United Kingdom Institute for Conservation). 1990. Guidelines for the Preparation of Archives for Long-Term Storage.