

**LAND EAST OF THE NURSERY  
MEDBURN VILLAGE  
NORTHUMBERLAND**

**ARCHAEOLOGICAL EVALUATION  
REPORT**

**May 2017**

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PRE-CONSTRUCT ARCHAEOLOGY

# **An Archaeological Evaluation at Land East of The Nursery, Medburn, Northumberland**

**Central National Grid Reference: NZ 1360 7049**

**Site Code: NMN 17**

**Commissioning Client:**

**Bellway Homes Limited North East**

Bellway House  
Kings Park  
Kingsway North  
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May 2017**


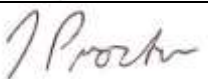
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**LAND EAST OF THE NURSERY,  
MEDBURN VILLAGE, NORTHUMBERLAND  
ARCHAEOLOGICAL EVALUATION REPORT**

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## **1. NON-TECHNICAL SUMMARY**

- 1.1 An archaeological evaluation was undertaken in April 2017 by Pre-Construct Archaeology Limited to support a planning application for a proposed housing development on land east of The Nursery, Medburn, Northumberland. The work was commissioned by Bellway Homes Limited North East as part of the planning process to inform the Local Planning Authority (LPA), Northumberland City Council, of the character, date, extent and degree of survival of any potential archaeological remains at the site.
- 1.2 The overall development site, centred at National Grid Reference NZ 1360 7049, is an irregular-shaped parcel of land covering an area of 6.4ha consisting of five fields predominantly under rough pasture with areas of dense shrub divided by fences and mature hedgerows. A dense wooded area is located within the north-eastern corner of the site.
- 1.3 Although no previous archaeological work has been undertaken within the near vicinity of the site and no heritage features have been identified within the site boundaries, the coastal plain area within which the site lies is known to have been densely settled during the prehistoric period.
- 1.4 A Written Scheme of Investigation for the archaeological investigation (AD Archaeology 2017) was approved by Northumberland County Council Conservation Team. As the site was overgrown with small trees and areas of dense scrub, geophysical survey was considered an unsuitable method of archaeological investigation.
- 1.5 The archaeological evaluation aimed to identify the archaeological potential of the site across the area of the proposed housing development. The initial trial trenching strategy comprised 50 machine-excavated trenches (Trenches 1-50) with each trench measuring 25m x 1.8m, equating to a total ground coverage of 2250m<sup>2</sup>. Two trenches (Trenches 31 and 32) located in a dense wooded area within the north-eastern part of the site were deemed unpractical to excavate and abandoned. The alignments of Trenches 19 and 23 were altered due to the presence of a fence, the south-eastern extent of Trench 10 was shortened by c. 4m due to obstruction by trees and the alignment of several other trenches were altered due to obstructions by small trees.
- 1.6 Natural geological material (Phase 1), comprising mid brownish orange boulder clay was exposed in all trenches. Sub-soil (Phase 2) directly overlay the Phase 1 natural geological material and was recorded in Trenches 2, 7, 12, 13, 14, 16, and 22 in the western part of the site and Trenches 35, 38, 39, 40, 41 and 42 in the eastern part of the site.

- 1.7 Phase 3 represents undated but potentially medieval or earlier activity consisting of a ditch and a stone-filled linear feature within the eastern part of the site. The ditch was initially identified within the central portion of Trench 21 and was further exposed within an expansion of the trench immediately to the east and the west. The ditch probably represents a drainage feature forming part of a more extensive field boundary associated with agricultural use of the land. The stone-filled linear feature was initially recorded in the central portion of Trench 6 with this trench being expanded to the north and south to expose its full extent and to establish the presence or absence of any associated features or deposits. To this end the full extent of the feature was established and no further features were identified. The fill of this feature contained large quantities of charred and cracked stone indicating that these had been subjected to high temperatures. It is likely that this material represents backfilling of the linear feature with burnt material probably derived from some form of industrial activity within the near vicinity. The function of the linear feature was undetermined.
- 1.8 Palaeoenvironmental analysis was undertaken from two bulk samples from the two features that provided limited evidence for the disposal of domestic waste and the use of spelt wheat at the site. This crop commonly associated with Iron Age and Romano-British sites. Also recovered were small pieces of charred plant debris of heather twigs, grass-type rhizomes and grass seeds with this assemblage of material commonly occurring on sites of late prehistoric or Roman origin.
- 1.9 Phase 4 represents undated but probably medieval or early post-medieval agricultural activity comprising generally NNW-SSE aligned furrows recorded within the central and western areas of the site. No furrows were identified within the eastern part of the site.
- 1.10 Phase 5 represents modern activity. Part of a brick and concrete structure and a substantial rubble-filled feature were recorded in Trench 1 which represent elements of a 20th-century agricultural building. Topsoil and turf formed the existing ground surface across the site.
- 1.11 In summary, the evaluation established that archaeological remains of prehistoric or medieval date were present within the south-western part of the site only. No archaeological remains were encountered across the remainder of the site. No further archaeological mitigation is required prior to determination of the planning application.

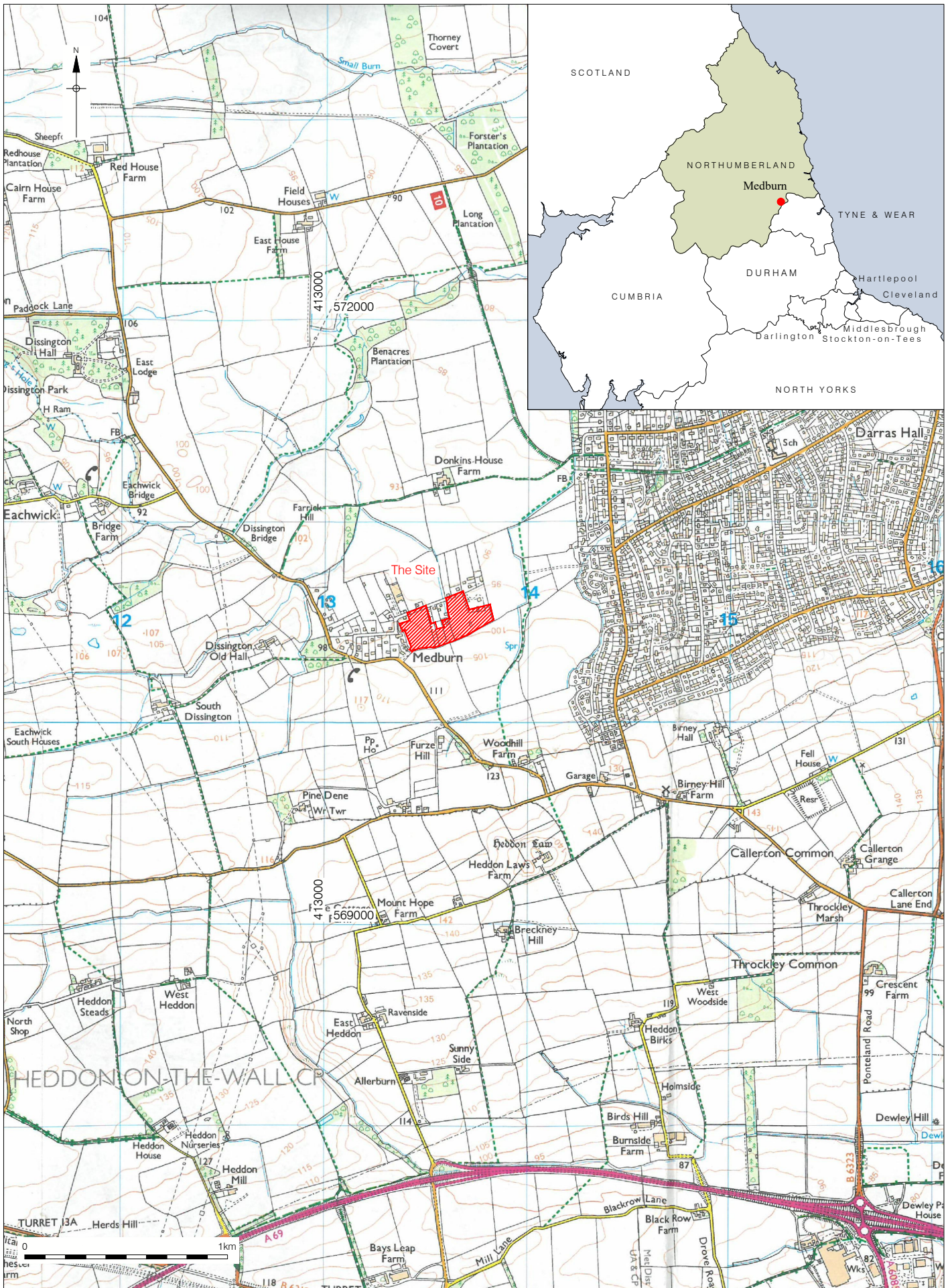
## **2. INTRODUCTION**

### **2.1 Project Background**

- 2.1.1 This report details the methodology and results of an archaeological evaluation undertaken by Pre-Construct Archaeology Limited (PCA) on land to the east of The Nursery, Medburn, Northumberland (Figures 1 & 2). The work was commissioned by Bellway Homes Limited North East (the client) to support a planning application for a proposed residential development of 62 houses (Reference 17/01149/FUL).
- 2.1.2 The archaeological evaluation comprised trial trenching in order to identify the potential for archaeological remains within the area. Forty-eight mechanically excavated trenches (Trenches 1-30, 33-50), measuring c. 25m x 1.80m and c. 25m x 1.50m at ground level were investigated (Figure 2).
- 2.1.3 The overall project was undertaken on the recommendation of the Northumberland County Council Conservation Team (NCCCT). A written scheme of investigation (WSI) compiled by AD Archaeology was approved by NCCCT prior to work commencing (AD Archaeology 2017)
- 2.1.4 The Online Access to the Index of Archaeological Investigations (OASIS) reference number of the project is preconst1-285069

### **2.2 Site Location and Description**

- 2.2.1 The proposed development area is located on land to the east of The Nursery at Medburn, Northumberland at National Grid Reference NZ 1360 7049 (Figures 1 & 2). The site is bounded to the north by residential housing and The Avenue; by residential housing and The Nursery to the west, and residential housing (Harrison Hall) and arable fields to the east and south.
- 2.2.2 The site itself is occupied by five roughly square/rectangular-shaped parcels of land covering a total area of 6.4ha. The land is relatively flat consisting of predominantly overgrown rough grass, small trees and shrubbery with mature trees running the course of field boundaries and a dense wooded area in the northeast corner of the site. A small number of outbuildings associated with The Nursery, a poultry farm and a house extending within the proposed development area are depicted on the Ordnance Survey map of 1963.
- 2.2.3 The proposed scheme involves the development of a field of pasture to the east of The Nursery for 62 residential properties with associated car parking and amenity space.



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Figure 1  
Site Location  
1:2,000,000 & 25,000 at A4





## **2.3 Geology and Topography**

- 2.3.1 The bedrock geology of the area comprises Stainmore Formation mudstone, sandstone and limestone formed approximately 313 to 326 million years ago in the Carboniferous Period (*British Geological Survey Website*).
- 2.3.2 The superficial deposits within the development boundary are comprised of Devensian-Diamicton till formed up to 2 million years ago in the Quaternary Period. These deposits were formed in cold periods with Ice Age glaciers scouring the landscape and depositing moraines of till with outwash sand and gravel deposits and post glacial meltwaters (*ibid*).
- 2.3.3 Land at the study site lies at approximately 100m AOD. Beyond the site the land rises to c. 117m AOD to the south towards Furze Hill and down to c. 90m AOD north towards the River Pont, c. 1km away. The Medburn, a tributary of the Pont, flows c. 600m to the north of the site and a small stream which flows into the Medburn is situated a short distance from the central northern boundary of the site.

## **2.4 Planning Background**

- 2.4.1 The archaeological evaluation was carried out pre-determination of a planning application for residential development at the land east of The Nursery. The archaeological investigation was required, as part of the planning process, to inform the Local Planning Authority (LPA), Northumberland County Council, of the character, date, extent and degree of survival of archaeological remains at the site. The aim was to inform the LPA of the significance of the heritage assets affected by the proposed development (NPPF para 128)
- 2.4.2 Chapter 12 of the NPPF 'Conserving and enhancing the historic environment' describes, in paragraph 126, how LPAs should '*...set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment' and details, in paragraph 128, that 'In determining applications, LPAs should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum, the relevant [Historic Environment Record] HER should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, LPAs should require developers to submit an appropriate desk-based assessment and where necessary [the results of] a field evaluation'*.
- 2.4.3 Northumberland County Council Conservation Team has responsibility for archaeological development control in relation to historic environment. A written

scheme of investigation was compiled by AD Archaeology in 2017 and submitted to and approved by NCCCT before work commenced.

## **2.5 Archaeological and Historical Background**

*The background is taken from the WSI prepared by AD Archaeology, the research and writing of those authors is acknowledged.*

### **Prehistoric**

2.5.1 The study site lies within a landscape which is known to have been densely occupied by agricultural settlements and extensively farmed during the Late Iron Age and early Roman period. Numerous rectilinear enclosures have been identified on aerial photographs across the region (Burgess 1984, 163; Petts and Gerrard 2006, 37). Several examples of small ditched settlements, thought to represent single household farmsteads, were excavated by George Jobey from the 1950s to 1980s. These investigations were generally conducted as 'rescue excavations' ahead of the destruction of the sites by development and with limited time and resources excavation focused on the ditch circuit and internal areas. More recent large-scale developer funded excavations in advance of housing schemes and opencast mining have revealed evidence for a wider range of settlement types and, in some cases, for extensive field systems associated with settlements (Proctor 2009; Hodgson *et al.* 2013).). These form an important component of a settlement pattern with evidence pointing to occupation at various sites from as early as the late Bronze Age.

2.5.2 A possible rectilinear enclosure has been recorded at Darras Hall, 400m south-east of the site under investigation (HER 27765). The enclosure was noted during analysis of lidar and aerial photography.

2.5.3 A trial trench evaluation, following on from a geophysical survey, was undertaken at Birney Hill Farm located 1km south-east from the development site by Wardell Armstrong in 2014. The site had several archaeological features ranging in date from the Bronze Age to early medieval period including prehistoric ring ditches (HER 27433), a cup and ring marked boulder and an Anglo-Saxon strap end.

### **Roman**

2.5.4 The line of Hadrian's Wall, a UNESCO transnational World Heritage Site (Frontiers of the Roman Empire), lies some 3km to the south of the study area. The area surrounding Ponteland may have been within the militarised zone.

### **Medieval**

2.5.5 The development site lies 1.5km south-west of Ponteland, a well-known medieval site. In the 12th century, Ponteland is recorded as part of the Barony of Mitford held by the Bartram family. The town was divided into three areas, Ponteland, Little Eland (Eland Green) and Great Eland (Eland Hall). These areas were united in 1240 under

the orders of the Bishop of Durham. Potential archaeological remains relating to this period and area are likely to be of agricultural use rather than settlement activity such as field boundaries or ridge and furrows.

### **Post-Medieval**

- 2.5.6 A range of heritage features are located 700m west of the development site at Dissington Old Hall. Remnants of a demolished house and its associated 17th-century garden wall are grade II listed buildings (HER 15120). To the east of Old Dissington Hall, Old Dissington Farmhouse (HER 15121) and a range of outbuildings including a gin gang (HER 15122) dating to the mid-19th century are also Grade II listed buildings.
- 2.5.7 The grade II listed Dissington Bridge (HER 10986) is noted c. 1km north-west of the development site. Approximately 1km to the south-west of the site is a water tower that has now been converted into a Grade II listed house (HER 21687). A former WWII POW camp (HER 15266) demolished by the early 1960's, is located 900m to the east of the development site. A former 20th-century railway line (HER 24994) which ran between Ponteland and Wallridge Colliery is situated 1km north-east of the site.

### **Modern**

- 2.5.8 Analysis of Ordnance Survey mapping shows that the site has lain within open fields between the mid-19th century and the end of the First World War, with the closest settlement, Dissington Old Hall located c. 700m west.
- 2.5.9 The Ordnance Survey of 1963 shows the road known as 'The Avenue' had been constructed with houses to either side, with poultry farm to the western extent of the site and a nursery to the east. A small number of outbuildings associated with the poultry farm and the nursery, and a house extending into the development area are visible on the 1963 edition of the Ordnance Survey map.
- 2.5.10 The Hadrian's Wall National Mapping Programme (NMP) suggests the presence of ridge and furrow on the development site based on the analysis of historic aerial photographs.
- 2.5.11 The nearest archaeological work to the site was a trial trenching scheme at Green Rig situated c. 300m north-west of the site. The scheme, undertaken by Archaeology Services Durham University in 2016, concluded that no significant archaeological features were encountered within the investigated areas.

### **3. PROJECT AIMS AND RESEARCH OBJECTIVES**

#### **3.1 Project Aims**

3.1.1 The project aims to fulfil the requirements of the local planning authority by undertaking an appropriately specified scheme of archaeological work. The primary aim of the scheme of works was to determine the absence/presence of archaeological features on site. The work aimed to attempt to define the presence, character, date and extent of any structures or archaeological deposits within the boundaries of the proposed development site. The results are to be used to inform decisions regarding further mitigation measures that may be required at the site prior to the proposed development. A written scheme of investigation produced by AD Archaeology in 2017 was approved by NCCCT prior to the work commencing.

#### **3.2 Research Objectives**

3.2.1 The archaeological work at Medburn provides opportunities to address key research objectives as set out in Shared Visions: The North East Regional Research Framework for the Historic Environment (NERRF) (Petts & Gerrard 2006). The NERRF highlights the importance of research as a vital element of development-led archaeological work. It set out key research priorities for all periods of the past so that all elements of commercial archaeological work can be related to wider regional and national priorities for the study of archaeology and the historic environment.

3.2.2 The NERRF Research Strategy for the Bronze Age and Iron Age has identified five Key Research Themes which address a range of archaeological topics. As the site is situated within a landscape that was evidently relatively densely settled during the later Bronze Age, the work has the potential to provide a contribution to all of these Key Research Themes:

- li. Chronology;
- lii. Changing landscapes;
- liii. Settlement function;
- liv. Social organisation and identity;
- Iv. Material culture.

3.2.3 Furthermore, the archaeological evaluation could also contribute to research agendas relating to the early medieval period:

- Emi. Landscape;
- EMii. Settlement;
- EMiii. Architecture;
- EMv. Trade and economy;

EMvi. Christianity;

EMvii. Death and burial;

EMviii. The impact of the Vikings.

## 4. ARCHAEOLOGICAL METHODOLOGY

### 4.1 Trial Trenching Evaluation

- 4.1.1 The fieldwork was undertaken in compliance with the codes and practice of the Chartered Institute for Archaeologists and the relevant ClfA standard and guidance document (ClfA 2014b). PCA is a ClfA 'Registered Organisation'. All fieldwork and post-excavation was carried out in accordance with the *Yorkshire, the Humber & The North East: Regional Statement of Good Practice* (Yorkshire, The Humber and the North-East 2009). The work was carried out between the 10th and 21st of April 2017.
- 4.1.2 A total of 50 evaluation trenches were set-out using a Leica Viva Smart Rover Global Navigation Satellite System (GNSS), with pre-programmed co-ordinate data determined by an office-based CAD operative.
- 4.1.3 The trenches measured c. 25m x c. 1.8m; Trenches 31 and 32 were not excavated as they were located in a dense wooded area within the north-eastern part of the site.
- 4.1.4 The alignments of Trenches 19 and 23 were altered due to the presence of a fence, the south-eastern extent of Trench 10 was shortened by c. 4m due to obstruction by trees. Further trenches were moved from their original locations due to ground obstructions; the trench locations as excavated are shown on Figure 2.
- 4.1.5 Following consultation with NCCCT, Trenches 6 and 21 were expanded to further characterise features of archaeological interest. Trench 6 was expanded to the north by c. 8.50m x 6.00m and to the south by c. 7.00m x 4.50m (Area 2) and Trench 21 was expanded to the east by c. 6.00m x 5.00m and by c. 5.00m x 4.00m to the west (Area 1).
- 4.1.6 Ground level in the trenches was reduced using a tracked 180° back-acting, mechanical excavator (JCB) utilising a wide blade, toothless ditching bucket. Successive spits of no more than 100mm depth were removed until either the top of the first significant archaeological horizon or the top of the natural geological substratum was reached. All ground reduction was carried out under archaeological supervision.
- 4.1.7 The investigation of archaeological levels was by hand, with cleaning, examination and recording both in plan and in section, where appropriate. Investigations within the trenches followed the normal principles of stratigraphic excavation and were conducted in accordance with the methodology set out in the field manual of PCA (PCA 2009) and the Museum of London *Site Manual* (Museum of London 1994).
- 4.1.8 Deposits and cut features were individually recorded on the *pro-forma* 'Trench Recording Sheet' and 'Context Recording Sheet'. All site records were marked with the unique-number 'Site Code' (NMN 17). All archaeological features were excavated by hand tools and recorded in plan at 1:20 or in section at 1:10 using standard 'single

context recording' methods. The height of all principal strata and features was calculated in metres above Ordnance Datum (m AOD) and indicated on appropriate plans and sections.

- 4.1.9 A detailed photographic record of the evaluation was prepared using SLR cameras (35mm film black and white prints for archive purposes) and by digital photography. All detailed photographs included a legible graduated metric scale. The photographic record illustrated both in detail and general context archaeological exposures and specific features in all trenches.

## **4.2 Post Excavation**

- 4.2.1 The stratigraphic data generated by the evaluation is represented by the written, drawn and photographic records. A total of 244 archaeological contexts were defined in the 48 excavated trenches (Appendix A). Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data. A written summary of the archaeological sequence was then compiled, as described in Section 5.
- 4.2.2 During the evaluation no artefactual or ecofactual material was recovered from the evaluation trenches.
- 4.2.3 The palaeoenvironmental sampling strategy of the project was to recover bulk samples where appropriate, from well-dated stratified deposits covering the main periods or phases of occupation and the range of feature types represented, with specific reference to the objectives of the excavation. To this end 4 bulk samples (Samples 1-4) were collected from deposits of undated but probably medieval or earlier date; of the group of bulk samples two were selected for post-excavation processing and assessment for palaeoenvironmental remains (Samples 2 & 4) (Appendix C). An assessment report has been produced including a basic quantification of the recovered material and a statement of potential for further analysis and recommendations for such work (see the Section 6).
- 4.2.4 The complete Site Archive, in this case comprising only the written, drawn and photographic records (including all material generated electronically during post-excavation) will be packaged for long term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document (Brown 2007) will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document (Walker, UKIC 1990) and the most recent ClfA publication relating to archiving (ClfA 2014b). The depositional requirements of the body to which the Site Archive will be ultimately transferred will be met in full.
- 4.2.5 At the time of writing the Site Archive was housed at the Northern Office of PCA, Unit N19a Tursdale Business Park, Durham, DH6 5PG. When complete, the Site Archive



will be deposited with the Great North Museum, Newcastle upon Tyne, under the site code NMN 17. The Site Archive will be organised as to be compatible with the other archaeological archives produced in the county. A completed transfer of title deed will accompany the Site Archive on deposition.

## **5. EVALUATION RESULTS: THE ARCHAEOLOGICAL SEQUENCE**

*During the evaluation, separate stratigraphic entities were assigned unique and individual 'context' numbers, which are indicated in the following text as, for example [123]. The archaeological sequence is described by placing stratigraphic sequences within broad phases, assigned on a site-wide basis in this case. An attempt has been made to add interpretation to the data, and correlate these phases with recognised historical and geological periods. A selection of plates can be found within Appendix B. Deposits and features that have been grouped have the pre-fix G, for example, G1.*

### **5.1 Phase 1: Geological Substratum**

5.1.1 Phase 1 represents the natural geological material exposed within all 48 trenches which generally comprised firm brownish orange and yellowish-brown clay.

5.1.2 The maximum and minimum height of the upper interfaces of geological substratum was 102.12m AOD in Trench 1 in the western part of the site and 95.12m AOD in Trench 30 in the eastern part of the site.

5.1.3 The depth at which natural clay was encountered below existing ground level varied across the site and was dependant on the presence of subsoil and modern dumped deposits. Where only topsoil was encountered, the geological substratum was encountered at maximum and minimum depths below ground level of 0.47m in Trench 17 in the western part of the site and 0.30m in Trenches 48 & 47 in the eastern part. In trenches where subsoil or modern dumping deposits were present (Trenches 2, 7, 11-14, 16, 22, 25 & 38-42), the geological substratum was encountered at maximum and minimum depths below ground level of 0.68m in Trench 7 and 0.29m in Trench 25, respectively.

### **5.2 Phase 2: Subsoil**

5.2.1 Subsoil directly overlying the natural-substratum was recorded in 12 trenches; Trenches 2, 7, 12, 13, 14, 16, and 22 in the western part of the site and Trenches 35, 38, 39, 40, 41 and 42 in the eastern part of the site. The subsoil comprised mid brown silty clay ([21] Trench 21; [71] Trench 7; [121] Trench 12; [131] Trench 13; [141] Trench 14; [161] Trench 16; [221] Trench 22; [381] Trench 38; [391] Trench 39; [401] Trench 40; [411] Trench 41; [421] Trench 42) with a maximum thickness of 0.30m in Trench 2 and a minimum thickness of 50mm in Trenches 38 and 40.

### **5.3 Phase 3: Undated**

5.3.1 Phase 3 represents undated archaeological activity at the site.

5.3.2 Part of an east–west aligned ditch (G1) was initially exposed within the central portion of Trench 21. Further exposure of the ditch was required and the central portion of

Trench 21 was expanded to the east and west to further characterise this feature (Area 1) (Figure 3). To this end the ditch was traced for a maximum distance of 11.20m. It had a U-shaped profile and was up to 0.63m wide by up to 0.21m deep (Plate 3; Figure 5, Sections 3, 5 & 6). The ditch continued beyond the east and west limits of excavation with the eastern portion of the ditch was truncated by a Phase 4 furrow. Three ditch slot sections were excavated across ditch G1. The findings are summarised in the table below:

Slot No.	Phase 2: Ditch G1			
	Width	Depth	mAOD	
			Top	Base
[213]	0.62m	0.30m	101.32	101.02
[215]	0.66m	0.23m	101.25	101.02
[219]	0.40m	0.05m	100.91	100.86

Table 5.1: Ditch G1 Measurements

- 5.3.3 Ditch G1 was filled by two phases of natural silting (G2) (Plate 4). The lower silting deposit comprised firm greyish orange silty clay [214] & [217] up to 0.11m thick. The uppermost natural silting fill comprised firm mid brownish grey silty clay, [212] & [216], up to 0.14m thick.
- 5.3.4 The form of ditch G1 and the composition of its fills suggest this feature is likely to have been associated with agricultural use of the land and probably represents a drainage ditch or more extensive field boundary. Although the ditch itself is undated, it was truncated by a furrow of probably late medieval to post-medieval date, therefore the ditch must predate this and a medieval or earlier date is probable.
- 5.3.5 A palaeoenvironmental sample from the lower natural silting deposit [214] (Sample 2) from ditch [213] was analysed (Appendix C). The sample produced fragmented charcoal, cinder and coal, charred grass-type rhizomes, charred heather twigs and modern roots. Heavily mineralised charcoal remains were identified comprised oak, ash and diffuse porous. A single oat-type grass seed was also present.
- 5.3.6 No artefactual or ecofactual material was recovered from ditch G1.
- 5.3.7 Part of a linear NE-SW aligned linear feature [67], was partially exposed within the central portion of Trench 6 (Figure 4; Plate 6). Further exposure of this feature was required to establish its full extent and also to identify the presence or absence of any associated features or deposits. To this end the central portion of Trench 6 was extended to the north by c. 8.50m x 6.00m and to the south by c. 7.00m x 4.50m (Area 2). The full extent of linear feature [67] was exposed within Trench 6 and the northern element of Area 2. As exposed, it measured 3.26m long with a rounded terminal to the south-west and truncated to the north-east by a Phase 4 furrow, beyond which it did not extend. It had a U-shaped profile and was up to 0.47m wide by up to 0.27m deep (Figure 5, Sections 2 & 4; Plates 5 & 7) and was encountered at a maximum height of 100.52m AOD. Its single fill comprised soft dark grey sandy clay

[66] which contained frequent medium sub-rounded stones measuring up to 150mm (Plate 7). The stones have been subjected to high temperatures with a large proportion observed to be cracked with a pinkish hue and some covered with soot.

- 5.3.8 A palaeoenvironmental sample (Sample 4) was analysed from backfill [66]. Charred plant fossils were present in low quantities and comprised compact wheat grain, spelt wheat (*Triticum spelta*) glume bases, and grass caryopses of brome, oat-type and heath-grass. The use of spelt wheat as a cereal crop first appears during the middle to late Bronze Age, but is more commonly associated with sites of Iron Age or Roman date. A small quantity of charcoal recovered identified as hazel branchwood was probably used as fuel. Fire-cracked stone, a trace of calcined bone and a small fragment of fired clay were also recovered.
- 5.3.9 The function of this feature is uncertain and has been tentatively interpreted as a gully possibly associated with the agricultural use of the land. The large quantity of burnt stone in the backfill may derive from some form of industrial or processing activity undertaken within the near vicinity. Although the gully is undated, it is truncated by Phase 4 furrow, therefore as with the aforementioned ditch G1 it is likely to also be medieval or earlier in date.
- 5.3.10 No artefactual or ecofactual material was recovered from gully [67].

#### **5.4 Phase 4: Undated Furrows**

- 5.4.1 An extensive, regular arrangement of roughly north–south aligned furrows were recorded across the site in Trenches 2, 3-7, 10, 13, 14-18, 20, 21, 23-30 & 33-37 (Figure 2; Plate 1). The exception was the eastern extent of the site where no furrows were identified. The furrows varied in size with the largest measuring c. 3.60m in width and the smallest measuring c. 0.90m in width. The furrows had a shallow U-shaped profile. Sample excavation across furrow [297] in Trench 29 recorded a depth of 0.17m (Figure 5, Section 1; Plate 2). All furrows contained similar firm brown silty clay fills from which no datable artefactual material was recovered. The width and spacing of c. 9-10m apart, measuring from mid points, are typical of that expected for a 'broad' ridge and furrow agricultural system of the medieval period and it is likely the furrows recorded across the site are medieval in date.

#### **5.5 Phase 5: Modern**

- 5.5.1 Phase 5 represents modern agricultural activity at the site. In Trench 1 part of a substantial rubble filled feature [13] was exposed at the northern extent and a brick and concrete structure [14] was recorded in the central portion of the trench. Both features probably represent 20th-century activity with the structure probably one of the many outbuildings belonging to the former nursery and poultry farm located in this area. The northernmost rubble filled feature was possibly associated with its demolition.

- 5.5.2 Topsoil, which was on average 0.35m thick across the site, comprised dark brown silty clay. The maximum and minimum height for the ground surface was recorded at 102.42 AOD at the western extent of the site (Trench 1) and a minimum of 95.43m AOD within the central-northern part of the site (Trench 30).
- 5.5.3 Modern dumping deposits were recorded overlying the topsoil in Trenches 11, 12 and 25. These deposits comprised stone, brick and concrete rubble deposits in Trenches 11 and 12 and an ash deposit containing modern debris throughout in Trench 25 with such deposits ranging in thickness from 0.10m in Trench 12 to 0.62m thick in Trench 25.



- Archaeological Feature
- Furrow
- Excavated Slot

0 5m

Figure 3  
Plan of Area 1  
1:100 at A4

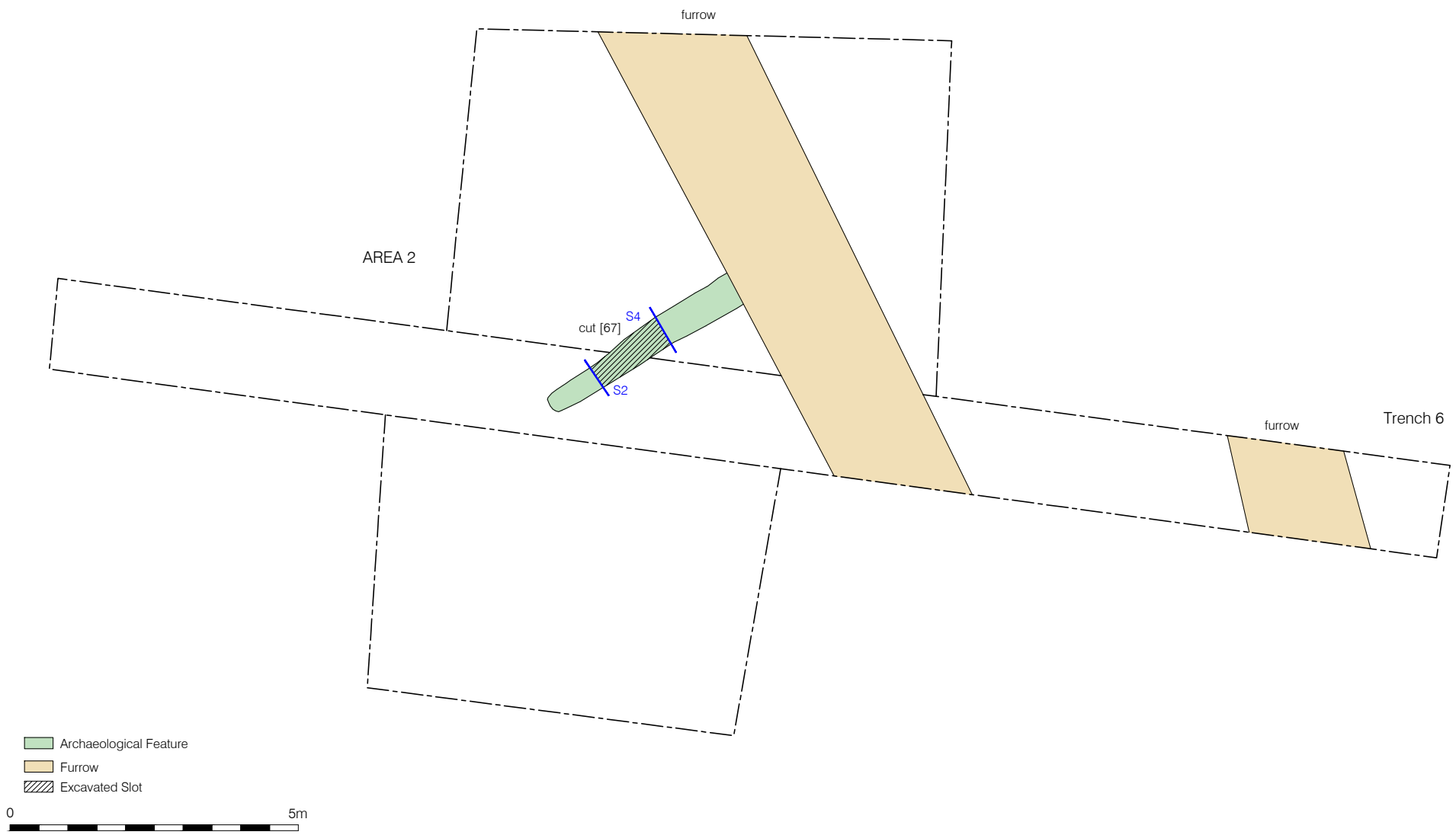
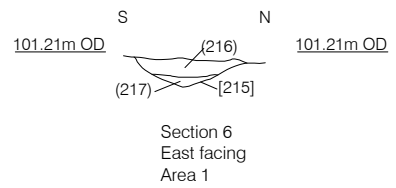
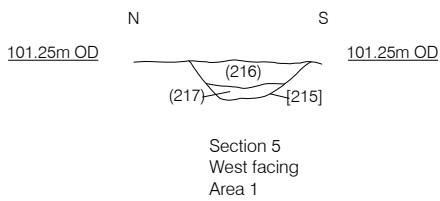
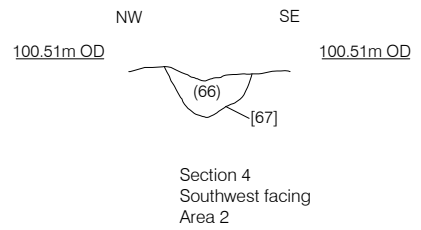
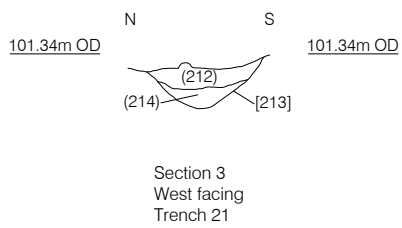
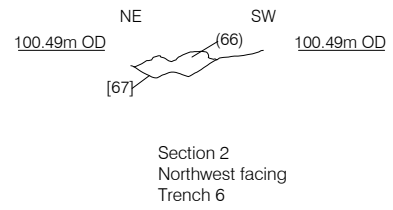
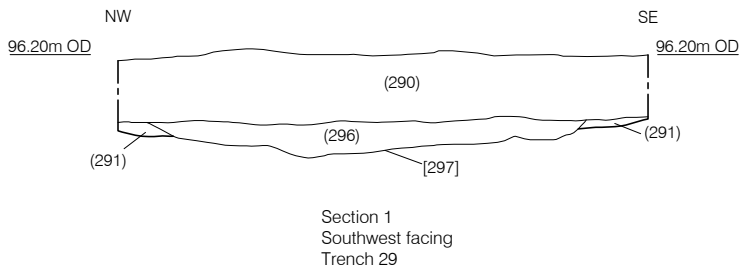


Figure 4  
Plan of Area 2  
1:100 at A4



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08/05/17 RM

Figure 5  
Sections  
1:40 at A4



## **6. CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 Conclusions**

6.1.1 Geological and archaeological deposits and features encountered during the trial trenching evaluation have been assigned to four phases of activity:

- Phase 1 – Geological substratum; mid brown orange boulder clay was exposed as the basal deposit in all trenches. Natural deposits were encountered at maximum and minimum heights of 102.12m AOD in Trench 1 in the western part of the site and 95.12m AOD in the east in Trench 30. These values broadly reflect the relatively flat topography of the site, with gently sloping down from west to east.
- Phase 2 – Subsoil; subsoil was recorded in 12 trenches in the western and eastern parts of the site (Trenches 2, 7, 12-14, 16, 22, 38-40, 41 and 42).
- Phase 3 – Undated activity; represented by a shallow boundary or drainage ditch orientated east–west observed within Trench 21 & Area 1 for a distance of over 11m and an east–west aligned gully recorded within Trench 6 & Area 2. No artefactual or ecofactual material was recovered from the features, although the gully contained a large number of heat affected stones indicative of waste from industrial or processing activity. The palaeoenvironmental assessment from these features provided limited evidence for the disposal of domestic waste and the use of spelt wheat at the site. The use of this cereal crop is usually associated Iron Age or Romano-British sites and there is potential that these features could be of a similar date.
- Phase 4 – Undated but possibly late medieval; represented by groups of plough furrows recorded in Trenches 2, 3-7, 10, 13, 14-18, 20, 21, 23-30 & 33-37. The wide spacing, c. 9-10m apart, measuring from mid points indicates a medieval date for the remains of this ridge and furrow agricultural system.
- Phase 5 – Modern; represented by the demolished remains of a 20th-century outbuilding, and dump layer spreads. Topsoil formed the current ground surface across the site.

### **6.2 Recommendations**

6.2.1 The evaluation has established that archaeological remains of prehistoric or medieval date are only present within the south-western part of the site; no archaeological remains were encountered across the rest of the investigated area. No further archaeological mitigation is required pre-determination of the planning application.

6.2.2 Although no further analysis of the palaeoenvironmental assemblage is required, as outlined in Appendix C, if further archaeological work is undertaken at the site the

results of this palaeoenvironmental assessment should be added to any further palaeoenvironmental data produced.

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## **8. ACKNOWLEDGEMENTS AND CREDITS**

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### **PCA Credits**

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*Report:* Danni-Louise Parker

*Illustrations:* Ray Murphy

### **Other Credits**

*Palaeoenvironmental assessment:* Lorne Elliott (ASDU)

**APPENDIX A  
CONTEXT INDEX**

NMN17 CONTEXT INDEX

<b>Context</b>	<b>Group No.</b>	<b>Field</b>	<b>Trench</b>	<b>Area</b>	<b>Phase</b>	<b>Type 1</b>	<b>Type 2</b>	<b>Interpretation</b>
10	-	1	1	-	5	Deposit	Layer	Topsoil
11	-	1	1	-	1	Deposit	Layer	Natural
12	-	1	1	-	5	Deposit	Fill	Fill of modern truncation [13]
13	-	1	1	-	5	Cut	Cut	Cut of modern truncation filled by [12]
14	-	1	1	-	5	Masonry	Structure	Modern concrete and brick structure
20	-	1	2	-	5	Deposit	Layer	Topsoil
21	-	1	2	-	2	Deposit	Layer	Subsoil
22	-	1	2	-	1	Deposit	Layer	Natural
23	-	1	2	-	4	Deposit	Fill	Fill of furrow [24]
24	-	1	2	-	4	Cut	Cut	Cut of furrow filled by [23]
25	-	1	2	-	4	Deposit	Fill	Fill of furrow [26]
26	-	1	2	-	4	Cut	Cut	Cut of furrow filled by [25]
30	-	1	3	-	5	Deposit	Layer	Topsoil
31	-	1	3	-	1	Deposit	Layer	Natural
32	-	1	3	-	4	Deposit	Fill	Fill of furrow [33]
33	-	1	3	-	4	Cut	Cut	Cut of furrow filled by [32]
40	-	1	4	-	5	Deposit	Layer	Topsoil
41	-	1	4	-	1	Deposit	Layer	Natural
42	-	1	4	-	4	Deposit	Fill	Fill of furrow [43]
43	-	1	4	-	4	Cut	Cut	Cut of furrow filled by [42]
44	-	1	4	-	4	Deposit	Fill	Fill of furrow [45]
45	-	1	4	-	4	Cut	Cut	Cut of furrow filled by [44]
46	-	1	4	-	4	Deposit	Fill	Fill of furrow [47]
47	-	1	4	-	4	Cut	Cut	Cut of furrow filled by [46]
50	-	1	5	-	5	Deposit	Layer	Topsoil
51	-	1	5	-	1	Deposit	Layer	Natural
52	-	1	5	-	4	Deposit	Fill	Fill of furrow [53]
53	-	1	5	-	4	Cut	Cut	Cut of furrow filled by [52]
54	-	1	5	-	4	Deposit	Fill	Fill of furrow [55]
55	-	1	5	-	4	Cut	Cut	Cut of furrow filled by [54]
60	-	1	6	-	5	Deposit	Layer	Topsoil
61	-	1	6	-	1	Deposit	Layer	Natural
62	-	1	6	-	4	Deposit	Fill	Fill of furrow [63]
63	-	1	6	-	4	Cut	Cut	Cut of furrow filled by [62]
64	-	1	6	-	4	Deposit	Fill	Fill of furrow [65]
65	-	1	6	-	4	Cut	Cut	Cut of furrow filled by [64]
66	-	1	6	2	3	Deposit	Fill	Fill of linear feature [67]
67	-	1	6	2	3	Cut	Cut	Cut of linear feature filled by [66]
70	-	1	7	-	5	Deposit	Layer	Topsoil
71	-	1	7	-	2	Deposit	Layer	Subsoil
72	-	1	7	-	1	Deposit	Layer	Natural
73	-	1	7	-	4	Deposit	Fill	Fill of furrow [74]
74	-	1	7	-	4	Cut	Cut	Cut of furrow filled by [73]
80	-	1	8	-	5	Deposit	Layer	Topsoil
81	-	1	8	-	1	Deposit	Layer	Natural
90	-	1	9	-	5	Deposit	Layer	Topsoil
91	-	1	9	-	1	Deposit	Layer	Natural
100	-	1	10	-	5	Deposit	Layer	Topsoil
101	-	1	10	-	1	Deposit	Layer	Natural
102	-	1	10	-	4	Deposit	Fill	Fill of furrow [103]
103	-	1	10	-	4	Cut	Cut	Cut of furrow [102]
110	-	1	11	-	5	Deposit	Layer	Topsoil
111	-	1	11	-	1	Deposit	Layer	Natural
112	-	1	11	-	5	Deposit	Layer	Modern dump layer
120	-	1	12	-	5	Deposit	Layer	Topsoil

**NMN17 CONTEXT INDEX**

<b>Context</b>	<b>Group No.</b>	<b>Field</b>	<b>Trench</b>	<b>Area</b>	<b>Phase</b>	<b>Type 1</b>	<b>Type 2</b>	<b>Interpretation</b>
121	-	1	12	-	2	Deposit	Layer	Subsoil
122	-	1	12	-	1	Deposit	Layer	Natural
123	-	1	12	-	5	Deposit	Layer	Modern dump layer
130	-	1	13	-	5	Deposit	Layer	Topsoil
131	-	1	13	-	2	Deposit	Layer	Subsoil
132	-	1	13	-	1	Deposit	Layer	Natural
133	-	1	13	-	4	Cut	Cut	Cut of furrow filled by [136]
134	-	1	13	-	4	Deposit	Fill	Fill of furrow [135]
135	-	1	13	-	4	Cut	Cut	Cut of furrow filled by [134]
136	-	1	13	-	4	Deposit	Fill	Fill of furrow [133]
137	-	1	13	-	4	Cut	Cut	Cut of furrow filled by [138]
138	-	1	13	-	4	Deposit	Fill	Fill of furrow [137]
140	-	1	14	-	5	Deposit	Layer	Topsoil
141	-	1	14	-	2	Deposit	Layer	Subsoil
142	-	1	14	-	1	Deposit	Layer	Natural
143	-	1	14	-	4	Cut	Cut	Cut of furrow filled by [146]
144	-	1	14	-	4	Deposit	Fill	Fill of furrow [145]
145	-	1	14	-	4	Cut	Cut	Cut of furrow filled by [144]
146	-	1	14	-	4	Deposit	Fill	Fill of furrow [143]
147	-	1	14	-	4	Deposit	Fill	Fill of furrow [148]
148	-	1	14	-	4	Cut	Cut	Cut of furrow filled by [147]
150	-	1	15	-	5	Deposit	Layer	Topsoil
151	-	1	15	-	1	Deposit	Layer	Natural
152	-	1	15	-	4	Deposit	Fill	Fill of furrow [153]
153	-	1	15	-	4	Cut	Cut	Cut of furrow filled by [152]
154	-	1	15	-	4	Deposit	Fill	Fill of furrow [155]
155	-	1	15	-	4	Cut	Cut	Cut of furrow filled by [154]
160	-	1	16	-	5	Deposit	Layer	Topsoil
161	-	1	16	-	2	Deposit	Layer	Subsoil
162	-	1	16	-	1	Deposit	Layer	Natural
163	-	1	16	-	4	Cut	Cut	Cut of furrow filled by [164]
164	-	1	16	-	4	Deposit	Fill	Fill of furrow [163]
170	-	1	17	-	5	Deposit	Layer	Topsoil
171	-	1	17	-	1	Deposit	Layer	Natural
172	-	1	17	-	4	Deposit	Fill	Fill of furrow [173]
173	-	1	17	-	4	Cut	Cut	Cut of furrow filled by [172]
174	-	1	17	-	4	Deposit	Fill	Fill of furrow [175]
175	-	1	17	-	4	Cut	Cut	Cut of furrow filled by [174]
180	-	1	18	-	5	Deposit	Layer	Topsoil
181	-	1	18	-	1	Deposit	Layer	Natural
182	-	1	18	-	4	Deposit	Fill	Fill of furrow [183]
183	-	1	18	-	4	Cut	Cut	Cut of furrow filled by [182]
184	-	1	18	-	4	Deposit	Fill	Fill of furrow [185]
185	-	1	18	-	4	Cut	Cut	Cut of furrow filled by [184]
186	-	1	18	-	4	Deposit	Fill	Fill of furrow [187]
187	-	1	18	-	4	Cut	Cut	Cut of furrow filled by [186]
190	-	1	19	-	5	Deposit	Layer	Topsoil
191	-	1	19	-	1	Deposit	Layer	Natural
200	-	1	20	-	5	Deposit	Layer	Topsoil
201	-	1	20	-	1	Deposit	Layer	Natural
202	-	1	20	-	4	Deposit	Fill	Fill of furrow [202]
203	-	1	20	-	4	Cut	Cut	Cut of furrow filled by [202]
204	-	1	20	-	4	Deposit	Fill	Fill of furrow [205]
205	-	1	20	-	4	Cut	Cut	Cut of furrow filled by [204]
210	-	1	21	-	5	Deposit	Layer	Topsoil
211	-	1	21	-	1	Deposit	Layer	Natural
212	2	1	21	1	3	Deposit	Fill	Upper fill of ditch [213]
213	1	1	21	1	3	Cut	Cut	Cut of ditch filled by [212] and [214]



**NMN17 CONTEXT INDEX**

<b>Context</b>	<b>Group No.</b>	<b>Field</b>	<b>Trench</b>	<b>Area</b>	<b>Phase</b>	<b>Type 1</b>	<b>Type 2</b>	<b>Interpretation</b>
214	2	1	21	1	3	Deposit	Fill	Lower fill of ditch [213]
215	1	1	21	1	3	Cut	Cut	Cut of ditch filled by [216] and [217]
216	2	1	21	1	3	Deposit	Fill	Upper fill of ditch [215]
217	2	1	21	1	3	Deposit	Fill	Lower fill of ditch [215]
218	2	1	21	1	3	Deposit	Fill	Fill of ditch [219]
219	1	1	21	1	3	Deposit	Fill	Cut of ditch filled by [218]
220	-	1	22	-	5	Deposit	Layer	Topsoil
221	-	1	22	-	2	Deposit	Layer	Subsoil
222	-	1	22	-	1	Deposit	Layer	Natural
230	-	1	23	-	5	Deposit	Layer	Topsoil
231	-	1	23	-	1	Deposit	Layer	Natural
232	-	1	23	-	4	Deposit	Fill	Fill of furrow [233]
233	-	1	23	-	4	Cut	Cut	Cut of furrow filled by [232]
240	-	2	24	-	5	Deposit	Layer	Topsoil
241	-	2	24	-	1	Deposit	Layer	Natural
242	-	2	24	-	4	Deposit	Fill	Fill of furrow [243]
243	-	2	24	-	4	Cut	Cut	Cut of furrow field by [242]
244	-	2	24	-	4	Deposit	Fill	Fill of furrow [245]
245	-	2	24	-	4	Cut	Cut	Cut of furrow filled by [244]
250	-	2	25	-	5	Deposit	Layer	Topsoil
251	-	2	25	-	1	Deposit	Layer	Natural
252	-	2	25	-	4	Deposit	Fill	Fill of furrow [253]
253	-	2	25	-	4	Cut	Cut	Cut of furrow filled by [252]
254	-	2	25	-	5	Deposit	Layer	Modern overburden
255	-	2	25	-	4	Cut	Cut	Cut of furrow filled by [256]
256	-	2	25	-	4	Deposit	Fill	Fill of furrow [255]
260	-	3	26	-	5	Deposit	Layer	Topsoil
261	-	3	26	-	1	Deposit	Layer	Natural
262	-	3	26	-	4	Deposit	Fill	Fill of furrow [263]
263	-	3	26	-	4	Cut	Cut	Cut of furrow filled by [262]
264	-	3	26	-	4	Deposit	Fill	Fill of furrow [265]
265	-	3	26	-	4	Cut	Cut	Cut of furrow filled by [264]
266	-	3	26	-	4	Deposit	Fill	Fill of furrow [267]
267	-	3	26	-	4	Cut	Cut	Cut of furrow filled by [266]
268	-	3	26	-	4	Deposit	Fill	Fill of furrow [269]
269	-	3	26	-	4	Cut	Cut	Cut of furrow filled by [268]
270	-	3	27	-	5	Deposit	Layer	Topsoil
271	-	3	27	-	1	Deposit	Layer	Natural
272	-	3	27	-	4	Deposit	Fill	Fill of furrow [273]
273	-	3	27	-	4	Cut	Cut	Cut of furrow filled by [272]
274	-	3	27	-	4	Deposit	Fill	Fill of furrow [275]
275	-	3	27	-	4	Cut	Cut	Cut of furrow filled by [274]
276	-	3	27	-	4	Deposit	Fill	Fill of furrow [277]
277	-	3	27	-	4	Cut	Cut	Cut of furrow filled by [276]
278	-	3	27	-	4	Deposit	Fill	Fill of furrow [279]
279	-	3	27	-	4	Cut	Cut	Cut of furrow filled by [278]
280	-	3	28	-	5	Deposit	Layer	Topsoil
281	-	3	28	-	1	Deposit	Layer	Natural
282	-	3	28	-	4	Deposit	Fill	Fill of furrow [283]
283	-	3	28	-	4	Cut	Cut	Cut of furrow filled by [282]
284	-	3	28	-	4	Deposit	Fill	Fill of furrow [285]
285	-	3	28	-	4	Cut	Cut	Cut of furrow filled by [284]
290	-	3	29	-	5	Deposit	Layer	Topsoil
291	-	3	29	-	1	Deposit	Layer	Natural
292	-	3	29	-	4	Deposit	Fill	Fill of furrow [293]
293	-	3	29	-	4	Cut	Cut	Cut of furrow filled by [292]
294	-	3	29	-	4	Deposit	Fill	Fill of furrow [295]
295	-	3	29	-	4	Cut	Cut	Cut of furrow filled by [294]

**NMN17 CONTEXT INDEX**

<b>Context</b>	<b>Group No.</b>	<b>Field</b>	<b>Trench</b>	<b>Area</b>	<b>Phase</b>	<b>Type 1</b>	<b>Type 2</b>	<b>Interpretation</b>
296	-	3	29	-	4	Deposit	Fill	Fill of furrow [297]
297	-	3	29	-	4	Cut	Cut	Cut of furrow filled by [296]
300	-	3	30	-	5	Deposit	Layer	Topsoil
301	-	3	30	-	1	Deposit	Layer	Natural
302	-	3	30	-	4	Deposit	Fill	Fill of furrow [303]
303	-	3	30	-	4	Cut	Cut	Cut of furrow filled by [302]
330	-	3	33	-	5	Deposit	Layer	Topsoil
331	-	3	33	-	1	Deposit	Layer	Natural
332	-	3	33	-	4	Deposit	Fill	Fill of furrow [333]
333	-	3	33	-	4	Cut	Cut	Cut of furrow filled by [332]
334	-	3	33	-	4	Deposit	Fill	Fill of furrow [335]
335	-	3	33	-	4	Cut	Cut	Cut of furrow filled by [334]
336	-	3	33	-	4	Deposit	Fill	Fill of furrow [337]
337	-	3	33	-	4	Cut	Cut	Cut of deposit filled by [336]
340	-	3	34	-	5	Deposit	Layer	Topsoil
341	-	3	34	-	1	Deposit	Layer	Natural
342	-	3	34	-	4	Deposit	Fill	Fill of furrow [343]
343	-	3	34	-	4	Cut	Cut	Cut of furrow filled by [342]
344	-	3	34	-	4	Deposit	Fill	Fill of furrow [345]
345	-	3	34	-	4	Cut	Cut	Cut of furrow filled by [344]
350	-	3	35	-	5	Deposit	Layer	Topsoil
351	-	3	35	-	2	Deposit	Layer	Subsoil
352	-	3	35	-	4	Deposit	Fill	Fill of furrow [353]
353	-	3	35	-	4	Cut	Cut	Cut of furrow filled by [352]
354	-	3	35	-	4	Deposit	Fill	Fill of furrow [355]
355	-	3	35	-	4	Cut	Cut	Cut of furrow filled by [354]
356	-	3	35	-	4	Deposit	Fill	Fill of furrow [357]
357	-	3	35	-	4	Cut	Cut	Cut of furrow filled by [356]
360	-	3	36	-	5	Deposit	Layer	Topsoil
361	-	3	36	-	1	Deposit	Layer	Natural
362	-	3	36	-	4	Deposit	Fill	Fill of furrow [363]
363	-	3	36	-	4	Cut	Cut	Cut of furrow filled by [362]
364	-	3	36	-	4	Deposit	Fill	Fill of furrow [365]
365	-	3	36	-	4	Cut	Cut	Cut of furrow [364]
370	-	3	37	-	5	Deposit	Layer	Topsoil
371	-	3	37	-	1	Deposit	Layer	Natural
372	-	3	37	-	4	Deposit	Fill	Fill of furrow [373]
373	-	3	37	-	4	Cut	Cut	Cut of furrow filled by [372]
374	-	3	37	-	4	Deposit	Fill	Fill of furrow [375]
375	-	3	37	-	4	Cut	Cut	Cut of furrow filled by [374]
380	-	3	38	-	5	Deposit	Layer	Topsoil
381	-	3	38	-	2	Deposit	Layer	Subsoil
382	-	3	38	-	1	Deposit	Layer	Natural
390	-	3	39	-	5	Deposit	Layer	Topsoil
391	-	3	39	-	2	Deposit	Layer	Subsoil
392	-	3	39	-	1	Deposit	Layer	Natural
400	-	3	40	-	5	Deposit	Layer	Topsoil
401	-	3	40	-	2	Deposit	Layer	Subsoil
402	-	3	40	-	1	Deposit	Layer	Natural
410	-	3	41	-	5	Deposit	Layer	Topsoil
411	-	3	41	-	2	Deposit	Layer	Subsoil
412	-	3	41	-	1	Deposit	Layer	Natural
420	-	3	42	-	5	Deposit	Layer	Topsoil
421	-	3	42	-	2	Deposit	Layer	Subsoil
422	-	3	42	-	1	Deposit	Layer	Natural
430	-	3	43	-	5	Deposit	Layer	Topsoil
431	-	3	43	-	1	Deposit	Layer	Natural
440	-	3	44	-	5	Deposit	Layer	Topsoil
441	-	3	44	-	1	Deposit	Layer	Natural

**NMN17 CONTEXT INDEX**

<b>Context</b>	<b>Group No.</b>	<b>Field</b>	<b>Trench</b>	<b>Area</b>	<b>Phase</b>	<b>Type 1</b>	<b>Type 2</b>	<b>Interpretation</b>
450	-	3	45	-	5	Deposit	Layer	Topsoil
451	-	3	45	-	1	Deposit	Layer	Natural
460	-	3	46	-	5	Deposit	Layer	Topsoil
461	-	3	46	-	1	Deposit	Layer	Natural
470	-	3	47	-	5	Deposit	Layer	Topsoil
471	-	3	47	-	1	Deposit	Layer	Natural
480	-	3	48	-	5	Deposit	Layer	Topsoil
481	-	3	48	-	1	Deposit	Layer	Natural
490	-	3	49	-	5	Deposit	Layer	Topsoil
491	-	3	49	-	1	Deposit	Layer	Natural
500	-	3	50	-	5	Deposit	Layer	Topsoil
501	-	3	50	-	1	Deposit	Layer	Natural
502	VOID							
503	-	1	21	-	4	Deposit	Fill	Fill of furrow [504]
504	-	1	21	-	4	Cut	Cut	Cut of furrow filled by [504]

**APPENDIX B  
PLATES**



Plate 1. General view of Trench 29 showing furrows, north-west direction of view (scale 2m)



Plate 2. Trench 29, north facing section of furrow [297], (scale 1m)



Plate 3. Area 1, general view of Group 1 ditch, looking west (scale 2m)



Plate 4. Area 1, west facing section of Group 1 ditch, slot [215] (scale 0.2m)



Plate 5. Trench 6, north-east facing section of linear feature [67] (scale 0.2m)



Plate 6. Area 2, general view of linear feature [67], north-east direction of view (scale 2m)



Plate 7. Area 2, south-west facing section of linear [67], (scale 0.2m)



**APPENDIX C**  
**PALAEOENVIRONMENTAL ASSESSMENT**

# **PALAEOENVIRONMENTAL ASSESSMENT**

*By Lorne Elliott (ASDU)*

## **Summary**

### **The project**

This report presents the results of palaeoenvironmental assessment of two bulk samples taken during archaeological works at Medburn, Northumberland.

The works were commissioned by Pre-Construct Archaeology Ltd (PCA), and conducted by Archaeological Services Durham University.

### **Results**

The palaeoenvironmental assessment provides limited evidence for the disposal of domestic waste and the use of spelt wheat at the site. This cereal crop first appears in England during the middle to late Bronze Age, but is more commonly associated with Iron Age and Romano-British sites.

The deposits contained small charred plant debris comprising heather twigs, grass-type rhizomes and grass seeds. These remains frequently occur on sites of late prehistoric or Roman origin, although they are not exclusive to these periods.

### **Recommendations**

No further analysis is required for these samples, but the preservation of charred plant remains (although limited) indicates that other features on the site may have the potential to provide further information about diet, crop husbandry practices and the exploitation of fuel resources. If additional work is undertaken at the site, the results of this assessment should be added to any further palaeoenvironmental data produced.

The flots should be retained as part of the physical archive of the site. The residues were discarded following examination.

## **Project background**

### **Location and background**

An archaeological evaluation was conducted by PCA at land east of the Nursery, Medburn, Northumberland. This report presents the results of palaeoenvironmental assessment of two bulk samples comprising the lower fill [214] of a ditch and the backfill [66] of a linear feature, both of uncertain origin.

### **Objective**

The objective of the scheme of works was to assess the palaeoenvironmental potential of the samples, establish the presence of suitable radiocarbon dating material, and provide the client with appropriate recommendations.

### **Dates**

Samples were received by Archaeological Services on 18th May 2017. Assessment and report preparation was conducted between 19th and 23rd May 2017.

### **Personnel**

Assessment and report preparation was conducted by Lorne Elliott. Sample processing was by Dr Steph Piper and Daniel Adamson.

### **Archive**

The site code is **NMN17**. The flots and finds are currently held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University awaiting collection. The charred plant remains will be retained at Archaeological Services Durham University.

### **Methods**

The bulk samples were manually floated and sieved through a 500 $\mu$ m mesh. The residues were examined for shells, fruitstones, nutshells, charcoal, small bones, pottery, flint, glass and industrial residues, and were scanned using a magnet for ferrous fragments. The flots were examined at up to x60 magnification for charred and waterlogged botanical remains using a Leica MZ7.5 stereomicroscope. Identification of these was undertaken by comparison with modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University. Plant nomenclature follows Stace (2010). Habitat classification follows Preston *et al.* (2002).

Selected charcoal fragments were identified, in order to provide material suitable for radiocarbon dating. The transverse, radial and tangential sections were examined at up to x600 magnification using a Leica DMLM

microscope. Identifications were assisted by the descriptions of Schweingruber (1990) and Hather (2000), and modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University.

The works were undertaken in accordance with the palaeoenvironmental research aims and objectives outlined in the regional archaeological research framework and resource agendas (Petts & Gerrard 2006; Hall & Huntley 2007; Huntley 2010).

## Results

A concentration of notably magnetic (iron-rich) stones of various sizes occurred in both of the palaeoenvironmental samples. The fill of linear feature [66] contained a small quantity of fire-cracked stones, a trace of calcined bone and a tiny fragment of fired clay. Finds were absent from deposit [214].

The samples produced moderate-sized flots comprising similar quantities of fragmented (mainly <4mm) charcoal, cinder and coal, charred grass-type rhizomes, charred heather twigs and modern roots. Heavily mineralised charcoal remains from fill [214] were identified as oak, ash and diffuse porous. Poor preservation prevented further identification. The small quantity of charcoal recovered from fill [66] was in slightly better condition and was identified as hazel branchwood.

Charred plant macrofossils were present in low numbers. Ditch fill [214] contained a single oat-type grass seed (retained in the 1mm sieve). Linear fill [66] comprised a compact wheat grain, spelt wheat (*Triticum spelta*) glume bases, and grass caryopses of brome, oat-type and heath-grass. The deposits included uncharred seeds of fools parsley, clover, goosefoots and fumitories. The well-drained nature of the site and the frequent presence of modern roots suggest that these are modern inclusions.

Material suitable for radiocarbon dating is available for linear fill [66]. The results are presented in Table 1 below.

Table 1: Data from palaeoenvironmental assessment

Sample		2	4
Context		214	66
Feature number		213	67
Feature		ditch	linear
Material available for radiocarbon dating		-	✓
Volume processed (l)		19	17
Volume of flot (ml)		100	200
<i>Residue contents</i>			
Bone (calcined)	indet. frags	-	(+)
Charcoal		+	-
Fired clay		-	(+)
Fire-cracked stones		-	+
Iron-rich stones		++	++
<i>Flot matrix</i>			
Charcoal		+	+
Cinder	vesicular	+	++
Coal		++	++
Heather twigs (charred)		+	++
Rhizomes / Tubers (charred)		+	++
Roots (modern)		+++	+++
Uncharred seeds		(+)	(+)
<i>Charred remains (total count)</i>			
(a) <i>Bromus</i> sp (Bromes)	caryopsis	-	1
(c) <i>Triticum spelta</i> (Spelt Wheat)	glume base	-	2
(c) <i>Triticum</i> sp (Wheat species)	compact grain	-	1
(h) <i>Danthonia decumbens</i> (Heath-grass)	caryopsis	-	1
(x) Poaceae undiff. (Grass family)	>1mm caryopsis	1	1
<i>Identified charcoal (✓ presence)</i>			
<i>Corylus avellana</i> (Hazel)		-	✓
<i>Fraxinus excelsior</i> (Ash)		✓	-
<i>Quercus</i> sp (Oaks)		✓	-

## Discussion

The palaeoenvironmental assessment provides limited evidence for the disposal of domestic waste and the use of spelt wheat at the site. This cereal crop first appears in England during the middle to late Bronze Age (Greig 1991), but is more commonly associated with Iron Age and Romano-British sites. Fill [66] included the remains of brome grass. This species is frequently associated with spelt wheat, and is believed to have been brought to Britain in imported spelt (Godwin 1975).

The deposits contained small charred plant debris comprising heather twigs, grass-type rhizomes and grass seeds. This charred material may represent the remains of gathered hay for fodder or bedding, or probably represents the remains of burnt turves (Hall 2003), used either as fuel or for construction purposes such as roofing or earth ovens. These remains frequently occur on sites of late prehistoric or Roman origin, although they are not exclusive to these periods.

### **Recommendations**

No further analysis is required for these samples, but the preservation of charred plant remains (although limited) indicates that other features on the site may have the potential to provide further information about diet, crop husbandry practices and the exploitation of fuel resources. If additional work is undertaken at the site, the results of this assessment should be added to any further palaeoenvironmental data produced.

The flots should be retained as part of the physical archive of the site. The residues were discarded following examination.

### **Sources**

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