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PERSIMMON HOMES DURHAM

**LAND AT FENNEL GROVE
EASINGTON
COUNTY DURHAM**

ARCHAEOLOGICAL STRIP, MAP AND SAMPLE REPORT

January 2018

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Wardell Armstrong

2 The Avenue, Leigh, Greater Manchester WN7 1ES, United Kingdom
Telephone: +44 (0)1942 260101 www.wardell-armstrong.com



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PERSIMMON HOMES DURHAM

Land at Fennel Grove, Easington, County Durham

Archaeological Strip, Map and Sample Report

PREPARED BY:

Kevin Horsley Project Supervisor

APPROVED BY:

Martin Railton Associate Director

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DESK BASED ASSESSMENTS
ARCHAEOLOGICAL EVALUATION
ARCHAEOLOGICAL EXCAVATION
GEOPHYSICAL SURVEY
TOPOGRAPHIC AND LANDSCAPE SURVEY
HISTORIC BUILDING RECORDING
EIA AND HERITAGE CONSULTANCY

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SUMMARY

Wardell Armstrong was commissioned by Persimmon Homes Durham, to undertake an archaeological strip, map and sample on land at Fennel Grove, Easington, County Durham SR8 3TQ, National Grid Reference NZ 41575 43658. The strip, map and sample excavation was required as a condition of planning consent, and undertaken in accordance with a written scheme of investigation (WSI) produced in response to advice provided by Durham County Council Archaeology Section (DCCAS).

The archaeological strip, map and sample excavation took place over 18 days from the 20th September to 13th October 2017 and included the removal of topsoil and subsoil and the subsequent excavation of the archaeological features present. This report presents the results of the assessment of the stratigraphic data, finds and environmental data recovered, and presents a discussion of the site phasing, interpretation and possible significance of the site.

A number of archaeological features were recorded within the excavated area, comprising an enclosure with a series of curvilinear and linear ditches, and a small concentration of pits. A small disparate collection of finds were recovered from the features, dating tentatively to the late medieval period from 12th-15th century. Tree throws and a linear field boundary were also recorded.

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Wardell Armstrong also thanks Humac Civil Engineering Ltd., for their help during this project.

The archaeological strip, map and sample excavation was supervised by Kevin Horsley, assisted by Jaime Megan Levell, Jonathan Banasko and Michael Mann. The report was written by Kevin Horsley and illustrated by Helen Phillips. The finds assessment was by Megan Stoakley with contributions by David Jackson and Lynne Gardiner. The palaeoenvironmental assessment was by Lynne Gardiner with the palaeoenvironmental processing undertaken by Freddie Sisson. The project was managed by Martin Railton who also edited the report.

1. INTRODUCTION

1.1 Project Circumstances and Planning Background

1.1.1 Between September and October 2017, Wardell Armstrong (WA) undertook an archaeological strip, map and sample excavation on land at Fennel Grove, Easington, County Durham SR8 3TQ, National Grid Reference NZ 41575 43658 (Figure 1). It was commissioned by Persimmon Homes Durham who intends to develop the land for housing for which planning consent has been granted by Durham County Council (Planning Reference: DM/16/01970/FPA).

1.1.2 The grant of permission, dated 2nd August 2017, stated that, *“No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation that has been approved in writing by the Local Planning Authority... The archaeological mitigation strategy shall be carried out in accordance with the approved details and timings.”* With the reason being, *“To comply with paragraphs 135 & 141 of the National Planning Policy Framework (NPPF) because the site is of archaeological interest”* (DM/16/01970/FPA, Condition 11).

1.1.3 The proposed development area is thought to contain a possible enclosure towards the south side of the site, identified as a number of soil-filled ditches of an uncertain date during a previous archaeological evaluation (ASDU 2016).

1.2 Project Documentation

1.2.1 The project conforms to a brief which was prepared in accordance with advice provided by Durham County Council Archaeology Section. A Written Scheme of Investigation (WA 2017a) was then produced to provide a specific methodology. This was approved by the archaeological planning advisor prior to the fieldwork taking place. This methodology conforms to government advice as set out in Section 12 of the National Planning Policy Framework (NPPF 2012).

1.2.2 This report outlines the work undertaken on site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological excavation.

2. METHODOLOGY

2.1 Standards and guidance

2.1.1 The archaeological strip, map and sample excavation was undertaken following the Chartered Institute for Archaeologists *Standard and Guidance for archaeological excavation* (2014a), and in accordance with the WA Excavation Manual (WA 2017b).

2.1.2 The fieldwork programme was followed by an assessment of the data as set out in the Standard and Guidance for archaeological excavation (CIfA 2014a) and the Standard and Guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2014b).

2.2 Documentary Research

2.2.1 No desk-based assessment has been undertaken in relation to the proposed development area, however a detailed overview of the historical and archaeological background has been discussed in the previous archaeological evaluation report (AD Archaeology 2016) and is not intended to repeat that information here. However, as part of the current works, and to provide specific context to the archaeology recorded, a brief historical and archaeological narrative will be included (see Section 3.2).

2.3 The Archaeological Strip, Map and Sample Excavation

2.3.1 The archaeological strip, map and sample excavation comprised the excavation of a targeted area of land within the proposed development area measuring c.3,000m² to cover the presumed extent of a possible enclosure as determined by the trial trenching and geophysical survey (Figure 2). The general aims of these investigations were to:

- Determine the character, date, extent and distribution of any archaeological remains and their potential significance
- Produce scale plans of the layout of the possible enclosure and any associate features, including any evidence of phasing or later modification
- Obtain samples of any finds, environmental deposits, or occupation debris where identified, for analysis and dating
- Determine levels of disturbance to any archaeological deposits from later activities at the site
- Disseminate the results of the fieldwork through an appropriate level of reporting.

- 2.3.2 Deposits considered not to be significant were removed by a 360° tracked mechanical excavator with a toothless ditching bucket, under close archaeological supervision. Topsoil and subsoil were stored separately in bunds away from the stripped area for safety. The stripped area was subsequently cleaned by hand. All possible features were inspected and selected deposits were excavated by hand to retrieve artefactual material and environmental samples. Once completed, all features were recorded according to the WA standard procedure as set out in the Excavation Manual (WA 2017b).
- 2.3.3 All finds encountered were retained on site and returned to the Carlisle office where they were identified, quantified and dated to period. A *terminus post quem* was then produced for each stratified context under the supervision of the WA Finds Officer, and the dates were used to help determine the broad date phases for the site. On completion of this project, the finds were cleaned and packaged according to standard guidelines (*Ibid*). Please note, the following categories of material will be discarded after a period of six months following the submission of this report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):
- unstratified material;
 - modern pottery;
 - material that has been assessed as having no obvious grounds for retention.
- 2.3.4 On completion the removed soil was not reinstated as further engineering groundworks were to continue across the site immediately following the completion of the archaeological works.
- 2.3.5 A full professional archive has been compiled in accordance with the project specification, and the Archaeological Archives Forum recommendations (Brown 2011). The archive will be deposited with an agreed repository with DCCAS, with copies of the report sent to Durham County Council HER, where viewing will be made available upon request. The archive can be accessed under the unique project identifier WA 2018 / FGE-A / LE13753.
- 2.3.6 Wardell Armstrong supports the Online Access to the Index of Archaeological InvestigationS (OASIS) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project

will be made available by WA as a part of this national project. The OASIS reference for the project is: wardella2-305695.

3. BACKGROUND

3.1 Location and Geological Context

3.1.1 The site is centred on National Grid Reference NZ 41575 43658 (Figure 1). The site is situated to the immediate north of the village of Easington, approximately 3km north of Peterlee and 2.5km west of the North Sea coastline. The site is accessed via Fennel Grove, a cul-de-sac of modern housing, to the north-east of the site, bounded to the east by properties fronting Sunderland Road (B1432) and to the south and west by properties fronting Cadwell Lane and The Spinney respectively (Figure 2). Agricultural land extends from the north of the site, and the site itself is set within an arable field, comprising approximately 2.1ha of land in total. The site occupies the top of a north facing slope with elevations from c.125m aOD (above Ordnance Datum) in the north to c.130m aOD to the south.

3.1.2 The underlying solid geology within the area of investigation is mapped as Dolostone, of the Ford Formation deposited during the Permian Period approximately 252 to 272 million years ago in a local environment dominated by shallow carbonate seas. This is overlain by superficial deposits of hummocky glacial deposits of sand, gravel and diamicton deposited up to 2 million years ago during the Quaternary Period in a local environment dominated by ice age conditions (BGS 2018). The natural substrate observed during the current phase of works comprised loose mid yellowish grey sand and gravel which is consistent with the mapped geologies above.

3.2 Historical and Archaeological Background

3.2.1 **Prehistoric and Roman (up to c. AD 410):** There is no known evidence of prehistoric or Roman activity, however the county HER records a series of circular features within the development area as probably being prehistoric in origin with the possibility that they represent ring-ditches or barrows (ASDU 2016). However, after further study they can likely be dismissed as “fairy rings” caused by the growth patterns of fungi (AD Archaeology 2016). The earliest recorded archaeological feature in the local area is a round barrow at Low Hills, Peterlee which was probably Bronze Age in date (*ibid*).

3.2.2 **Early Medieval (410-1066):** Easington is thought to have originated as a late Anglo-Saxon estate centre, which included Little Thorpe, Shotton and Eden (WA 2017a). The first documentary reference to Easington Village (HER 4370) is in 1050 in the *Historia de Sancto Cuthberto (History of St. Cuthbert)* as “*Esingtun*” which translates from the Old English as “farmstead of Esi’s people”. Remains of an Anglo-Saxon building (HER

3866) consisting of a posthole, foundations and an earth bank were recorded during works at the 13th century rectory located at Seaton Holme 200m south-west of the site (Daniels, Lakin and Thornes, nd). The church of St. Mary (HER 248), located 250m to the south-west of the site is probably Anglo-Saxon in origin (AD Archaeology 2016, 3), and a cemetery, dated as early as the 6th century, was recorded on Andrew's Hill to the south of Easington (Hamerow and Pickin 1995), exemplifying the concentration of Anglian settlement in the immediate environs of the development area, though there is no recorded evidence dating to this period within the site boundary.

3.2.3 Medieval (1066-1540): The village is listed as "*Esinton*" in the Boldon Book of 1183 (Greenwell 1852). The proposed development area was probably utilised as agricultural land at this time. Ridge and furrow was identified during geophysical survey (ASDU 2016), aligned north-northwest to south-southeast, similar in orientation to the current field boundaries to the east and west, and might be as early as medieval in origin. It is recorded that the rural landscape still suffered from the effects of attacks by the Scots in the 14th century with Bishop Hatfield's Survey recording that "the waste lands are very numerous" in the land around Easington (Mackenzie and Ross 1834, 387). Studies show the development of these "waste lands", or unreclaimed lands, during the late medieval period (Britnell 2004). The village of Easington was substantial and of growing regional importance throughout the medieval period. Seaton Manor House, Chapel and Vicarage (HER 66, HER 3685 and HER 35466) were built during the 13th century for Bishop Fareham, and following the Reformation in the 16th century, the Manor House became the main residence of the Archdeacon of Durham.

3.2.4 Post-Medieval to Modern (1540-present): Throughout the post-medieval period and into modern times, the site has remained agricultural land whilst the landscape around it changed dramatically. Ordnance Survey maps since 1850 show that the field the development site resides in has altered little aside the slow encroachment of development upon its boundaries. Easington, like many towns and villages in North-East England, found itself surrounded by the industrial drive to mine for coal, with Easington Colliery opening in 1899 to the east of the village, and closing in 1993, and South Hetton Colliery to the north-west (DMM 2018). The development area is roughly equidistance between the two collieries, though the site itself remained agricultural in nature throughout the 20th century.

3.3 Previous Archaeological Work

- 3.3.1 A geophysical survey was undertaken at the site by Archaeology Services Durham University (ASDU 2016). Occasional remains of probable soil-filled features were identified to the south of the site, interpreted as mostly linear ditches with one possibly reflecting a former field boundary. The presence of circular features which may correspond to those identified in the aerial photography (Keys to the Past, ref: PRN D8592) were not detected during the survey.
- 3.3.2 Subsequently, an archaeological evaluation was undertaken by AD Archaeology (2016) to test the results of the geophysical survey. Features of possible archaeological significance were recorded across the slope in the southern portion of the site comprising a series of probable boundary ditches and gullies (in Trenches 4, 5, 6, 7 and 8). A series of possible postholes were also identified in Trench 8 which may represent a fence line (*ibid*). The features were interpreted as a series of possible enclosures which pre-dated the Ordnance Survey mapping (1850) but otherwise remained undated.

4 ARCHAEOLOGICAL EVALUATION RESULTS

4.1 Introduction

4.1.1 The archaeological strip, map and sample investigation was undertaken from the 20th September to the 13th October 2017, with approximately 3,000m² of land excavated across a targeted area within the proposed development site (Figure 2). The area targeted was in the vicinity of a concentration of undated features identified during the trial trench evaluation to the south of the development area, including linear soil-filled ditches and postholes (Wardell Armstrong 2017a).

4.2 Results

4.2.1 The following narrative describes the results of the archaeological investigation, providing a clear phasing of the recorded archaeology (Figure 3). It is not intended to describe in detail each context, of which a table is provided at the end of this report (see Appendix 1: Context Table).

4.2.2 Topsoil **(100)** comprising loose dark greyish brown sandy clayey silt was removed to a maximum depth of 0.30m, followed by the removal of a dark reddish brown fine sandy silt subsoil **(102)** up to a further 0.50m towards the north-west of the site to reveal the natural substrate **(101)**.

4.2.3 The natural substrate **(101)** was first observed at a maximum height of 129.05m aOD and comprised very loose and variable silty sand and gravels and frequent moderately sorted, rounded stones, 50-150mm, with occasional bands of bluish grey clay, consistent with the mapped geology (see Section 3.3.3).

4.2.4 Two curvilinear ditches, one being the re-cut of the other, and following much the same trajectory around the north-west crest of the hill, were recorded corresponding with the results of the evaluation. Another sub-linear ditch was observed to the east of the site, also with visible recuts. A possible linear field boundary was revealed in the centre of the site, aligned roughly north to south. A large sub-circular soil-filled feature was excavated and determined to be a small concentration of waste pits containing medieval pottery and animal bone. Five oval pits, interpreted as possible tree throws, were also observed.

4.2.5 A curvilinear ditch **[166]**, located to the west of the site, began to the south of the site at a height of 127.50m aOD and arcing in a north-east direction, terminating in an east pointing direction at a height of 125.91m aOD (Figure 3). The ditch was approximately 53m in length. As it steadily descended the north-facing slope of the hill, the ditch

became wider, from as narrow as 0.85m at the south-west terminus **[126]** to 2.55m at its mid-point **[138]** (Plate 1). At the east terminus **[146]** of the ditch, the width was 1.54m. Likewise, both the depth and the profile of the ditch changed along its course (Figure 4). The ditch was a minimum of 0.17m at its termini and at its deepest point 0.56m, with a shallow concave profile, imperceptible sides and a rounded base, before becoming a sharper, deeper profile, with a sharper break of slope, steeper concave sides and a more undulating profile indicative of recuts (see Figure 4, section 18), though no recuts could be determined beyond the later curvilinear ditch **[167]**.

- 4.2.6 The ditch **[166]** appeared to contain a single homogenous fill of dark greyish brown silty clay, containing occasional discrete deposits of disarticulated animal bone (see **(145)** for example). A small fragment of glass and a piece of ceramic were recovered from towards the south end of the ditch (**106**), and a flint and a bone knife handle (see Section 6) from the north **(145)**.
- 4.2.7 Another curvilinear ditch **[167]** was observed in much the same location and orientation as the earlier curvilinear ditch **[166]**, partially truncating its mid-point (Figure 5). It was first observed at a height of 127.83m aOD. In contrast, this ditch had a uniform concave profile, and was narrow and sinuous in plan (Plate 2). The ditch was approximately 50m in length, and never wider than 0.77m and averaging 0.50m wide. The maximum depth of the ditch was 0.18m. Once again there was a single homogenous deposit within the ditch, identical to the earlier ditch and sometimes difficult to distinguish, being moderately compact dark greyish brown silty clay. No finds were recovered from this feature.
- 4.2.8 Several land drains were observed towards the northwest corner of the site, on differing alignments and within 0.20-0.30m below ground level, and for the most part had been plough damaged.
- 4.2.9 A sub-linear ditch **[168]**, located towards the north-east of the site, was first observed at a maximum height of 126.14m aOD in the west and descending gradually eastwards to 125.68m (Plate 3, Figure 6). The ditch was approximately 26m in length, and was deepest towards the east at 0.68m. The profile of the ditch was similar to the earlier ditch in the west in that it transformed along its length from a narrow, gradual U-shaped profile into a wider profile with convex sides, with what appeared to be further re-cuts (though the re-cuts were only observed in section).
- 4.2.10 What was probably the earliest cut **[150]**, was approximately 1.58m wide and 0.68m deep and contained two fills (Plate 4). The primary fill **(151)** was compact mid

yellowish brown fine sandy silt with frequent pebbles, likely to be redeposited natural. The upper fill **(152)** was similar to the upper deposits observed across the site, being dark yellowish brown sandy silt containing animal bone. To the immediate south of this cut **[150]** was another probable re-cut **[153]**, measuring 0.57m wide and 0.23m deep, far shallower than the earlier ditch cut and containing a single fill **(154)**, similar to fill **(152)**. The re-cut had gradual concave sides and a shallow, irregular U-shaped base. Truncating both ditches was another possible re-cut **[155]**. The re-cut appeared to cut the southern and northern edges of ditch **[150]** and **[153]** respectively, though again only a possible profile could be surmised in section due to the homogeneity of the deposits.

- 4.2.11 The terminus **[148]** of boundary ditch **[168]** was narrow with gradual convex sides, similar in profile to the wider ditch **[150]**, and so it is likely these two belong to the same phase. On that point, it could not be ascertained where the termini of the re-cuts **[153]** and **[155]** were, though they were probably in the vicinity of the previous archaeological evaluation trench. The terminus **[148]** was 0.60m wide, 0.17m deep and contained a single fill **(149)**, of mid greyish brown fine sandy silt with animal bone and shell throughout.
- 4.2.12 A group of at least three pits **[157]**, **[159]** and **[163]**, located at the highest point in the centre of the site, was first observed at a height of 129.11m aOD (Figure 7). The loose, unconsolidated nature of the fill meant that a quartered approach to the feature was required. Investigations revealed that the feature was indeed a series of intercutting pits (Plate 5). One quarter of the feature was investigated (where pottery was recovered from the surface) revealing two distinct pits, with a third revealed after further cleaning.
- 4.2.13 The earliest pit **[163]** remained unexcavated, but is presumed to have been roughly contemporary, containing a similar fill **(164)**, truncated by a later sub-circular pit **[159]**, across its south edge.
- 4.2.14 The sub-circular pit **[159]**, was approximately 5.20m in length and at least 2.80m wide, with a maximum depth of 0.58m. The sides were gradual, concave with a rounded base. The fill **(160)** was mid greyish brown sandy silt and contained the disarticulated bones of a small animal. This pit had also been truncated along its south edge by a later pit.
- 4.2.15 The later pit **[157]** was roughly kidney-shaped and found to be 3.46m in length and 2.40m wide, with a maximum depth of 0.78m. An imperceptible top break of slope

into shallow, gentle concave sides, and a sharp break of slope at the base, presenting a shallow V-shaped profile. The primary fill **(165)** was a mid greyish brown stony, silty sand 0.40m thick. A diffuse horizon separated an overlying fill **(158)** 0.40m thick. The upper fill was similar, albeit siltier and stonier, and contained a large amount of mixed animal bone and several fragments of medieval pottery (see Section 5).

- 4.2.16 A small oval-shaped pit **[103]** located approximately 5m south-east of the centre of curvilinear ditch **[167]**, was first observed at a height of 126.51m aOD (Plate 6, Figure 7). The pit was 0.84m by 0.50m and a maximum of 0.14m deep. A single fill **(104)** of dark greyish brown sandy silt contained a small fragment of CBM.
- 4.2.17 Four other oval-shaped pits were investigated across the site and interpreted as tree throws, spread across the site and broadly similar in composition. The largest pit **[114]** was located approximately 1.9m south of the concentration of pit (Plate 7). It was 1.52m in length and 0.82m in width with a maximum depth of 0.14m with irregular sides and an irregular base pock-marked with heavy rooting. The smallest of the pits **[112]** was 1.25m in length, 0.80m in width and 0.21m located to the east of the site. The fill in each pit was very loose, dark brownish grey with frequent inclusion of charcoal and large sub-angular stones throughout. Natural geology was noticeably heat affected, and no dating information was recovered from any of these features.
- 4.2.18 Linear ditch **[169]** was observed at a maximum height of 129.36m aOD to the south of the site, extending over the crest of the hill north-northwest for approximately 33m to a height of approximately 128.50m aOD (Figure 3). The ditch comprised shallow concave sides and an irregular base, tapering off at its north end (Figure 8). At its widest point (at **[136]**), the ditch was 3.30m wide and a maximum of 0.46m deep (Plate 8). Evidence of rooting was prevalent along the entire course of the linear. A single fill **(133)**, **(135)** and **(137)** was observed, comprising friable, dark brown sandy silt. No finds were recovered from the feature.
- 4.2.19 Two animal burials were revealed at the site. The articulated remains of a juvenile cow **[124]/(125)** and the partly articulated remains of a small dog **[118]/(119)** were found in separate burials adjacent to one another (Figure 3). The fill surrounding the dog burial contained modern pottery.
- 4.2.20 The cut for the dog burial **[118]** truncated a deposit **(121)** containing modern industrial waste, within a small sub-rectangular pit **[120]** measuring 0.60m in length and 0.41m in width with a maximum depth of 0.32m.

4.3 **Archaeological Finds and Environmental Sampling**

- 4.3.1 A selection of archaeological finds were recovered, and 20 paleoenvironmental samples were retained during the groundworks. A discussion of the finds and samples follow in Sections 5 and 6. A large assemblage of animal bone was recovered from the site and is discussed in Section 7.

5 FINDS

5.1 Introduction

5.1.1 A total of 74 artefacts, weighing 2,227g, were recovered from the archaeological strip, map and sample excavation at Fennel Grove, Easington, County Durham.

5.1.2 All finds were dealt with according to the recommendations made by Watkinson & Neal (1998) and to the Chartered Institute for Archaeologists (CIfA) Standard & Guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2014b). All artefacts have been boxed according to material type and conforming to the deposition guidelines recommended by Brown (2011) and EAC (2014).

5.1.3 The material archive has been assessed for its local, regional and national potential and further work has been recommended on the potential for the material archive to contribute to the relevant research frameworks.

5.1.4 Quantification of bulk finds by material and context is visible in Table 1.

Context	SF No	<E> No	Material	Qty	Wgt (g)	Period	Refined Date	Comments
100			CBM	3	63	PM-Mod	19th - 20th C	Miscellaneous tile fragments
100			CBM	1	679	Med-PM?	12th - 19th C	Highly friable and abraded miscellaneous fabric, light pink fabric; appears to have mortar on one surface
104			CBM	1	64	Med-PM?	12th - 19th C	Highly friable and abraded miscellaneous fabric, light pink fabric
100			Ceramic	2	7	PM	19th C	RWE plate sherd, TP plate sherd
106		2	Ceramic	1	2	Med	12th - 14th C	Tiny miscellaneous sherd; red gritty fabric
119			Ceramic	1	2	PM-Mod	19th - 20th C	Miscellaneous sherd of Porcelain (?)
158			Ceramic	3	34	Med	13th - 15th C	1 x unglazed buff base, 1 x unglazed reduced body sherd, 1 x buff & reduced (sandwich effect) partially glazed sherd
145	1		Flint	1	9	Prehist	Early Neo	Possibly a fabricator
106		2	Glass	1	1	Med-PM?	12 th – 14 th C	Tiny shard from environmental sample
121		8	Industrial Waste	60+	1366	PM	17th - 20th C	Bloomery waste
TOTAL				74	2227			

Table 1: Finds by Material and Context

5.2 Worked Lithics

- 5.2.1 A single worked flint (SF **1**), weighing 9g, was recovered from the fill (**145**) of cut [**144**] in ditch [**166**], (Table 1). The artefact is in good condition.
- 5.2.2 It is likely to comprise a retouched blade, possibly a fabricator and is potentially of Early Neolithic date (Dave Jackson 2017, pers. comm.).
- 5.2.3 No further analysis is warranted.

5.3 Medieval Ceramics

- 5.3.1 Four sherds of medieval pottery, weighing 36g, were recovered from fill (**106**) <2> of cut [**105**] in ditch [**166**], and from fill (**158**) of pit [**157**] (Table 1). The sherds are in moderate to good condition.
- 5.3.2 The small sherd recovered from fill (**106**) <2> comprises a miscellaneous body sherd in a red gritty fabric. A date of 12th to 14th century is appropriate for this sherd.
- 5.3.3 The sherds recovered from fill (**158**) comprise a buff-coloured base sherd, an unglazed reduced body sherd and a partially glazed, sandwich-effect buff and reduced sherd. A date of 13th to 15th century is suitable for these sherds.
- 5.3.4 No further analysis is warranted.

5.4 Post-medieval Ceramics

- 5.4.1 Three sherds of post-medieval ceramics, weighing 9g, were recovered from topsoil (**100**) and from fill (**119**) of pit [**118**] (Table 1). The sherds are in good condition.
- 5.4.2 The sherds from topsoil (**100**) comprise 19th century refined white earthenware and Transfer Print plate sherds.
- 5.4.3 The sherd from fill (**119**) comprises a small miscellaneous (potentially) Porcelain sherd of possibly 19th to 20th century date.
- 5.4.4 No further analysis is warranted.

5.5 Ceramic Building Material

- 5.5.1 Five fragments of ceramic building material, weighing 806g, were recovered from topsoil (**100**) and from fill (**104**) of pit [**103**] (Table 1). The fragments are in poor to moderate condition.
- 5.5.2 Three fragments recovered from deposit (**100**) comprise deep red tile fragments of later post-medieval to modern date.

5.5.3 Two artefacts recovered from deposit **(100)** and fill **(104)** comprise highly friable, light-pinkish, gritty, undiagnostic tile / brick fragments; a general date of medieval to post-medieval has been attributed to these two artefacts.

5.5.4 No further analysis is warranted.

5.6 Industrial Waste

5.6.1 Over 60 fragments of archaeometallurgical waste, weighing 1,366g, were recovered from fill **(121)** <8> of pit **[120]**.

5.6.2 The material likely comprises bloomery waste (Lynne Gardiner 2018, *pers. comm.*) and is likely to be of 17th to 20th century date.

5.6.3 No further analysis is warranted.

5.7 Glass

5.7.1 A single fragment of glass, weighing <1g, was recovered from environmental sample <2> from fill **(106)** of cut **[105]** in ditch **[166]**, (Table 1). The shard is in poor condition.

5.7.2 It was recovered in conjunction with medieval pottery of potentially 12th to 14th century date, therefore the glass shard is possibly contemporary with the pottery.

5.7.3 No further analysis is warranted.

5.8 Statement of Potential

5.8.1 The finds provide evidence of activity on the site and in its environs from the (potentially Early) Neolithic period, the high medieval period and the later post-medieval to modern periods.

5.8.2 The finds will be retained with the archive.

6 ENVIRONMENTAL ASSESSMENT

6.1 Introduction

6.1.1 Twenty bulk environmental samples were taken during the archaeological investigation.

6.1.2 This report presents the results of the assessment of the environmental samples, palaeobotanical, charcoal and molluscan remains in accordance with Campbell et al. (2011) and English Heritage (2008).

6.2 Methodology

6.2.1 The bulk environmental samples (Table 2) were processed at the Wardell Armstrong office in Carlisle.

Table 2: Sampled Context Information

<>	C	context description
1	104	fill of pit [103]
2	106	fill of linear [105]
3	111	fill of linear [110]
4	113	fill of burnt pit [112]
5	115	fill of possible tree throw [114]
6	117	fill of burnt pit [116]
7	123	fill of burnt pit [122]
8	121	fill of modern disturbance [120]
9	125	fill of modern cow burial [124]
10	131	fill of small linear ditch [130]
11	133	fill of north-south linear [132]
12	137	fill of linear hedgerow [136]
13	145	fill of large boundary ditch [144]
14	149	fill of eastern boundary ditch terminus [148]
15	151	primary fill of ditch [150]
16	156	fill of re-cut ditch [155]
17	158	fill of pit [157]
18	162	fill of ditch terminus [161]
19	165	primary fill of pit [157]
20	160	fill of pit [159]

Key: <>= sample number, C= context number

6.2.2 The colour, lithology, weight and volume of each sample was recorded using standard Wardell Armstrong pro forma recording sheets, Table 3. The samples were processed with 500 micron retention and flotation meshes using the Siraf method of flotation (Williams 1973). Once dried, the residues from the retention mesh were sieved to 4mm and the artefacts and ecofacts removed from the larger fraction and forwarded

to the finds department. The smaller fraction was scanned with a magnet for microslags such as hammerscales. This fraction was then examined for smaller artefacts such as beads. Finds from samples are presented in Table 4. It was then re-floated to maximise any archaeobotanical yield thus creating a second flot (Flot 2) with those residues discarded. For the purposes of the assessment Flot 2 has not been examined but have been kept.

- 6.2.2 The flot (Flot 1), plant macrofossils and charcoal were retained and scanned using a stereo microscope (up to x45 magnification). Any non-palaeobotanical finds were noted on the flot pro forma. The flot data is presented in Table 5.
- 6.2.3 Plant remains were counted as single units whereby an embryo was present. Their preservation was noted using poor, moderate and excellent. Molluscs were counted as single units if the apex was complete and/or an umbone was present.
- 6.2.4 A small selection of charcoal was identified to species for the purposes of suitability for radiocarbon dating only.
- 6.2.5 The plant remains and charcoal were identified to species as far as possible, using Cappers et al (2006), Cappers and Bekker (2013), Cappers and Neef (2012), Hather (2000), Jacomet (2006) and Schoch et al. (2004), Schweingruber (1982) and the author's reference collection. Nomenclature for plant taxa followed Stace (2010) and cereals followed Cappers and Neef (2012). Molluscs were identified to species as far as possible using Cameron (2008) and Hayward and Ryland (1998) with nomenclature following Anderson (2008) and Hayward and Ryland (1998).
- 6.2.6 Data for plants is presented in Table 6, charcoal in Table 7, marine molluscs in Table 8 and terrestrial molluscs in Table 9.

6.3 Results

6.3.1 *Magnetic matter*

- 6.3.1.1 Seventeen samples yielded small amount of magnetic matter. Microslags, in the form of plate hammerscale, were observed in only two of them; sample <17> - fill (158) of pit [157] - and sample <20> - fill (159) of central pit [159]. These were in very small quantities with two in <17> and one in <20>.

6.3.2 *Animal bone*

- 6.3.2.1 Animal bone was recovered from sixteen samples and four flots. These have been reported on elsewhere (see Section 7).

6.3.3 *Plant remains*

6.3.3.1 No un-charred plant remains were observed. All the charred plant material was poorly preserved; showing much abrasion and slight distortion. Oat (*Avena* sp.) was present in <1>, <2> and <16>. Due to the lack of any floret bases it was not possible to determine species further. Wheat (*Triticum* sp.) caryopsis were present in <2>, <3> and <14>. Barley (*Hordeum* sp.) was the most prolific grain and was observed in eight samples.

6.3.3.2 Most grains were present as single counts within the samples. Two grains of barley were in <5>, <10> and <18> with a single oat and single barley in <2>. Two samples, <9> and <15>, contained three examples of barley, with a possible pea (*Pisum sativum*) also in <15>.

6.3.4 *Charcoal*

6.3.4.1 Twelve samples yielded charcoal. Most of them were very small fragments. Primarily identified for suitability for radiocarbon suitability, species observed were alder/hazel (*Alnus/Corylus avellana*), apple/pear/whitebeam/hawthorn (Maloideae), oak (*Quercus* sp.), elm (*Ulmus* sp.) and willow/poplar (*Salix/Populus*).

6.3.4.2 Three samples contained relatively large amounts of charcoal. The largest (121.52g) was from <4>, Sample <6> contained 40.5g and 5.32g from <5>.

6.3.5 *Molluscs (marine)*

6.3.5.1 Most marine molluscs presented were fragments which included common limpet (*Patella vulgata*), common mussel (*Mytilus edulis*) and common periwinkle (*Littorina littorea*). Complete examples of common periwinkle observed in <2> and <14>, with a complete common limpet present in <20>. The complete examples had excellent preservation with the fragmented material having no abrasion.

6.3.6 *Molluscs (terrestrial)*

6.3.6.1 Nine samples yielded terrestrial molluscs. For the most part they were catholic species with only *Vallonia* sp. and *Pupilla muscorum* having a stricter ecological niche; that of open countryside. The molluscs had excellent preservation.

6.3.7 *pH levels*

6.3.7.1 The pH levels ranged from the lowest 5.83 (sample <11>) to the highest 7.91 (sample <10>).

6.4 Discussion

- 6.4.1 The dearth of plant remains prohibited further discussion.
- 6.4.2 The presence of marine molluscs would not be considered unusual due to the proximity of the sea (2.6km to the east of the site). They may have been utilised as food-stuffs, but no cut-marks were present, so this cannot be ascertained.
- 6.4.3 The small quantities of terrestrial molluscs also prohibit further discussion.
- 6.4.4 The small quantities of charcoal examined for AMS potential show a variety of species that could have been grown locally. Elm was identified and this is relatively scarce within charcoal assemblages from the north of England (Huntley 2010, 98).

6.5 Statement of Potential and Recommendations

- 6.5.1 Charcoal from samples <1>, <4>, <5>, <6> and <14> would be suitable for submission for AMS radiocarbon dating. The occurrence of earthworm capsules and heavily rooted flots with the low quantities of charred grains make them not a secure material as they may be present through bioturbation. If an AMS date is required from other samples then Flot 2 should be examined to see if the charred grain count may be increased and if animal bone was present, this should be examined for its potential.
- 6.5.1 The molluscs, plant remains and magnetic matter offer no potential for work and may be discarded.
- 6.5.2 The second flots may also be discarded if not required for further work.
- 7.5.3 Charcoal from <4>, <5> and <6> offer a potential to examine both past woodland management and wood and fuel procurement practices. This would involve identification of at least 300 fragments per sample and involving recording as suggested by Huntley (2010, 58-60). The caveat applied to this is that these contexts must be securely dated prior to analysis.
- 6.5.4 Charcoal from the remaining samples may be discarded; except that from <1> and <14>, unless they are not required for AMS and, thus, may be discarded.

Table 3: Sample Data

C	<>	TQ	pH	CP	TP	MP	PW	PV	CS	Components (sorting)	A	SA	SR	R	SW	SV
104	1	1	7.18	Dark brown	Crumbly	Sandy silt	10	7	Pale grey	Stone>1cm 30%: stone<1cm 20%: sand 50%	-	-	-	X	1300	700
106	2	2	5.91	Dark brown	Loose	Sandy silt	23	18	Pale yellowish brown	Stone>1cm 30%: stone<1cm 30%: sand 40%	-	-	X	-	11609	6500
111	3	3	7.43	Dark brown	Friable	Sandy silt	36	24	Mid yellowish brown	Stone>1cm 30%: stone<1cm 30%: sand 40%	-	-	-	X	8944	5100
113	4	4	7.88	Dark brownish black	Friable	Silty clay	44	33	Mid brown	Stone>1cm 20%: stone<1cm 30%: sand 50%	-	X	-	-	4842	3400
115	5	2	7.3	Dark brownish black	Loose	Sandy silt	24	17	Pale greyish brown	Stone>1cm 30%: stone<1cm 40%: sand 30%	-	X	-	-	10825	10500
117	6	2	7.21	Dark brownish black	Loose	Sandy silt	24	18	Dark brown	Stone>1cm 30%: stone<1cm 30%: sand 40%	-	-	-	X	4839	4500
123	7	2	6.9	Dark brown	Loose	Sandy silt	20	16	Mid brown	Stone>1cm 40%: stone<1cm 20%: sand 40%	-	X	-	-	7561	4200
121	8	2	7.18	Dark yellowish brown	Loose	Sand	22	18	Mid brown	Stone>1cm 50%: stone<1cm 20%: sand 30%	X	-	-	-	5533	5500
125	9	3	6.73	Mid brown	Loose	Sandy silt	26	23	Mid brown	Stone>1cm 20%: stone<1cm 10%: sand 70%	-	-	-	X	6844	4800
131	10	2	7.91	Mid brown	Loose	Sandy silt	20	17	Mid greyish brown	Stone>1cm 20%: stone<1cm 40%: sand 40%	-	X	-	-	2328	2000
133	11	2	5.83	Dark brown	Crumbly	Sandy silt	24	17	Mid greyish brown	Stone>1cm 30%: stone<1cm 30%: sand 40%	-	-	-	X	5757	3600
137	12	2	7.3	Very dark brown	Friable	Sandy silt	25	18	Mid brown	Stone>1cm 30%: stone<1cm 20%: sand 50%	-	-	X	-	14207	65600
145	13	2	7.36	Dark greyish brown	Soft	Silty clay	23	16	Mid brown	Stone>1cm 30%: stone<1cm 50%: sand 20%	-	-	X	-	3309	2100
149	14	2	7.28	Dark greyish brown	Friable	Silty clay	26	18	Pale greyish brown	Stone>1cm 30%: stone<1cm 50%: sand 20%	-	-	-	X	4540	3000
151	15	2	7.24	Mid yellowish brown	Loose	Sandy silt	22	18	Mid yellowish brown	Stone>1cm 30%: stone<1cm 10%: sand 60%	-	X	-	-	6509	3600
156	16	2	7.15	Dark brown	Crumbly	Silty sand	23	16	Mid brown	Stone>1cm 20%: stone<1cm 20%: sand 60%	-	-	-	X	5203	2900
158	17	2	6.3	Very dark brown	Loose	Sandy silt	23	19	Pale yellowish brown	Stone>1cm 30%: stone<1cm 50%: sand 20%	-	-	-	X	9703	6600
162	18	2	6.79	Dark brown	Friable	Sandy silt	19	16	Pale greyish brown	Stone>1cm 40%: stone<1cm 20%: sand 40%	-	-	X	-	2897	1700
165	19	2	6.8	Mid yellowish brown	Loose	Sandy silt	28	17	Pale yellowish brown	Stone>1cm 30%: stone<1cm 40%: sand 30%	-	-	-	X	13177	9300
160	20	2	6.28	Mid yellowish	Loose	Sandy silt	25	18	Pale greyish	Stone>1cm 30%: stone<1cm 30%: sand 40%	-	-	-	X	12331	7000

C	<>	TQ	pH	CP	TP	MP	PW	PV	CS	Components (sorting)	A	SA	SR	R	SW	SV
				brown					brown							

Key: **C**= context, **<>**= sample number, **TQ**= quantity of tubs in sample, **CP**=colour of pre-processed sediment, **TP**=texture of pre-processed sediment, **MP**=matrix of pre-processed sediment, **PW**= weight (kg) of pre-processed sediment, **PV**=volume (l) of pre-processed sediment, **CS**=colour of dried retent, description of stone **A**=angular, **SA**=sub-angular, **SR**=sub-rounded, **R**=rounded, **SW**=weight (g) of retent residues, **SV**=volume (ml) of retent residue

Table 4: Finds from Samples

C	<>	Material	Act.	1-10	11-50	51-150	151-250	>250	Wt :g	Wt<	>	<
104	1	Magnetic matter		-	-	yes	-	-	4	-	-	yes
106	2	Charcoal		-	yes	-	-	-	-	yes	yes	-
106	2	Animal bone		yes	-	-	-	-	30	-	yes	-
106	2	Animal bone		-	yes	-	-	-	0	yes	-	yes
106	2	Shell		-	yes	-	-	-	14	-	yes	-
106	2	Shell		-	yes	-	-	-	0	yes	-	yes
106	2	Magnetic matter		-	-	yes	-	-	3	-	-	yes
106	2	Pottery	1	-	-	-	-	-	3	-	yes	-
106	2	Glass	1	-	-	-	-	-	0	yes	-	yes
111	3	Magnetic matter		-	-	yes	-	-	3	-	-	yes
111	3	Animal bone		yes	-	-	-	-	29	-	yes	-
113	4	Charcoal		-	-	-	-	yes	106	-	yes	-
113	4	Magnetic matter		-	-	-	-	yes	15	-	-	yes
115	5	Charcoal		-	yes	-	-	-	4	-	yes	-
115	5	Magnetic matter		-	-	-	yes	-	10	-	-	yes
115	5	Bone		yes	-	-	-	-	0	yes	yes	-
115	5	Bone		yes	-	-	-	-	0	yes	-	yes
123	7	Charcoal		-	yes	-	-	-	5	-	yes	-
123	7	Magnetic matter		-	yes	-	-	-	6	-	-	yes
121	8	Ind waste		-	-	-	yes	-	1236	-	yes	-
121	8	Coal		-	-	-	-	yes	345	-	yes	-
121	8	Magnetic matter		-	-	-	-	yes	10	-	-	yes
121	8	Animal bone		-	yes	-	-	-	30	-	yes	-
125	9	Animal bone		-	yes	-	-	-	12	-	yes	-
131	10	Charcoal		yes	-	-	-	-	1	-	yes	-
131	10	Animal bone		-	yes	-	-	-	2	-	yes	-
131	10	Animal bone		yes	-	-	-	-	0	yes	-	yes
131	10	Magnetic matter		-	yes	-	-	-	3	-	-	yes
133	11	Animal bone		yes	-	-	-	-	2	-	yes	-
133	11	Magnetic matter		-	yes	-	-	-	0	yes	-	yes
137	12	Charcoal		-	yes	-	-	-	20	-	yes	-
137	12	Shell		yes	-	-	-	-	0	yes	yes	-
137	12	Animal bone		yes	-	-	-	-	0	yes	yes	-
137	12	Magnetic matter		-	yes	-	-	-	2	-	-	yes
145	13	Animal bone		-	yes	-	-	-	17	-	yes	-
145	13	Magnetic matter		-	-	yes	-	-	4	-	-	yes
149	14	Charcoal		-	-	yes	-	-	-	yes	yes	-
149	14	Animal bone		-	-	yes	-	-	115	-	yes	-
149	14	Animal bone		-	yes	-	-	-	0	yes	-	yes
149	14	Shell		-	yes	-	-	-	0	yes	-	yes
149	14	Shell		-	yes	-	-	-	19	-	yes	-
149	14	Magnetic matter		-	yes	-	-	-	3	-	-	yes
151	15	Animal bone		yes	-	-	-	-	5	-	yes	-
151	15	Magnetic matter		-	-	yes	-	-	2	-	-	yes
156	16	Animal bone		yes	-	-	-	-	2	-	yes	-
158	17	Shell		-	yes	-	-	-	0	yes	yes	-
158	17	Animal bone		-	yes	-	-	-	6	-	yes	-
158	17	Magnetic matter		-	-	yes	-	-	0	yes	-	yes
162	18	Animal bone		-	yes	-	-	-	38	-	yes	-
162	18	Magnetic matter		-	yes	-	-	-	3	-	-	yes
165	19	Magnetic matter		-	yes	-	-	-	2	-	-	yes
165	19	Animal bone		yes	-	-	-	-	87	-	yes	-
160	20	Magnetic matter		-	yes	-	-	-	0	yes	-	yes
160	20	Pottery	1	-	-	-	-	-	1	-	yes	-

C	<>	Material	Act.	1-10	11-50	51-150	151-250	>250	Wt :g	Wt<	>	<
160	20	Shell		yes	-	-	-	-	0	yes	yes	-
160	20	Animal bone		yes	-	-	-	-	4	-	yes	-

Key: C= context, <>=sample number, Act.=actual, qty= quantity, >/< relate to the fraction the material was sourced from (>4mm or >4mm)

Table 5: Flot Data

C	<>	<>n	WF	VF	M	IPR	AMS?	Ch	Mo	AB	Ci	Components	EWC
104	1	1	4.78	25		1	Yes	<0.1	-	-	-	very fine rootlets 50%: sand 45%; comminuted charcoal 5%	2
106	2	1	7.3	30		2		<0.1	3	-	-	very fine rootlets 50%: sand 45%: comminuted charcoal 5%	-
111	3	1	20.7	35		1		<0.1	-	2	-	very fine rootlets 40%: comminuted charcoal 5%: sand 55%	-
113	4	1	72.8	260	2mm	1	Yes	15.52	-	-	-	very fine rootlets 10%: comminuted charcoal 90%	3
115	5	1	11.2	80		2	Yes	0.89	5	-	-	very fine rootlets 75%: sand 5%: comminuted charcoal 20%	3
117	6	1	69.3	345	2mm	-	Yes	40.5	1	-	-	very fine rootlets 10%: comminuted charcoal 90%	3
123	7	1	10.6	100		1		0.32	3	-	-	very fine rootlets 80%: sand 10%: comminuted charcoal 10%	2
121	8	1	143.4	310	2mm	-		<0.1	-	2.12	124.1	very fine rootlets 15%: cinder 85%	3
125	9	1	67.1	195	2mm	3		<0.1	-	7.44	-	very fine rootlets 70%: sand 20%: comminuted charcoal 5%: animal bone 5%	5
131	10	1	3.9	20		2		0.13	1	-	-	very fine rootlets 65%: sand 30%: comminuted charcoal 5%	-
133	11	1	9.2	40		-		-	14	-	-	very fine rootlets 70%: rhizomes 10%: sand 20%	-
137	12	1	17.5	90		-		-	8	-	-	very fine rootlets 90%: sand 10%	-
145	13	1	6.6	15		1		<0.1	-	-	-	very fine rootlets 50%: sand 50%	1
149	14	1	21.6	50		1	Yes	0.21	-	-	-	very fine rootlets 60%: sand 30%: comminuted charcoal 10%	-
151	15	1	6.5	15		4		-	-	<0.1	-	very fine rootlets 30%: sand 50%: comminuted charcoal 20%	-
156	16	1	9.4	25		1		-	-	-	-	very fine rootlets 40%: sand 60%	-
158	17	1	7.2	30		-		-	-	-	-	very fine rootlets 50%: sand 45%: comminuted charcoal 5%	-
162	18	1	10.8	30		2		-	-	-	-	very fine rootlets 75%: comminuted charcoal 5%: sand 20%	-
165	19	1	9.9	25		-		-	-	-	-	very fine rootlets 40%: sand 60%	-
160	20	1	5.1	25		-		-	1	-	-	very fine rootlets 40%: sand 20%: cinder 40%	-

Key: **C**=context, **<>**=sample number, **<>n**=denotes which flot (1st or 2nd if applicable), **WF**= weight (g) of flot, **VF**=volume (ml) of flot, **M**=mesh size (if used), **IPR**=identifiable plant remains (quantity), **AMS?**=any suitable material for radiocarbon dating?, **Ch**= charcoal (g), **Mo**= mollusc (actual), **AB**= animal bone (g), **Ci**= cinder (g), **EWC**= earthworm capsule (actual)

Table 6: Plant Data

C	<>	preservation	plant part	species	common	qty
104	1	poor	fruit	<i>Avena</i> sp.	oat	1
106	2	poor	fruit	<i>Triticum</i> sp.	wheat	1
106	2	poor	fruit	<i>Avena</i> sp.	oat	1
111	3	poor	fruit	<i>Triticum</i> sp.	wheat	1
113	4	poor	fruit	<i>Hordeum</i> sp.	barley	1
115	5	poor	fruit	<i>Hordeum</i> sp.	barley	2
123	7	poor	fruit	<i>Hordeum</i> sp.	barley	1
125	9	poor	fruit	<i>Hordeum</i> sp.	barley	3
131	10	poor	fruit	<i>Hordeum</i> sp.	barley	2
145	13	poor	fruit	<i>Hordeum</i> sp.	barley	1
149	14	poor	fruit	<i>Triticum</i> sp.	wheat	1
151	15	poor	fruit	<i>Hordeum</i> sp.	barley	3
151	15	poor		cf. <i>Pisum sativum</i>	cf. common pea	1
156	16	poor	fruit	<i>Avena</i> sp.	oat	1
162	18	poor	fruit	<i>Hordeum</i> sp.	barley	2

Key: **C**=context, **<>**= sample number, **qty**=quantity

Table 7: Charcoal Data

C	<>	WF	WR	FI	% sorted	FW	Observations (qty)
104	1	<0.1	-	4	100		alder/hazel (2) Maloideae (1) oak (1)
106	2	<0.1	0.36	4	100		willow/poplar (1), oak (1) elm (1) indet. (1)
111	3	<0.1	-	2	50		Maloideae (1) indet. (1)
113	4	15.52	106	3	5	yes	alder/hazel (2) elm (1)
115	5	0.89	4	4	5	yes	Maloideae (3) alder/hazel (1)
117	6	40.5	-	3	5	yes	willow/poplar (3)
123	7	0.32	5	5	75		Maloideae (2) alder/hazel (2) indet. (1)
121	8	<0.1	-	2	100		alder/hazel (1) oak (1)
125	9	<0.1	-	1	100		indet. (1)
131	10	0.13	1	7	100		oak (4) indet. (3)
145	13	<0.1	<1	2	100		cf. willow/poplar (1) indet. (1)
149	14	0.21	<1	3	50		alder/hazel (2) indet. (1)

Key: **C**= context, **<>**= sample number, **WF**= weight (g) of charcoal from flot, **WR**= weight (g) of charcoal from residue, **FI**= number of fragments identified, **%sorted**= % of total fragments identified, **FW**= remainder suitable for further work

Table 8: Mollusc Data (marine)

C	<>	binomial	common	wt	qty	frags	comments
100	HC	<i>Patella vulgata</i>	common limpet	4.75		1	
106	2	indet	indet	0.67		29	
106	2	<i>Mytilus edulis</i>	common mussel	1.35		4	
106	2	<i>Littorina littorea</i>	common periwinkle	9		15	
106	2	<i>Littorina littorea</i>	common periwinkle	2.07	3		
137	12	indet	indet	0.54		3	
149	14	indet	indet	1.12		35	inc limpet and mussel
149	14	<i>Littorina littorea</i>	common periwinkle	9.18		40	
149	14	<i>Littorina littorea</i>	common periwinkle	10.16	4		
158	HC	<i>Mytilus edulis</i>	common mussel	3.22		3	
158	17	<i>Mytilus edulis</i>	common mussel	0.39		5	
160	20	cf. <i>Patella vulgata</i>	cf. common limpet	0.62		6	
160	20	<i>Patella vulgata</i>	common limpet	1	1		

Key: C= context, <>=sample number, HC=hand-collected, wt=weight (g), qty= quantity, frags= fragment count

Table 9: Mollusc Data (terrestrial)

C	<>	qty	binomial
106	2	1	<i>Vallonia</i> sp.
106	2	1	<i>Cochlicopa</i> cf. <i>lubricella</i>
106	2	1	<i>Oxychillus</i> sp.
115	5	1	<i>Vallonia</i> sp.
115	5	1	<i>Cochlicopa</i> cf. <i>lubricella</i>
115	5	2	<i>Cepaea hortensis</i>
117	6	1	<i>Oxychillus</i> sp.
123	7	1	<i>Cochlicopa</i> cf. <i>lubricella</i>
123	7	1	<i>Pupilla muscorum</i>
123	7	1	<i>Vallonia</i> sp.
121	8	2	<i>Oxychillus</i> sp.
121	8	1	<i>Cepaea hortensis</i>
131	10	1	<i>Oxychillus</i> sp.
131	10	9	<i>Vallonia</i> sp.
131	10	1	<i>Cepaea hortensis</i>
137	12	3	<i>Cepaea hortensis</i>
137	12	3	<i>Vallonia</i> sp.
137	12	2	<i>Cochlicopa</i> cf. <i>lubricella</i>
158	17	8	indet
160	20	1	<i>Oxychillus</i> sp.

Key: C=context, <>=sample number, qty= quantity

7 ZOOARCHAEOLOGICAL ASSESSMENT

7.1 Introduction

7.1.1 A total of 676 animal bones, weighing 5,270g, were recovered from 16 contexts during the archaeological investigation.

7.1.2 Animal bone was recovered from the following environmental samples: <2> <3> <5> <8> - <20>. This report focusses on the hand-collected material.

7.1.3 All of the animal bone was recorded and analysed using guidelines published by English Heritage (2014), now Historic England.

7.1.4 Quantification of the zooarchaeological material is available in Table 11.

7.2 Results

7.2.1 Subsequent analyses revealed a MNI (minimum number of individuals) count of 33 animals represented in this assemblage (Table 10).

Species	Count & Percentage
<i>Bos sp.</i>	14 (42.4%)
<i>Ovis sp.</i>	6 (18.1%)
<i>Equus sp.</i>	1 (3%)
<i>Canis sp.</i>	3 (9%)
<i>Gallus sp.</i>	1 (3%)
<i>Oryctolagus / Lepus sp.</i>	1 (3%)
Large mammal	3 (9%)
Medium mammal	4 (12.1%)
TOTAL	33

Table 10: Quantification of Faunal Species

7.2.2 Cattle (*Bos sp.*) comprise over 40% of the assemblage, followed by sheep (*Ovis sp.*) at 18.1%. Medium mammals make up 12.1% of the assemblage while dogs (*Canis sp.*) and large mammals make up 9%. Animals with the lowest count include horses (*Equus sp.*), chickens (*Gallus sp.*) and rabbits / hares (*Oryctolagus / Lepus sp.*) at 3% each. Pigs (*Sus sp.*) were not observed in this assemblage.

7.2.3 The vast majority of the faunal remains comprise adult animals; there are four non-adult animals (including a likely neonatal calf) which are all cattle (*Bos sp.*).

7.2.3 Gnawing and unusual pathology were not observed, although butchery marks were recorded on ribs from an adult cow recovered from context **(131)**.

7.2.4 Taphonomic conditions of the bone would suggest that this assemblage is modern (mid to late 20th century). Animal bone from deposit **(119)** was recovered alongside

pottery of 19th to 20th century date.

7.2.5 It should be noted that a small partial decorated bone knife handle was recovered from deposit **(145)**; this is likely to be of late 19th to 20th century date. Although artefacts with similar designs have been recovered from Roman and Anglo-Saxon contexts.

7.3 Statement of Potential

7.3.1 This is a small faunal assemblage which is highly likely to be of modern date; a minimum of 33 animals are represented, with the greatest percentage comprising cattle.

7.3.2 No further work is required.

7.3.3 It is recommended that the animal bone is not retained with the archive, with the exception of the bone knife handle.

Table 11: Quantification of Faunal Assemblage

Context	Count	Wgt (g)	Species	Element - Notes	Butchery	Gnawing	Pathology	Age
100	2	46	<i>Bos sp.</i>	Molars	-	-	-	Adult
100	1	26	<i>Ovis sp.</i>	Horn core	-	-	-	Adult
109	1	155	<i>Equus sp.</i>	Metacarpal	-	-	-	Adult
109	2	81	Large mammal	Limb	-	-	-	Adult
109	1	66	<i>Equus sp.</i>	Astragalus	-	-	-	Adult
109	2	5	?	?	-	-	-	Adult
111	2	2	?	Limb	-	-	-	Adult
111	2	34	<i>Bos sp.</i>	Rib	-	-	-	Adult
111	1	3	Medium mammal	Vert	-	-	-	Adult
111	1	8	<i>Bos sp.</i>	Scap	-	-	-	Adult
119	160	142	<i>Canis sp.</i>	Post-cranial elements	-	-	-	Adult
125	56	37	<i>Bos sp.</i>	Phalanges, vertebrae, incisor, epiphyseal plates	-	-	-	Juv - neonatal
125	268	1420	<i>Bos sp.</i>	Cranial and post-cranial elements	-	-	-	Juv
127	1	30	<i>Bos sp.</i>	Mandible	-	-	-	Adult
127	1	11	<i>Bos sp.</i>	Vert	-	-	-	Juv
127	1	2	Medium mammal	Cranium	-	-	-	Adult
127	1	8	Medium mammal	Scap	-	-	-	Adult
131	2	25	<i>Bos sp.</i>	Ribs	Y	-	-	Adult
131	2	6	Medium mammal	Distal end of limb bone; misc limb bone	-	-	-	Adult
137	1	22	<i>Bos sp.</i>	M1	-	-	-	Adult
137	1	18	Large mammal	Limb	-	-	-	Adult
139	14	10	<i>Ovis sp.</i>	Includes teeth	-	-	-	Adult
143	2	6	<i>Ovis sp.</i>	Limb bone, rib bone	-	-	-	Adult
145	2	42	<i>Ovis sp.</i>	Mandible & limb bones frag	-	-	-	Adult
145	3	145	<i>Bos sp.</i>	Vert x 2, 1 x prox tibial hd	-	-	-	Juv
145	32	568	<i>Bos sp.</i>	Cranial and post-cranial elements	-	-	-	Adult
145	1	6	-	Worked bone knife handle with concentric rings	-	-	-	-
147	3	33	<i>Ovis sp.</i>	Molars, metatarsel	-	-	-	Adult
147	2	78	<i>Bos sp.</i>	Metatarsel; scap (glenoid fossa)	-	-	-	Adult
147	3	10	Medium mammal	Misc limb bones	-	-	-	Adult
149	14	411	<i>Bos sp.</i>	Post-cranial elements, partial mandible	-	-	-	Adult

158	65	1740	<i>Gallus sp.</i> x 1, <i>Canis sp.</i> x 2, <i>Bos sp</i> x 1, <i>Ovis sp.</i> x 1	Cranial and post-cranial elements	-	-	-	Adult
160	23	26	<i>Oryctolagus / Lepus sp.</i>	Calcaneus, distal tibs, misc frags	-	-	-	Adult
162	1	9	<i>Ovis sp.</i>	Mandible	-	-	-	Adult
162	1	8	Large mammal	Limb	-	-	-	Adult
162	1	31	<i>Bos sp.</i>	Humerus	-	-	-	Juv
	676	5270						

8 CONCLUSIONS

8.1 Interpretation

- 8.1.1 The archaeological strip, map and sample investigation revealed the remains of a possible enclosure which may have originated in the medieval period. A concentration of waste pits, also likely to be medieval in date, were found in the centre of the excavation area at the extreme top of the hill within the enclosure. A shallow field boundary of presumed post-medieval origins was recorded roughly central to the site, aligned north-northwest to south-southeast, and a series of probable tree throws indicative of woodland clearance were observed across the excavation area.
- 8.1.2 Two curvilinear ditches, one the possible re-cut of the other and following much the same trajectory around the north-west crest of the hill, were recorded corresponding with the evaluation trenches and geophysical survey. These two ditches both appeared to terminate in roughly the centre of the excavated area with a gap of c.20m before a possible continuation of a sub-linear ditch eastwards; with this ditch comprising at least two possible re-cuts. Together they create a convincing enclosure around the top of the hill.
- 8.1.3 It has proved difficult to date the ditches, with scant datable material recovered. The one exception is the earliest, westernmost curvilinear ditch from which a disparate assortment of dated material was recovered. A small sherd of ceramic and a single fragment of glass were recovered from its south-west end, dated to the 12th-14th century. Towards the north end of the ditch a flint fabricator was recovered from near the base of the fill, dated potentially to the Early Neolithic period, as well as small fragment of a bone knife handle which is probably 19th century. It is highly likely following discussions with the excavator and the finds specialist that the bone handle is an intrusive object, entering into the collection of animal bone due to the proximity to a 19th century land drain which ran along the west edge of the excavated slot. However, further deliberation is necessary when considering the other three artefacts; the Neolithic flint and the medieval material.
- 8.1.4 It is suggested that the Neolithic flint may be residual. It seems likely that the enclosure is medieval, especially when combined with the concentration of pits in the centre of the enclosure, also dated to the medieval period (13th to 15th century).
- 8.1.5 A large sub-circular, soil-filled feature was excavated and determined to be a small concentration of pits, suggestive of being waste pits, containing medieval pottery, and

a large concentration of animal bone. This indicated the site's domestic nature, on the northern peripheries of Easington village centre.

- 8.1.6 A linear field boundary was revealed, crossing the site north-northwest to south-southeast. The gravelly, loose nature of the fill within this shallow, rather ephemeral ditch suggests that it was a hedgerow. Although undated, the feature is likely to be post-medieval.
- 8.1.7 Five oval pits, interpreted as possible tree throws, were also identified with one containing possible post-medieval CBM. However, it is difficult to conclusively state that these predominantly charcoal-rich, loose, stony pits have not been subject to bioturbation and once gain prove that the post-medieval material is intrusive. What is clear, is that they represent woodland clearance.
- 8.1.8 Unusually, for a site producing very little by way of artefactual material, a vast array of animal bone was recovered, perhaps owing to the predominantly agricultural use of the site from at least the medieval period. However, taphonomically, much of the animal bone was considered to be more recent. A juvenile cow and a small dog burial were also excavated, within the immediate vicinity of one another, and determined to be modern and of no archaeological significance.
- 8.1.9 The possible postholes identified during the previous evaluation were located during the excavation. Having excavated more of the site, it became clear that these were likely to be rooting, with the centre of the excavated area clearly affected by a combination of bioturbation and ploughing.

8.2 Significance

- 8.2.1 The enclosure ditches can be tentatively dated to the later medieval period, possibly between the 12th and 15th centuries, when Easington would have been at its height in local and regional importance. The recut of the curvilinear ditch to the west, and its position, offset, though closely mimicking the formers orientation, brings forth the question of whether the earlier ditch was still visible when the later ditch was made. What is clear is that the enclosure was used repeatedly over a period of time.

8.3 Recommendations

- 8.3.1 Unfortunately, environmental data, and the sparsity of material culture, provides little scope for understanding the site. Further work is therefore not recommended, based on the paucity of the excavated evidence.

- 8.3.2 Some of the environmental samples produced material suitable for radiocarbon dating. Given the uncertainty of the date of the excavated features, further analysis may be appropriate should it be required to confirm the period of use.
- 8.3.3 Detailed study on a regional level could help provide more insight in terms of late medieval rural settlement patterns in accordance with the regional research framework (Petts and Gerrard 2006), and on a local level contributing to such studies as settlement development and the use and division of arable land in County Durham (see Dunsford and Harris 2003 and Britnell 2004).
- 8.3.2 There is the possibility of the curvilinear features continuing (or rather, reappearing) south of the site boundary. Investigation of this small parcel of land outside of the development area, beyond the southern boundary of the site, may elucidate the nature of this enigmatic site.

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APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description	Height/Depth	Discussion
(100)	Topsoil	Dark Greyish Brown, loose, sandy clay	0.25- 0.3m	Visible across site
(101)	Natural Substrate	Loose, mid yellowish grey gravels and sand	-	Naturally deposited till
(102)	Deposit	Mod compact, dark reddish brown, fine sandy silt with small pebble and charcoal inclusions	0.5m	Subsoil observed in the north west corner of the site, down the slope and into which the archaeology cuts. Stray finds of bone probably residual within this context due to later ploughing
[103]	Cut	Sub Oval shallow irregular pit with gently sloping sides and a concave base.	0.14m	Shallow pit of unknown purpose cut into subsoil. No relating features, filled by (104)
(104)	Deposit	Moderately compacted dark to mid grey brown sandy silt with charcoal fleck inclusions	0.14m	Fill of shallow irregular pit [103] backfilled. One piece of possibly medieval ceramic from this feature
[105]	Cut	Slot in Linear feature (enclosure ditch) aligned N-S towards the west site boundary. Shallow curving sides and concave base sloping towards the north. Filled by (106)	0.23m	Slot in enclosure ditch aligned N-S. Cut into subsoil. F[166]
(106)	Deposit	Moderately compacted, dark greyish brown silty clay	0.23m	Fill of enclosure ditch [105] concentration of small stone towards the base
(107)	Deposit	Loose Mottled orange yellow sand silt.	0.4m	Deposit of root and animal disturbance- hand excavated sondage
[108]	Cut	Slot in Linear feature (enclosure ditch) aligned N-S towards the west site boundary. Shallow curving sides and concave base sloping towards the north. Filled by (109)	0.30m	Slot in enclosure ditch aligned N-S. Same at [105]. Cut into subsoil. F[166]
(109)	Deposit	Loose, dark greyish brown silty clay with inclusions of small sub angular stones	0.30m	Fill of enclosure ditch [108]. Fill contained animal bones from a large domesticated mammal. Cut by [110]

[110]	Cut	Slot in small shallow linear with gradually sloping sides and a concave base. Filled by (111)	0.13m	Slot in narrow linear on N-S alignment. Cut into (109). F[167]
(111)	Deposit	Moderately compact dark greyish brown silty clay with small sub angular stone inclusions	0.13m	Fill of linear [110]. Fill contained animal bones from a large domesticated mammal.
[112]	Cut	Cut of sub oval burnt pit with moderately curving sides and an irregular base. Filled by (113). Cut into natural	0.21m	Large ovular pit towards south of the site, close to the top of the hill and east of enclosure ditch. No finds or dating evidence, one of a number of pit with evidence of burning-irregular shape could indicate that it is the result of root burn or a burnt which was disturbed by rooting in antiquity
(113)	Deposit	Very loose, dark brown grey clay sand with frequent charcoal inclusions and sub angular burnt stones- some fire cracked.	0.21m	Fill of oval pit [112]. Contained burnt organics
[114]	Cut	Sub-circular gradual sloped flat based pit. Cut into natural	0.14m	Cut for burnt pit feature, possible a tree throw
(115)	Fill	Loose Dark Greyish brown silty-sand with gravel and sandstone inclusions	0.14m	Fill of oval pit [114]. Contained burnt organics
[116]	Cut	Cut of irregular pit with evidence for burning. Heavily disturbed through rooting	0.12m	Cut for burnt pit feature, possible a tree throw
(117)	Fill	Moderately Compacted, Dark brownish grey, clayey silt with frequent charcoal inclusions and burnt/cracked cobbles.	0.12m	Fill of oval pit [116]. Contained burnt organics
[118]	Cut	Sub-oval gradual vertical sided flat based pit.	0.15m	Cut containing animal burial, modern
(119)	Fill	Loose mid greyish brown sandy clay	0.15m	Fill of [118] contained modern animal burial
[120]	Cut	Sub-rectangular pit, with roughly vertical sides and with sloping base, with the slope facing northwards	0.32	Cut for modern pit
(121)	Fill	Moderately compacted dark greyish brown silty clay containing coal	0.32m	Fill containing post-med/modern disturbance

[122]	Cut	Sub oval irregularly sloped sided pit with a concave base	0.14m	Cut for burnt pit feature, possible a tree throw
(123)	Fill	Moderately Compacted dark grey brown grey silty clay with occasional small sub-angular stones	0.14	Fill of oval pit [120]. Contained burnt organics
[124]	Cut	Irregular sub rectangular pit with near vertical sides and a roughly flat base	0.16m	Cut containing animal burial, modern
(125)	Fill	Loose mid brown grey silty sand with occasional sub angular stones	0.16m	Fill of [124] contained modern animal burial
[126]	Cut	Terminal of linear feature with curving sides and irregular base	0.17m	Terminal of enclosure ditch F[166]
(127)	Fill	Moderately compacted mid yellow brown fine sandy clay with very occasional pebble inclusions and flecks of charcoal	0.17m	Fill of ditch terminus [126]
[128]	Cut	Terminal of linear feature with curving sides truncated by sondage	0.13m	Terminal of enclosure ditch. F[167]
(129)	Fill	Moderately compacted mid greyish brown silty clay	0.13m	Fill of ditch terminus [128]
[130]	Cut	Slot through NW-SE orientated linear	0.13m	Cut of enclosure ditch. F[167]
(131)	Fill	Moderately compacted mid grey brown silty clay	0.13m	Fill of ditch slot [130]
[132]	Cut	Slot through N-S linear with sloping sides and concave base	0.23m	Cut of linear, probably hedge row F[169]
(133)	Fill	Moderately compact dark brown grey silty clay with small sub rounded stones.	0.23m	Fill of possible hedgerow [132]
[134]	Cut	Slot through N-S orientated linear with irregular shallow sides and base, heavily root disturbed	0.22m	Cut of linear, probably hedge row F[169]
(135)	Fill	Mid greyish brown fine sandy silt mixed and changeable in compaction with frequent inclusions of cobbles and pebbles	0.22m	Fill of possible hedgerow [134]
[136]	Cut	Slot through N-S orientated linear with irregular shallow sides and base, heavily root disturbed	0.46m	Cut of linear, probably hedge row F[169]
(137)	Fill	Mid greyish brown fine sandy silt mixed and changeable in compaction with frequent inclusions of cobbles and pebbles	0.46m	Fill of possible hedgerow [134]

[138]	Cut	Slot through NW-SE orientated linear with gentle curving sides and a concave base	0.47m	Cut of enclosure ditch. F[166]
(139)	Fill	Moderately compact mid greyish brown silty clay with occasional small sub angular stones	0.47m	Fill of enclosure ditch. F[166]
[140]	Cut	Slot through narrow NW-SE orientated linear with gentle curving sides and a concave base	0.18m	Cut of enclosure ditch. F[167]
(141)	Fill	Moderately compact mid greyish brown silty clay with occasional	0.18m	Fill of enclosure ditch. F[167]
[142]	Cut	Slot through narrow enclosure ditch with curving sides and concave base	0.22m	Cut of enclosure ditch. F[167]
(143)	Fill	Moderately compact dark yellowish grey silty clay with lenses of clay natural and occasional pebbles	0.22m	Fill of enclosure ditch F [167]
[144]	Cut	Slot through enclosure ditch with sloping sides and concave base	0.56m	Cut of enclosure ditch F[166]
(145)	Fill	Moderately compact mid greyish brown silty clay with small to large sub angular stones and charcoal flecks.	0.56m	Fill of enclosure ditch.
[146]	Cut	Cut of sub linear ditch terminal with shallow concave sides and an undulating concave base	0.19m	Cut of terminal end of enclosure ditch F[166]
(147)	Fill	Moderately compact, dark greyish brown fine silty clay with very occasional pebbles and flecks of charcoal	0.19m	Fill of enclosure ditch terminal
[148]	Cut	Cut of sub linear ditch terminal of a roughly E-W orientated ditch with irregular sides and an undulating concave base	0.17m	Cut of terminal end of enclosure ditch F[168]
(149)	Fill	Moderately compacted mid greyish brown fine silty sandy clay with occasional small pebbles and frequent flecks of charcoal shell and bone	0.17m	Fill of enclosure ditch terminal
[150]	Cut	Slot through sub linear enclosure ditch with stepped sides and an irregular 'U' shaped base	0.68m	Cut of enclosure ditch F[168]

(151)	Fill	Very compacted mid yellowish brown fine sandy clay with frequent pebble inclusions	0.24m	Primary Fill of enclosure ditch [150]
(152)	Fill	Moderately compacted dark orangey brown sandy silt with occasional small pebbles inclusions and very occasional flecks of charcoal.	0.5m	Secondary fill of enclosure ditch [150]
[153]	Cut	Slot through linear enclosure ditch with stepped sides and a roughly flat base	0.23m	Cut of shallow enclosure ditch
(154)	Fill	Moderately compact mid dark orange yellowish brown silty clay with occasional pebbles and flecks of charcoal	0.23m	Fill of [153]
[155]	Cut	Slot through linear enclosure ditch with concave sides and a roughly rounded 'U' shaped base	0.26m	Cut of shallow enclosure ditch
(156)	Fill	Moderately compacted dark yellowish brown silty clay with occasional pebbles and very occasional flecks of charcoal	0.26m	Fill of [155]
[157]	Cut	Sub Circular Pit with irregular edges through severe root damage	0.78m	Cut of pit, with two fills containing animal bone and medieval ceramic
(158)	Fill	Moderately compact mid greyish brown silty sand with occasional medium sized stone inclusions	0.38m	Upper fill of pit [157] containing medieval ceramic and bone
[159]	Cut	Sub Circular Pit with irregular edges through severe root damage	0.58m	Cut of pit containing animal bone
(160)	Fill	Moderately compact mid greyish brown sandy silt with occasional small stone inclusions	0.58m	Fill of pit containing animal bone
[161]	Cut	Cut for terminal end of linear enclosure ditch with gradually sloping sides and concave base	0.1m	Terminal end of enclosure ditch F[167]
(162)	Fill	Moderately compacted mid greyish brown silty clay with occasional small sub angular stones	0.1m	Fill of [161]
[163]	Cut	Cut of unexcavated pit	-	-
(164)	Fill	Mid greyish brown fill of unexcavated pit	-	Fill of [163]
(165)	Fill	Firm mid greyish brown stoney silty sand.	0.38m	Primary fill of pit [157]

[166]	Feature number	Feature number for earlier curvilinear enclosure ditch towards the North- West of site	-	-
[167]	Feature number	Feature number for later curvilinear enclosure ditch towards the North- West of site	-	-
[168]	Feature number	Feature Number for enclosure ditch running roughly East- West to the east of site	-	-
[169]	Feature number	Feature Number for enclosure ditch/hedge row running roughly North-South	-	-

APPENDIX 2: PLATES



Plate 1; North-east facing section of cuts [138] and [140] of ditches [166] and [167], facing south-west, 1x1m scale.



Plate 2; East facing section of cut [161] of ditch [167], facing west, 1x0.3m scale.



Plate 3; Boundary ditch [168], showing terminus [148], facing east, 2x1m scales.



Plate 4; Ditch [168] showing the east-facing sections of cut [150] and re-cuts [153] and [155], facing east-northeast, 1x1m scale.



Plate 5; East and south-facing sections of pits [157] and [159], facing north-west, 2x1m scales.



Plate 6; North-west facing section of pit [103], facing south-east, 1x0.50m scale.

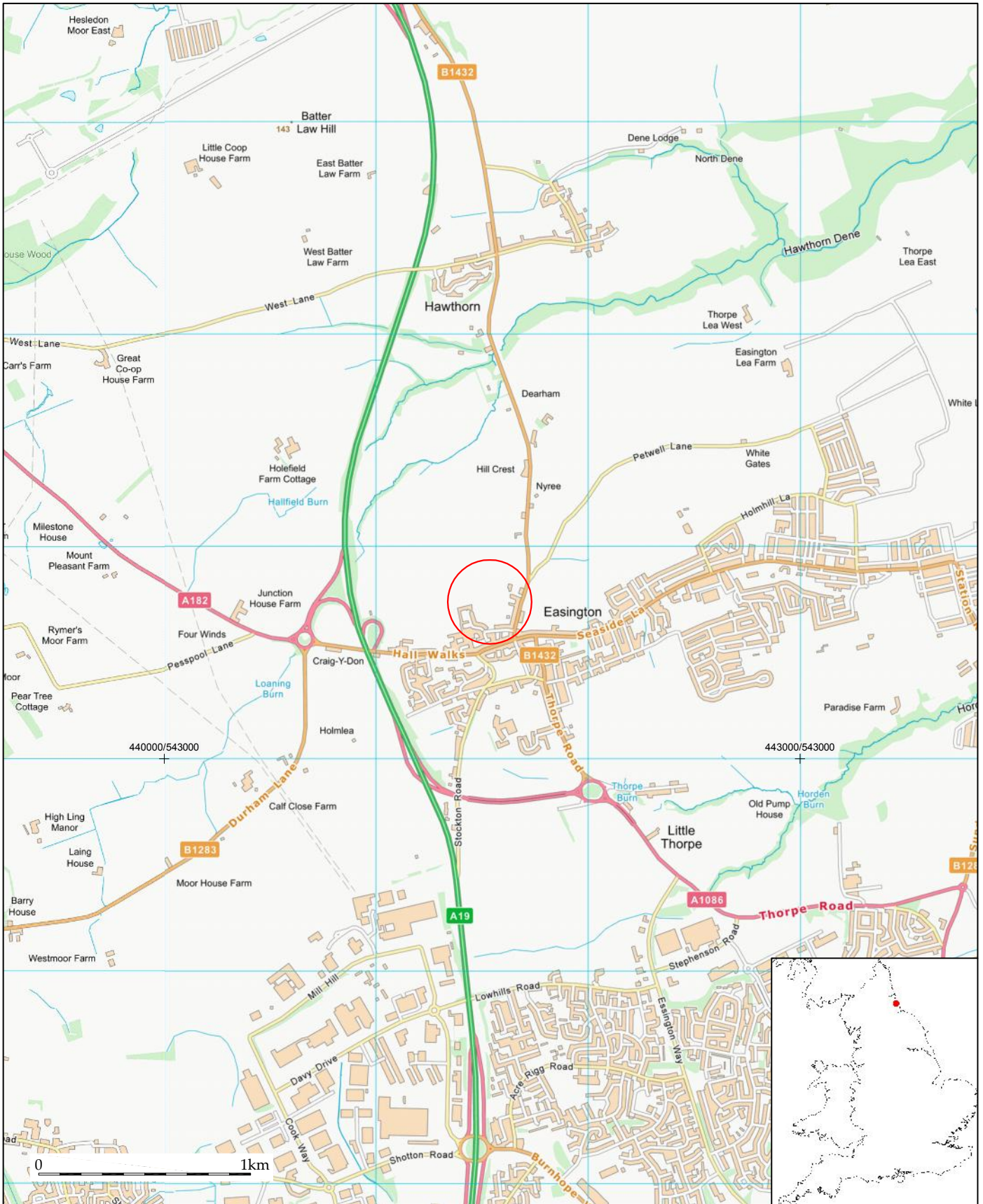


Plate 7; North-northwest facing section of pit [112], facing south-southeast, 1x1m scale.



Plate 8; North-northwest facing section of cut [136], part of ditch [169], facing south-southeast, 1x1m scale.

APPENDIX 3: FIGURES






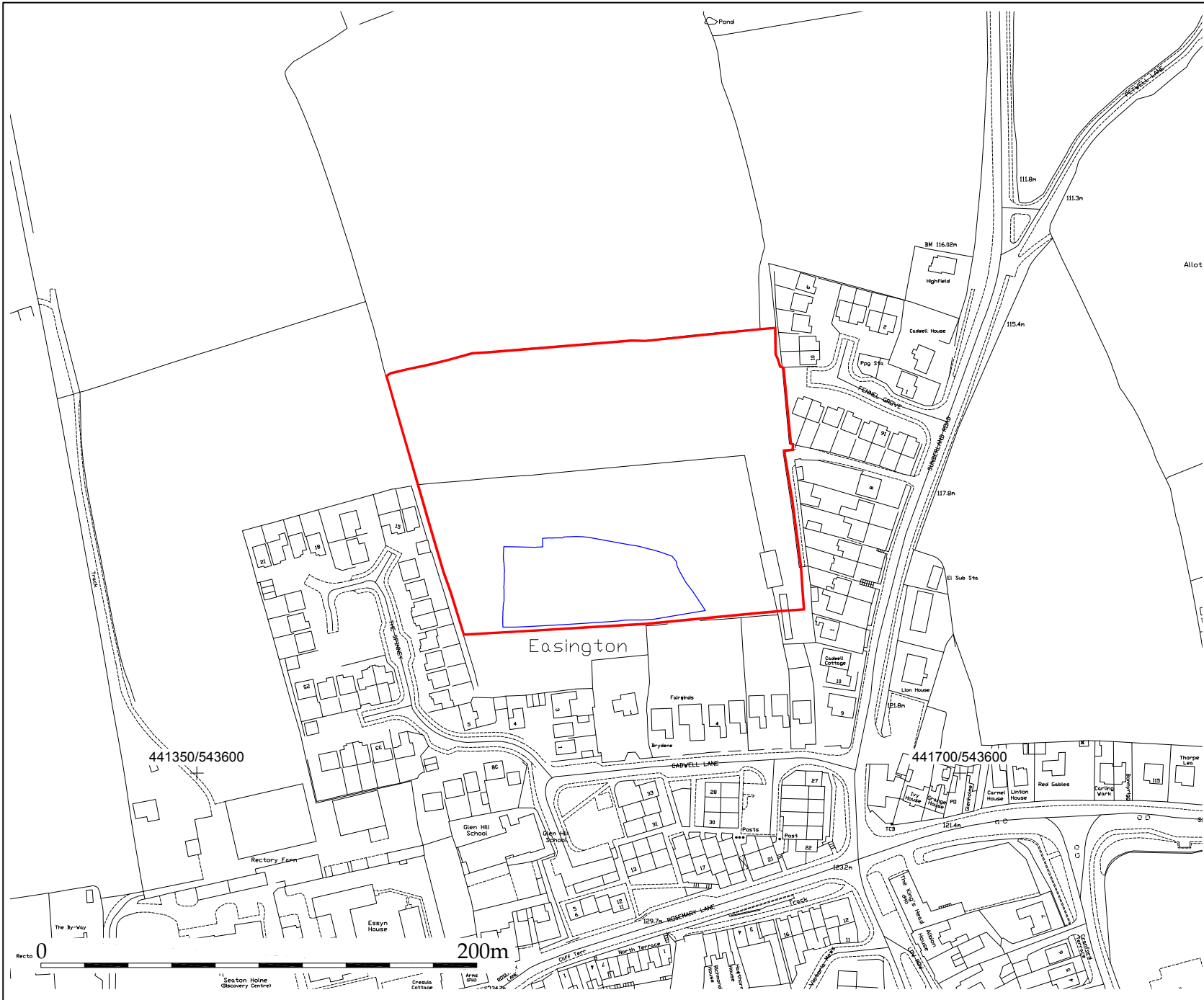
 <p>Wardell Armstrong 2018</p>	<p>PROJECT: Land at Fennel Grove, Easington, County Durham</p> <p>CLIENT: Persimmon Homes Durham</p> <p>SCALE: 1:25,000 at A4</p> <p>DRAWN BY: HP</p> <p>CHECKED BY: MDR</p> <p>DATE: January 2018</p> <p>REPORT No: LE13753</p>	<p>KEY:</p>  site location	 <p>Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number 100058076.</p>
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Figure 1: Site location



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DATE: January 2018

- KEY:
-  Site boundary
 -  Open area excavation



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Figure 2: Location of archaeological excavation.

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DATE: January 2018

KEY:

- (101) Context number
- Section location
- Limit of excavation
- Excavated slot
- Previous evaluation trenches



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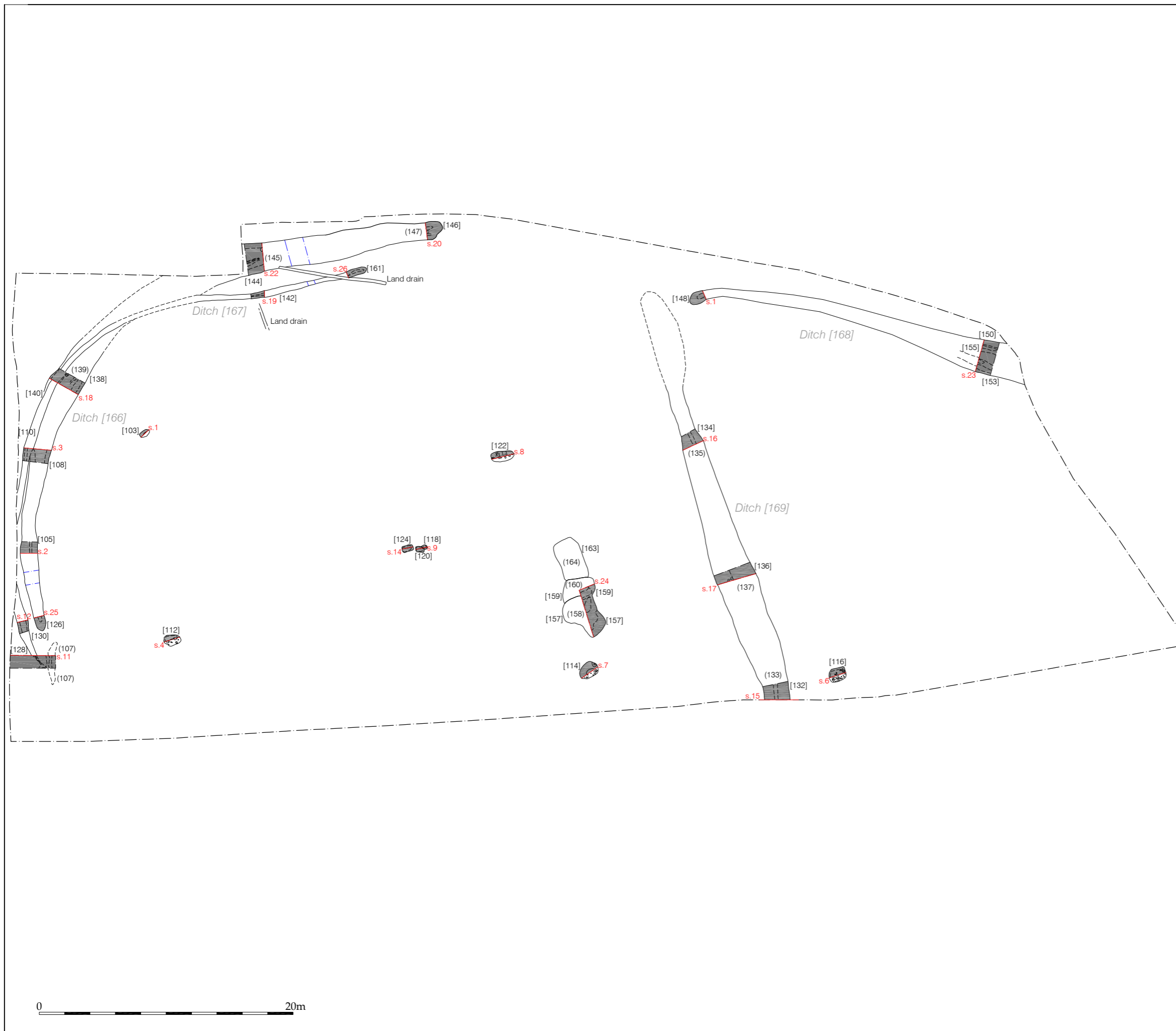


Figure 3: Plan of archaeological features.



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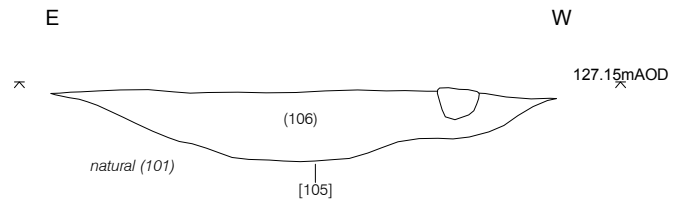
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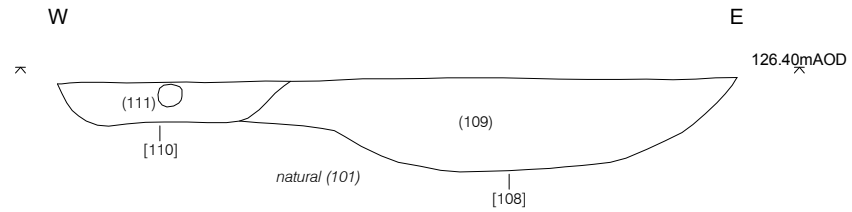
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- (101) Context number
- Height mAOd
- Limit of excavation

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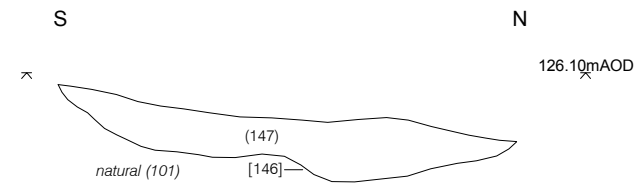
Section 2. North facing section across Ditch [105].



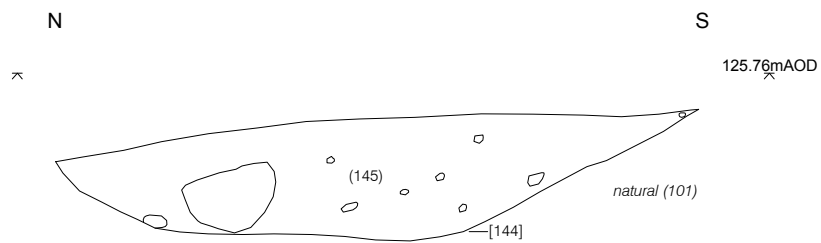
Section 3. South facing section across Ditches [108] and [110].



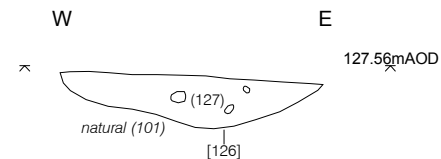
Section 18. North-east facing section across Ditches [138] and [140].



Section 20. East facing section across Ditch [146].



Section 22. West facing section across Ditch [144].



Section 25. South facing section across Ditch [126].



Figure 4: Sections of curvilinear ditch [166].



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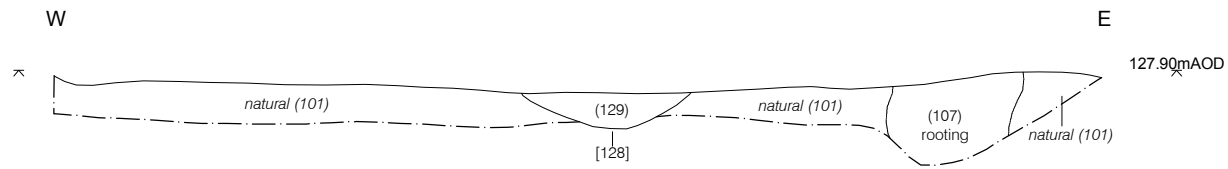
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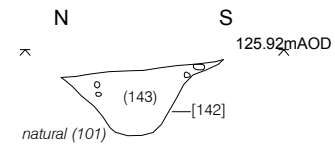
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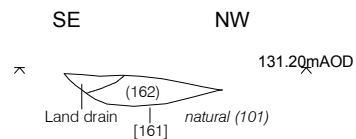
Section 11. South facing section across Linear [128] and (107).



Section 12. South-east facing section across Ditch [130].



Section 19. West facing section across Ditch [142].



Section 26. North-east facing section across Ditch [161].



Figure 5: Sections of curvilinear ditch [167].

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
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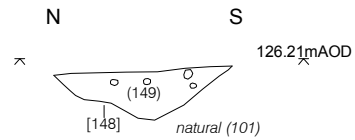
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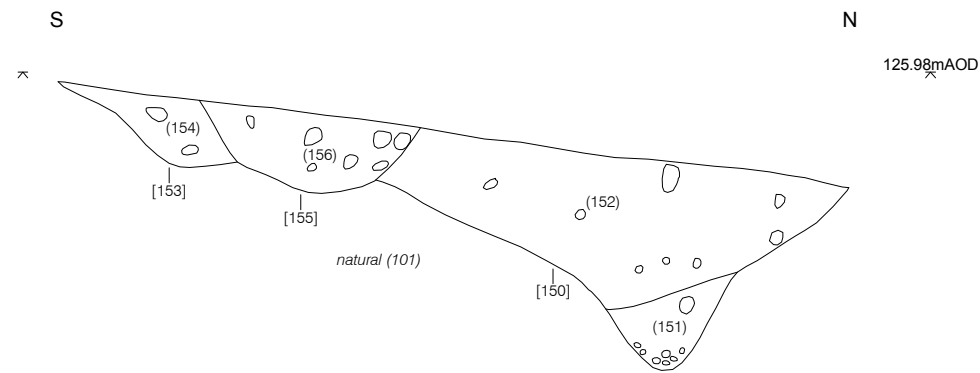
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Section 21. West facing section
across Ditch [148].



Section 23. East facing section across Ditches [150], [153] and [155].



Figure 6: Sections of ditch [168].

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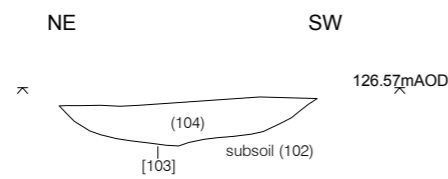
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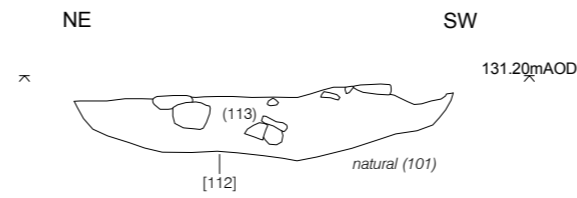
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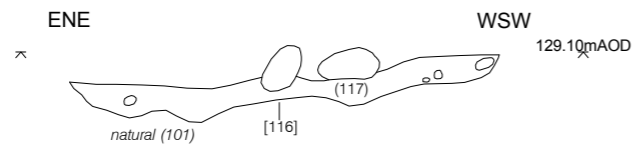
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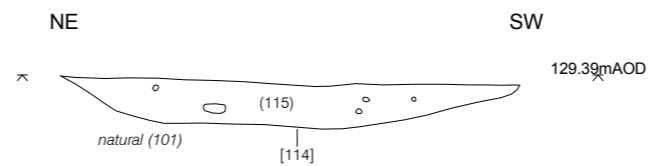
Section 1. North-west facing section across Pit [103].



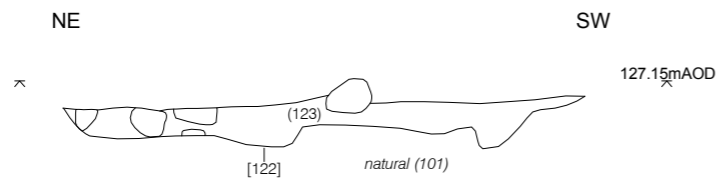
Section 4. North-west facing section across Pit [112].



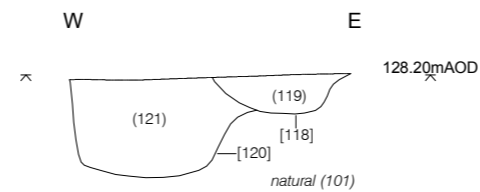
Section 6. NNW facing section across Pit [116].



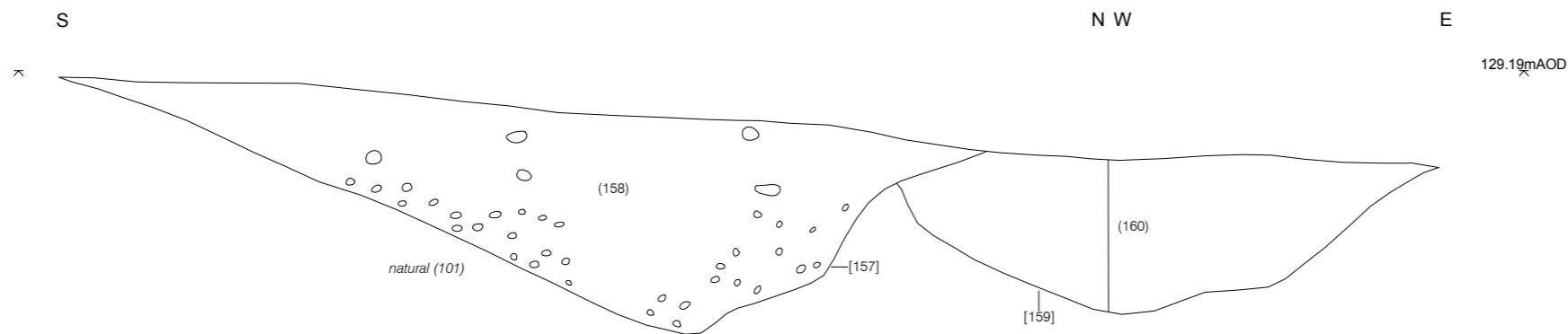
Section 7. North-west facing section across Pit [114].



Section 8. North-west facing section across Pit [122].



Section 9. South facing profile of features [118] and [120].



Section 24. East and south facing section across Pits [157] and [159].



Figure 7: Sections of pits.



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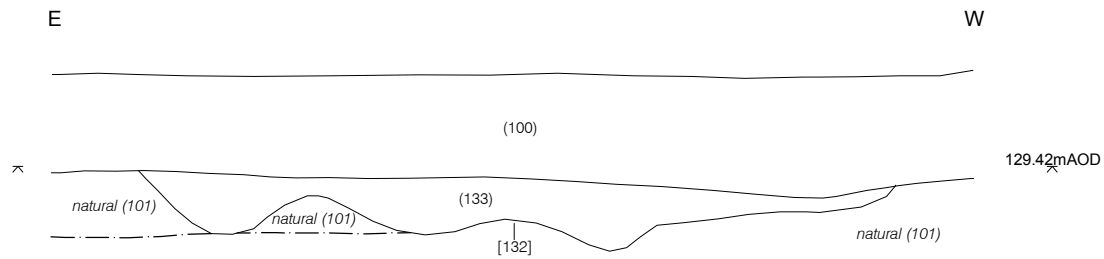
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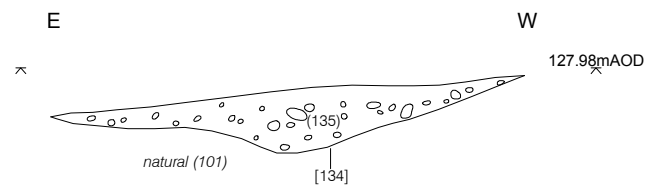
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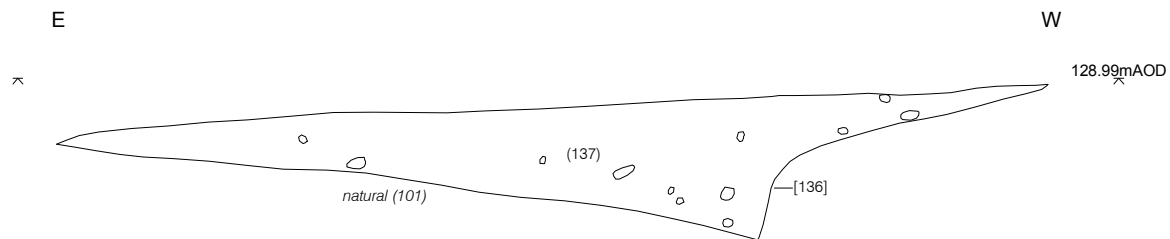
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Section 15. North facing section across feature [132].



Section 16. North facing section across Ditch [134].



Section 17. North facing section across hedgerow [136].



Figure 8: Sections of linear ditch [169].

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STOKE-ON-TRENT
Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)178 227 6700

BIRMINGHAM
Two Devon Way
Longbridge Technology Park
Longbridge
Birmingham
B31 2TS
Tel: +44 (0)121 580 0909

CARDIFF
22 Windsor Place
Cardiff
CF10 3BY
Tel: +44 (0)292 072 9191

CROYDON
Suite 8 Suffolk House
College Road
Croydon
Surrey
CR0 1PE
Tel: +44 (0)208 680 7600

EDINBURGH
Suite 3/1 Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GREATER MANCHESTER
2 The Avenue
Leigh
Greater Manchester
WN7 1ES
Tel: +44 (0)194 226 0101

LONDON
Third Floor
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)207 242 3243

NEWCASTLE UPON TYNE
City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP
Tel: +44 (0)191 232 0943

SHEFFIELD
Unit 5 Newton Business Centre
Newton Chambers Road
Thornccliffe Park Chapeltown
Sheffield
S35 2PH
Tel: +44 (0)114 245 6244

TAUNTON
Suite E1 Victoria House
Victoria Street
Taunton
Somerset
TA1 3JA
Tel: +44 (0)182 370 3100

TRURO
Baldhu House
Wheal Jane Earth Science Park
Baldhu
Truro
TR3 6EH
Tel: +44 (0)187 256 0738

International offices:

ALMATY
29/6 Satpaev Avenue
Hyatt Regency Hotel Office
Tower, 7th Floor Almaty
Kazakhstan
050040
Tel : +7(727) 334 1310

MOSCOW
Office 4014
Entrance 2
21/5 Kuznetskiy Most St.
Moscow
Russia
Tel: (495)626-07-67

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Archaeology:**

CUMBRIA
Cocklakes Yard
Carlisle
Cumbria
CA4 0BQ
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