

LAND AT SALTAUGH, KEYINGHAM, EAST YORKSHIRE

Report on an Archaeological Evaluation

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1.0 Introduction

SLR Consulting Ltd (SLR) was commissioned by Qila Energy to carry out an archaeological evaluation at their proposed development site ('the Site') on land adjacent to Mill Nurseries, Saltaugh, in the East Riding of Yorkshire (Figure 1). It is proposed to erect an agricultural anaerobic digestion facility at the Site. The planning Application Reference No. is 17/00867/CM; planning decision pending.

A Historic Environment Desk Based Assessment¹ prepared by RPS in February 2017 was provided in support of the planning application.

James Goodyear Development Management Archaeologist at East Riding of Yorkshire Council (DMAERYC) highlighted the archaeological potential of the site and stated there was a requirement for archaeological works to inform a planning decision. A geophysical survey was previously carried out which identified a number of anomalies, some of which may relate to nearby prehistoric/Roman activity recorded on the Humber Historic Environment Record. The work was carried out between 21st and 25th August 2017 as described in the Written Scheme of Investigation (WSI) previously produced by SLR Consulting².

The arrangements for fieldwork, post-fieldwork assessment, reporting and archiving, archive deposition and report dissemination are included in this document.

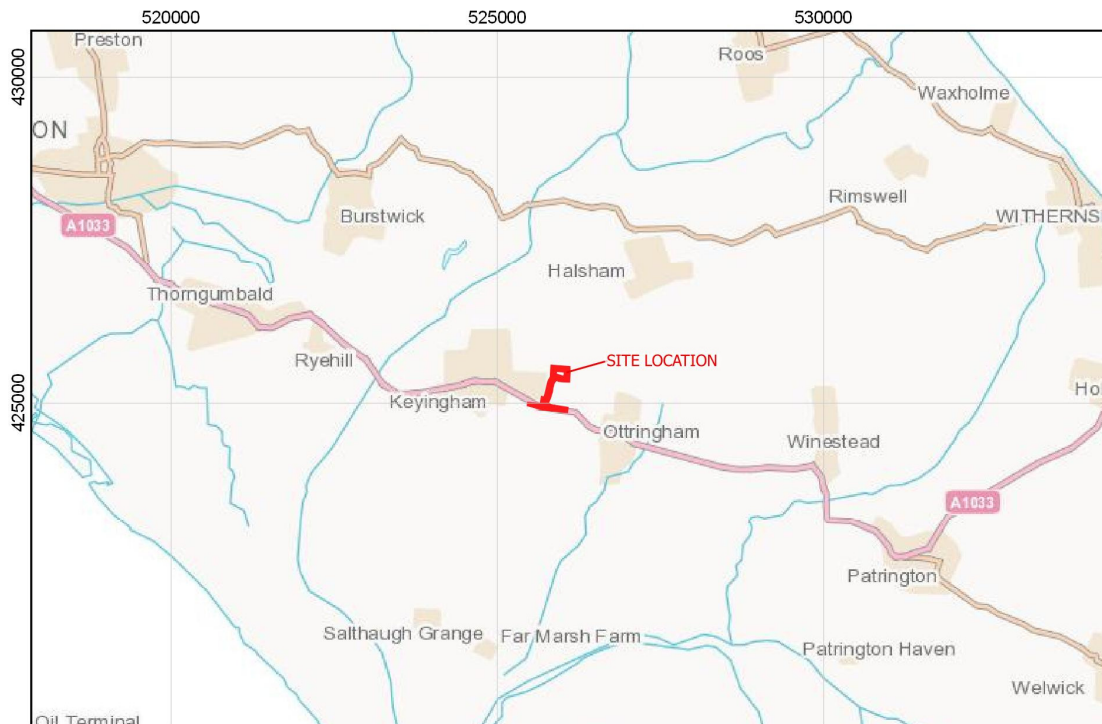
¹ RPS February 2017. Desk Based Historic Assessment in Connection with the proposed development of an agricultural anaerobic digestion facility at Saltaugh, East Riding of Yorkshire.

² SLR Consulting 2017 Land at Saltaugh, Keyingham, East Yorkshire; *Written Scheme of Investigation for Archaeological Field Investigation*

2.0 The Site

The Site is located within a single field to the east of the village of Keyingham (Figure 1), 16km east of Kingston upon Hull, East Yorkshire (centred at TA 2593 2551). It comprises a rectangular block of land with a narrow corridor extending southwards to provide access from the A1033. The Site is currently used for arable agriculture. It is relatively flat at between 5m and 8m AOD.

Figure 1
Site Location



OpenData Mapping: Contains Ordnance Survey data © Crown copyright and database right 2017

2.1 Geology

The underlying bedrock geology comprises Flamborough Chalk which is overlain by Devensian Till³.

³ <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

3.0 Archaeological and Historic Background

A historic environment desk based assessment (HEDBA) was undertaken in support of the planning application, including map regression and examination of records held by the Humber Historic Environment Record. The HEDBA concluded that:

There is evidence for prehistoric and/ or Roman settlement and/ or agricultural activity adjacent to or within the proposal site itself, in the form of cropmarks representing a linear feature, perhaps a field boundary or trackway, with rectilinear enclosures relatively close by.

The HEDBA suggests the site has remained undeveloped since at least the time of the Keyingham Enclosure Map of 1802, and likely much earlier.

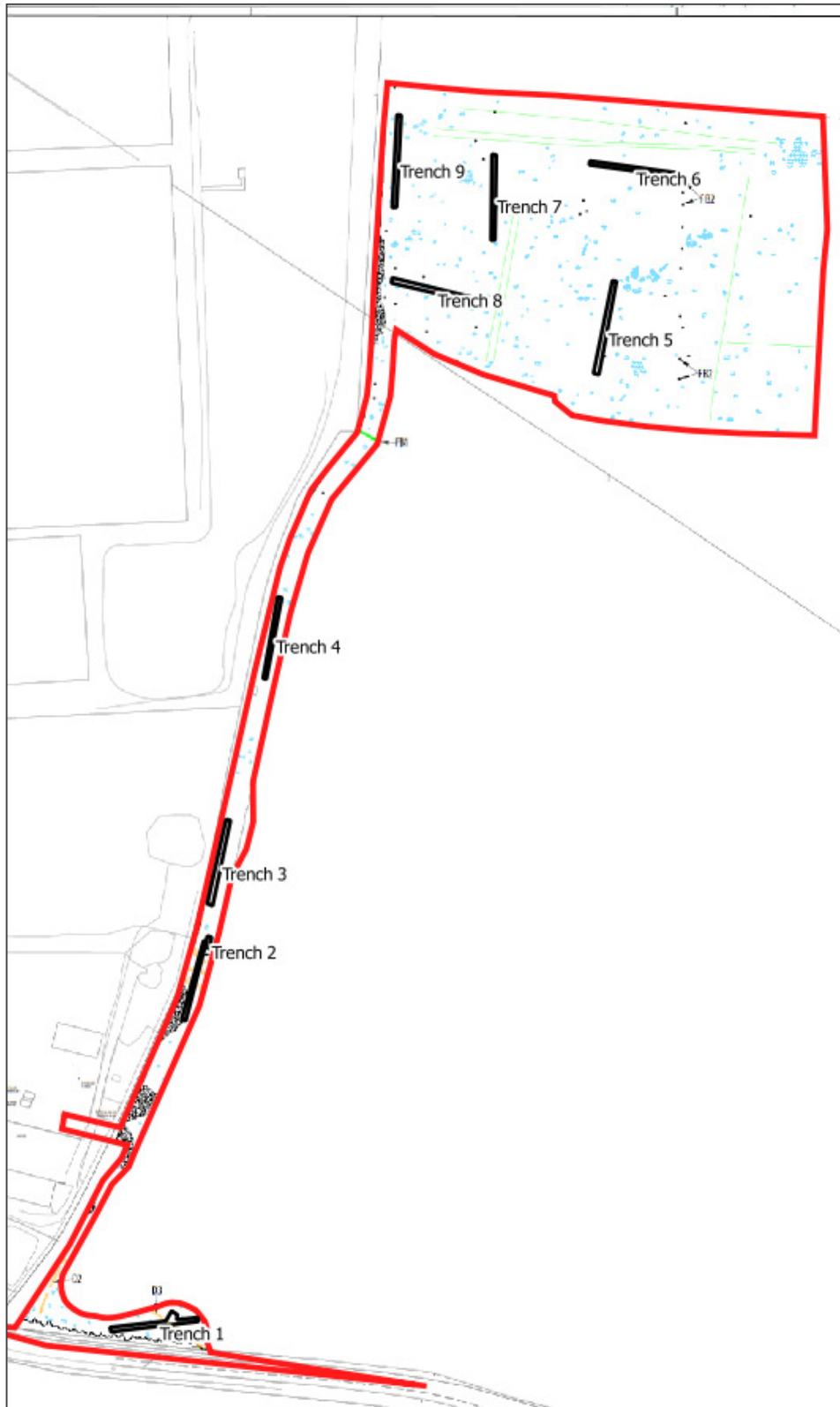
There is evidence of ploughing from the early 19th century onwards.

3.1 Geophysical Survey

The geophysical survey which was carried out by Headland Archaeology in July 2017⁴ identified three possible ditches along the proposed access corridor at the southwest of the site (Figure 2). Due to this part of the site being so narrow it is difficult to interpret what these ditches represent. It was thought they may relate to the nearby prehistoric/Roman activity recorded on the Humber HER.

⁴ Headland Archaeology 2017 Land East of Keyingham, East Yorkshire; Geophysical Survey

Figure 2
Geophysical survey results showing trenches



4.0 Aims and Objectives

The trial trenching was targeted to investigate geophysical anomalies with trenches spread across the site to allow sufficient information to be available for planning consent and to inform any subsequent mitigation scheme required.

The aims set out in the WSI for this work were:

- to assess the heritage significance of any potential archaeological features and deposits within affected areas of the Site;
- to assess the significance of the impact which the proposed development would have on them;
- to provide sufficient information to identify what mitigation might be required, if any; and
- to provide the client with information for budgetary and programming purposes.

The evaluation sought to address the following objectives:

- to establish the extent, nature and condition of potential archaeological features within the trenches;
- to estimate the extent, nature and condition of any colluvium within the affected areas of the Site; and
- to identify any areas likely to be devoid of archaeological features and deposits.

5.0 Methodology

It was proposed to undertake the excavation of nine trenches, each 40m long x 1.8m wide, to evaluate the site (Drawing 1). This represented an approximately 2% sample of the available area. Some trenches were located based on the results of the geophysical survey while others were designed to sample the remainder of the site. All works were carried out as outlined in the WSI for this work⁵.

5.1 Monitoring

All archaeological work was monitored by the DMAERYC via telephone / email conversations with SLR.

5.2 Destination Museum

This report will be uploaded to the OASIS website.

5.3 Reporting

Approved versions of this report will be circulated to:

- The Client;
- The NSDCAA;
- The Local Planning Authority
- SLR Consulting Limited.

⁵ SLR Consulting 2017 Land at Saltaugh, Keyingham, East Yorkshire; *Written Scheme of Investigation for Archaeological Field Investigation*

6.0 Results

Nine trenches were spread across a single field (Drawing 1).

6.1 Trench 1

Trench 1 was the most southerly trench excavated at the site and was orientated roughly ENE - WSW (Drawing 1, Figure 3). The natural subsoil in the area was a brown yellow silt clay with chalk inclusions (102) which was overlain by light brown grey silt subsoil (101) up to 0.35m thick. This was covered by between 0.3m and 0.4m of dark brown silt clay topsoil (100). The natural subsoil was recorded at between 5.16m and 5.55m AOD across the trench.

Figure 3
Trench 1 looking WSW



Trench 1 had targeted a linear anomaly recorded by the geophysical survey at the east of the trench (Figure 2) which it was thought could have been related to nearby Prehistoric/Roman features recorded on the Humber HER. This ditch was recorded during the excavation of the trench. An extra area was excavated on the northern side of the trench to reveal its full width (Drawing 2).

Figure 4
Trench 1 section of ditch [103] looking south west



The ditch was over 5.5m long continuing on beyond the limits of the trench. It was 1.9m wide and approximately 0.97m deep. Within the ditch primary fill (104), a light grey brown silt clay may have been derivative of the overlying subsoil and have represented the slumping in of a bank on the northern side of the ditch (Figure 4). Fills (105) and (106) may represent the ditch then silting up. Subsoil (101) also filled the top of the ditch.

A small assemblage of animal bone was recovered fill (105). It comprised 13 pieces of which two have been identified as horse, four cattle and a further seven from unidentified large mammals (Bates, Appendix 3). Knife marks from the filleting of animals were observed on both of the horse bones. Bates suggests the meat may have been for animal rather than human consumption. Dog gnawing marks were recorded on a cattle radius.

No other features of archaeological significance were identified within the trench.

6.2 Trenches 2 to 4

Trenches 2, 3 and 4 were located within area designated for the access road at the south west of the site. All of the trenches were orientated roughly NNE – SSW (Drawing 1, Figures 4, 5 and 6). Trench 2 was targeted on a linear feature orientated roughly north west – south east (Figure 2). In each trench the natural subsoil was a brown yellow silt clay (102, 202, 302) which was recorded between 6.28m (Trench 2) and 7.48m (Trench 4) AOD. It contained frequent chalk pieces in Trench 4. In each trench the natural subsoil was overlain by a further subsoil comprising light brown grey silt up to 0.3m thick (201, 301, 401). This was in turn covered by between 0.3m and 0.4m of dark brown silt clay topsoil (200, 300, 400). A single modern gully was recorded approximately 6.5m from the southern end of Trench 2. The gully contained a modern ceramic drain pipe. No features of archaeological significance were identified in any of these trenches.

Figure 5
Trench 2 looking NNE



Figure 6
Trench 3 looking NNE



Figure 7
Trench 4 looking SSW



6.3 Trench 6

Trench 6 was the most north easterly trench at the site. It was orientated roughly ESE –WNW (Drawing 1, Figure 8). The natural subsoil was a brown yellow silt clay (601), which was observed at between 7.25m and 7.34m AOD. This was covered by up to below up to 0.4m of dark brown silt clay topsoil (600).

Figure 8
Trench 6 looking ESE



Ditch [603] was identified towards the east of the trench orientated roughly north – south (Drawing 2). It was 2.45m wide, 0.56m deep and had gradual sloping sides and flat base. It was filled by light grey brown clay silt (603). No dating material was recovered from the fill during its excavation. The ditch may represent an open drain or field boundary although is not shown on any available mapping.

Figure 9
Trench 6 section of ditch [602] looking north



6.4 Trench 8

Trench 8 was located approximately 85m south west of trench 6, approximately 160m north of Trench 4. It was orientated roughly WNW –ESE (Drawing 1, Figure 10). Natural subsoil (801), a brown yellow silt clay was observed at between 6.89m and 7.49m AOD. It was covered by up to 0.4m of dark brown silt clay topsoil (800).

Figure 10
Trench 8 looking WNW



A single linear feature was identified within the trench. It was orientated roughly north west – south east and was up to 1.9m wide and 0.4m deep (Drawing 2). It had stepped sides and a rounded base.

Figure 11
Trench 8 section of ditch/gully [802] looking north west



6.5 Trenches 5, 7 and 9

The remaining trenches were all located in the main area at the north of the site (Drawing 1, Figures 12-14). Trench 9 was the most north westerly trench excavated with Trench 7 approximately 40m to the east and Trench 5 approximately 70m south east of that. Trench 7 and 9 were orientated roughly north – south while Trench 5 was orientated roughly NNW – SSE. In each of these trenches the natural subsoil was a brown yellow silt clay ((501), (701), (901)). The elevation of this deposit varied across the trenches between 6.38m (Trench 9) to 8.18m AOD (Trench 5). In each trench the natural subsoil was covered by between 0.3m and 0.4m of dark brown silt clay topsoil ((500), (700), (900)). No features of archaeological significance were identified in any of the trenches.

Figure 12
Trench 5 looking south west



Figure 13
Trench 7 looking north



Figure 14
Trench 9 looking south



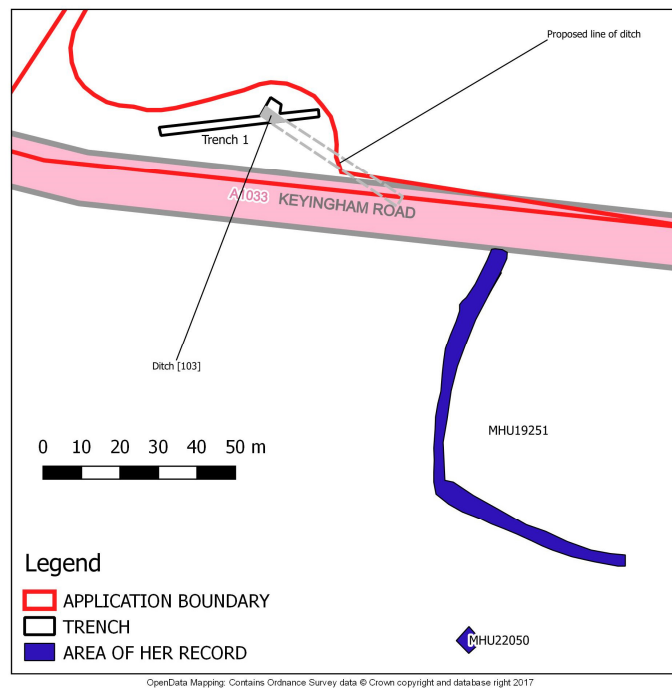
7.0 Discussion and Conclusion

7.1 Discussion

Nine trenches were excavated at the site at Saltaugh, Keyingham, two of which (Trenches 1 and 2) were targeted on geophysical anomalies (Drawing 1, Figure 2).

A large ditch suggested by geophysical survey was identified in Trench 1. Two sherds of undated pottery, interpreted as small sherds of late prehistoric, were recovered during the excavation of a section through this ditch as well as a small quantity of animal bone. The ditch may be related to two Iron Age/Roman enclosures (MHU22050 and MHU19251) recorded on the Humber HER approximately 65m to the south east. The ditch appears to run in the direction of the more northerly enclosure MHU19251 (Figure 15).

Figure 15
Trench 1 relating to HER records



There was no indication in Trench 2 of what may have caused the anomaly flagged up by the geophysical survey.

No dating material was recovered from ditch [602]. It may be a field boundary but it is not visible on any available mapping dating from the 19th century to present. The ditch runs parallel to a field boundary shown on mapping from the mid 19th century to the 1950's, approximately 20m to the east. The fields suffer a great deal from standing water and this ditch may represent an open drain within the former field system.

Ditch [802] contained sherds of post medieval pottery. Its purpose is unclear. It may also relate to drainage. It runs in the direction of Humber HER record MHU19249 approximately 32m to the south which is recorded as a linear crop mark which may be a road. It is not clear in which direction this linear/road might run.

7.2 Conclusion

A ditch suggested by geophysical survey was identified in Trench 1 and has been dated to the later prehistoric period, possibly Iron Age. It may be related to features thought to be of a similar date recorded on the Humber HER to the south east. Two further ditches were also recorded. Both are presumed to date to the post medieval period.

APPENDIX 01

Context Register

Context No	Type	Fill of	Length (m)	Width (m)	Depth (m)	Description	Interpretation
100	Deposit	N/A	Trench	Trench	0.3-0.4	Dark brown silt clay	Topsoil
101	Deposit	N/A	Trench	Trench	0.35	Light brown grey silt	Subsoil
102	Deposit	N/A	Trench	Trench	N/A	Brown yellow silt clay with chalk inclusions	Natural Subsoil
103	Cut	N/A	5.5+	1.9	0.97	Cut of linear ditch, steep sloping sides, rounded base	Cut of ditch
104	Fill	103	5.5+	1.1	0.7	Light grey brown silt clay	Primary fill of ditch
105	Fill	103	5.5+	1.35	0.57	Brown grey clay silt	Secondary fill of ditch
106	Fill	103	5.5+	0.63	0.22	Light grey silt clay	Tertiary fill of ditch
200	Deposit	N/A	Trench	Trench	0.3-0.4	Dark brown silt clay	Topsoil
201	Deposit	N/A	Trench	Trench	0.3	Light brown grey silt	Subsoil
202	Deposit	N/A	Trench	Trench	N/A	Brown yellow silt clay	Natural Subsoil
203	Cut	N/A	1.8m+	0.7	0.3	Cut of modern drain containing pipe	Cut of modern drain containing pipe
204	Fill	203	1.8m+	0.7	0.3	Fill of modern drain containing pipe	Fill of modern drain containing pipe
300	Deposit	N/A	Trench	Trench	0.3-0.4	Dark brown silt clay	Topsoil
301	Deposit	N/A	Trench	Trench	0.3	Light brown grey silt	Subsoil
302	Deposit	N/A	Trench	Trench	N/A	Brown yellow silt clay	Natural Subsoil
400	Deposit	N/A	Trench	Trench	0.3-0.4	Dark brown silt clay	Topsoil
401	Deposit	N/A	Trench	Trench	0.3	Light brown grey silt	Subsoil
402	Deposit	N/A	Trench	Trench	N/A	Brown yellow silt clay	Natural Subsoil
500	Deposit	N/A	Trench	Trench	0.3-0.4	Dark brown silt clay	Topsoil
501	Deposit	N/A	Trench	Trench	N/A	Brown yellow silt clay	Natural Subsoil
600	Deposit	N/A	Trench	Trench	0.3-0.4	Dark brown silt clay	Topsoil
601	Deposit	N/A	Trench	Trench	N/A	Brown yellow silt clay	Natural Subsoil
602	Cut	N/A	1.8m+	2.45	0.56	Cut of linear ditch, gradual sloping sides, flat base	Cut of ditch
603	Fill	602	1.8m+	2.45	0.56	Light grey brown clay silt	Fill of ditch

Context No	Type	Fill of	Length (m)	Width (m)	Depth (m)	Description	Interpretation
700	Deposit	N/A	Trench	Trench	0.3-0.4	Dark brown silt clay	Topsoil
701	Deposit	N/A	Trench	Trench	N/A	Brown yellow silt clay	Natural Subsoil
800	Deposit	N/A	Trench	Trench	0.3-0.4	Dark brown silt clay	Topsoil
801	Deposit	N/A	Trench	Trench	N/A	Brown yellow silt clay	Natural Subsoil
802	Cut	N/A	1.8+	1.75	0.4	Linear ditch, stepped sides, rounded base	Cut of ditch
803	Fill	802	1.8+	1.75	0.4	Light grey brown clay silt	Fill of ditch
900	Deposit	N/A	Trench	Trench	0.3-0.4	Dark brown silt clay	Topsoil
901	Deposit	N/A	Trench	Trench	N/A	Brown yellow silt clay	Natural Subsoil

APPENDIX 02

Drawings

APPENDIX 03

Summary Animal Bone Assessment – Andrew Bates

Introduction and Methodology

A small assemblage of animal bone was recovered from secondary fill 105 of ditch 103. Identification was completed using reference material held by the author and reference to Halstead and Collins (1995). Age estimates of animals from skeletal remains were made with reference to Silver (1969).

Quantification and Condition

It total, 13 specimens in a good condition with limited erosion to the bone surface and varying degrees of fragmentation were recovered by the excavation. Table 1 provides the number of individual specimens (NISP) by species and element.

Table 1: NISP by Species and Element

Species	Element	NISP
Horse	Femur	1
Horse	Tibia	1
Cattle	Mandibular M1/2	1
Cattle	Axis	1
Cattle	Radius	2
Large Mammal	Rib fragment	1
Large Mammal	Unidentified	6

Knife marks from the filleting of animals were observed on both of the horse bones, the meat potentially for animal rather than human consumption. The proximal end of the horse tibia was unfused, suggesting an animal less than 3/3.5 years of age. Marks from gnawing by dogs were present on the cattle radius.

Potential

The material has limited to no potential for further analysis. A full record of the material should be retained with the site archive.

Bibliography

Halstead, P, and Collins, P, 1995 Sheffield animal bone tutorial: Taxonomic identification of the principle limb bones of common European farmyard animals and deer: a multimedia tutorial, Archaeology Consortium, TL TP, University of Glasgow

Silver, IA, 1969 The ageing of domestic animals, in DR Brothwell and ES Higgs Science in Archaeology, 283 – 302, London

Summary Pottery and flint Assessment – Andrew Burn

Introduction and Methodology

A small assemblage of pottery and flint was recovered from secondary fill 105 of ditch 103. Identification was completed using reference material held by the author and reference to Gibson (2002) and Andrefsky (1998).

Quantification and Condition of pottery

In total, 2 pieces of well-preserved sherds of pottery were identified with an additional 20 pieces of residual post medieval pottery also recovered with varying degrees of fragmentation. The two well preserved sherds were identified as fragments from an Iron Age vessel, the pottery quite crude with small shell inclusions. Given the small size of the fragments, it is not possible to conclusively say what kind of vessel that they came from, however, it is possible to say that they come from the same vessel, having an identifiable break that connects the (see Figure 1).

Figure 1 Prehistoric sherds 101 and 102



Table 1 provides the weights of the identified fragments of pottery. Table 2 outlines the weights of the residual PM pottery

Table 1: Weights and sizes of IA pottery

Sherd	Weight	Description
101	0.05g	Small sherd, 2cm x 1.6cm, shell inclusions, poorly fired
102	0.07g	Small sherd, 1.5cm x 1.2cm, shell inclusions, poorly fired

Table 2: Weights and sizes of Post medieval pottery

Sherd	Weight	Description
103	0.022g	Small sherd, CBM
104	0.021g	Small sherd, CBM
105	0.014g	Small sherd, CBM

106	0.013g	Small sherd, CBM
107	0.013g	Small sherd, CBM
108	0.016g	Small sherd, CBM
109	0.017g	Small sherd, CBM
110	0.017g	Small sherd, CBM
111	0.015g	Small sherd, CBM
112	0.021g	Small sherd, CBM
113	0.012g	Small sherd, CBM
114	0.011g	Small sherd, CBM
115	0.011g	Small sherd, CBM
116	0.024g	Small sherd, CBM
117	0.011g	Small sherd, CBM
118	0.022g	Small sherd, PM pottery
119	0.011g	Small sherd, PM pottery
120	0.021g	Small sherd, PM pottery
121	0.012g	Small sherd, PM pottery
122	0.021g	Small sherd, Plant pot fragment

Potential

The material has limited potential for further analysis, although it may be worth further analysing the sections of the prehistoric sherds. A full record of the material should be retained with the site archive.

Quantification and Condition of flintwork

In total, 2 pieces of stratified worked flint were identified with an additional 40 pieces of un-stratified sherds of flint, possibly residual in the topsoil and of no interpretive use. The 40 un-stratified pieces are not discussed here as they are of limited value in interpreting features or the archaeological potential of the site. The two worked pieces of flint were drawn and photographed. The crude working and large size of these pieces of flint make them most likely to be bronze age.

Flake	Weight	Description
201	0.01g	Small retouched flake, grey flint 0.7 x 4cm
202	0.02g	Small retouched flake, grey flint 1.1 x 3.2cm

Figure 2 Worked flint 201 and 202



Potential

The material has limited potential for further analysis, although it does indicate prehistoric activity within the area. A full record of the material should be retained with the site archive.

Bibliography

Andrefsky, W. 1998. Lithics. Cambridge

Gibson, A. 2002. Prehistoric Pottery in Britain and Ireland. Tempus

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