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Archaeological Trial Trench Evaluation at Land off Abbey Road, Old Buckenham, Norfolk

ENF135130



Prepared for NPS Property Consultants Limited Lancaster House 16 Central Avenue St Andrews Business Park Norwich Norfolk NR7 0HR





John Ames MCIfA

March 2015



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PROJECT CHECKLIST		
Project Overview	Project Overview David Adams	
Draft Completed	John Ames	06/11/2014
Graphics Completed	Holly Payne/David Dobson	10/11/2014
Reviewed	Jayne Bown	19/11/2014
Issue 1		
Revised	Andrew Crowson	13/01/2015
Reviewed	David Adams	15/01/2015
Issue 2		

NPS Archaeology

Scandic House 85 Mountergate Norwich NR1 1PY

T 01603 756150 F 01603 756190 E nau.mail@nps.co.uk W http://nau.nps.co.uk

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Contents

Summary		1	
1.0	Introduction		
2.0	Geology and Topography4		
3.0	Archaeological and Historical Background	5	
4.0	Methodology	6	
5.0	Results	8	
6.0	The Archaeological Material	29	
	6.1 Roman Pottery	29	
	6.2 Post-Roman Pottery	30	
	6.3 Fired Clay	31	
	6.4 Metal Finds	32	
	6.5 Flint	32	
	6.6 Stone	32	
	6.7 Animal Bone	32	
	6.8 Finds Conclusions	34	
7.0	Environmental Evidence		
	7.1 Plant Macrofossils	35	
8.0	Conclusions	37	
	Acknowledgements		
	Bibliography and Sources		
	Appendix 1a: Context Summary		
	Appendix 1b: Feature Summary		
	Appendix 2a: Finds by Context		
	Appendix 2b: Finds Summary		
	Appendix 3: Roman Pottery Catalogue		
	Appendix 4: Post-Roman Pottery Catalogue		
	Appendix 5: Fired Clay Catalogue		
	Appendix 6: Animal Bone Catalogue		
	Appendix 7: Environmental Evidence	48	
	Appendix 8: OASIS Report Summary		
	Appendix 9: Archaeological Specification59		

Figures Figure 1 Site location Location of trenches with geophysics results Figure 2 Figure 3 Trench 1, plan and section Figure 4 Trench 2, plan and sections Trench 3, plan and sections Figure 5 Figure 6 Trench 4, plan and section Figure 7 Trench 5, plan and sections Figure 8 Trench 6, plan and section Figure 9 Trench 7, plan Figure 10 Trench 8, plan and sections **Plates** Plate 1 Trench 1, looking southwest Plate 2 Trench 2, looking southeast Plate 3 Trench 2, ditch [22], looking northeast Plate 4 Trench 3, looking southwest Plate 5 Trench 3, pit [15], looking southwest Plate 6 Trench 4, looking northwest Plate 7 Trench 4, ditch [42], looking northeast Plate 8 Trench 5, looking northwest Plate 9 Trench 6, looking southwest Plate 10 Trench 7, looking southeast Plate 11 Trench 8, looking west **Tables** Table 1 Quantification of Roman fabric types Table 2 Pottery quantification by fabric Table 3 Pottery types present by context Table 4 Quantification of the faunal assemblage by feature number, feature type and fragment count Table 5 Quantification of the faunal assemblage by feature number, feature type and weight in grams

Quantification of the faunal assemblage by species, feature type and

Table 6

NISP

Location: Land off Abbey Road, Old Buckenham, Norfolk

District: Norfolk County Council

Grid Ref.: 60673, 29191

Planning Ref.: Pre-application

HER No.: ENF135130

OASIS Ref.: 190644

Client: NPS Property Consultants Ltd

Dates of Fieldwork: 25, 30 September, 1–6 October 2014

Summary

An archaeological evaluation was conducted by NPS Archaeology in September and October 2014 for NPS Property Consultants Ltd ahead of an application for planning permission for the development of an education establishment at Old Buckenham School, Norfolk.

Interpretations of results from a geophysical (magnetometer) survey of the site conducted in 2014 indicated evidence of linear features, potentially part of a double-ditched enclosure system or land division indicative of settlement activity.

Eight trial trenches were excavated, targeted to the geophysical interpretations. All of the trenches produced archaeological features and deposits, revealing evidence for cultural activity throughout the site.

The ditched enclosure boundaries are dated predominately to the 11th–14th centuries, although the presence of 1st-century AD Roman pottery complicates their interpretation.

The rectangular form of the enclosures or land divisions is probably more indicative of prehistoric or Roman features, but the extent of known medieval-period activity in close proximity to the site may suggest a planned landscape away from the medieval core of Old Buckenham.

1.0 INTRODUCTION

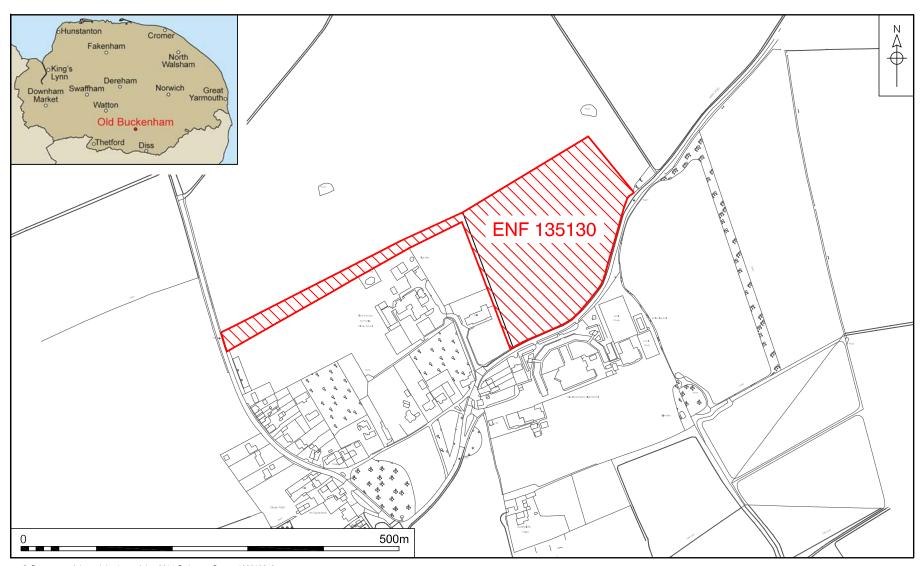
A proposal to construct a new school development on land to the north of Abbey Road, Old Buckenham, Norfolk (Fig. 1), required a programme of archaeological works to assess the potential effects of the proposal on the archaeological resource. Eight trenches totalling a length of 61.00m were excavated across the proposed development area and the access route into the site. The trenches were placed to test specific features identified from geophysical survey results (Webb 2014).

The trench locations were selected to avoid a Government Oil Pipeline that lies to the north of the site. The trench locations were inspected and confirmed to be located 3m either side of the Government Oil Pipeline on 2 October 2014 by Raymond Smith (Pipeline Technician) of Costain Limited.

This work was undertaken to fulfil a brief issued by Norfolk Historic Environment Service (CNF45108_1) prior to planning application to Norfolk County Council. The work was conducted in accordance with a Written Scheme of Investigation prepared by NPS Archaeology (01-02-14-1-1080). The work was commissioned and funded by NPS Property Consultants Ltd.

The programme of work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government 2012). The results will enable decisions to be made by the Local Planning Authority about the treatment of any archaeological remains found.

The site archive is currently held at the offices of NPS Archaeology and on completion of the project will be deposited with Norfolk Museums Service following the relevant policies on archiving standards.



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Figure 1. Site location. Scale 1:5000

2.0 GEOLOGY AND TOPOGRAPHY

The solid geology consists of Lewes Nodular, Seaford, Newhaven and Culver Chalk Formations, sedimentary bedrock formed approximately 71–94 million years ago in the Cretaceous Period, and indicating a local environment dominated by ice age conditions (http://mapapps.bgs.ac.uk/geologyofbritain/home.html).

The solid geology is overlain by superficial deposits of Lowestoft Formation – Diamicton formed up to 2 million years ago in the Quaternary Period, indicating a local environment dominated previously by ice age conditions. (http://mapapps.bgs.ac.uk/geologyofbritain/home.html).

The soils in the area of the site are classified in the Beccles 1 Association, characterised as slowly permeable, seasonally waterlogged loams over clays (Soil Survey of England and Wales 1983). The topsoil and subsoil was consistent across the site and measured 0.50–0.60m deep.

The site is located to the northeast of Old Buckenham, 4km south of Attleborough and approximately 10km southwest of Wymondham. The site is situated on a relatively flat plateau ranging between 41.95m OD at the northeast end and 43.57m OD at the southwest. At the time of work the site was a cultivated field, which had been recently seeded.

3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The site is positioned in an area that has high potential to contain archaeological evidence. Data held by the Norfolk Historic Environment Record (NHER) was appraised and the most relevant entries are presented below. Although no previously known heritage assets were listed by the NHER for the proposed development site, interpretations of geophysical survey results in September 2014 provided germane detail to the site's potential archaeological resource. Faint linear magnetic anomalies representing in-filled ditches appeared to form a series of rectangular enclosures across most of the site. Discrete anomalies inside some of the enclosures were also considered to be of archaeological significance (Webb 2014).

A castle founded by William d'Albini in the late 11th century was granted to the Augustinian Canons in 1146 upon the completion of a new fortification at New Buckenham Castle (NHER 40577). The Order built an abbey on the site, but left the moats intact. The abbey was dissolved in 1536 and remains of moats, earthworks, cropmarks and foundations including the base of a pier belonging to the abbey church still remain. The site of the castle and abbey are located to the east of the current site and recorded together at Abbey Farm as NHER 9202.

Site (NHER 9205) records the site of St Andrew's Church. The church belonged to Old Buckenham Abbey (NHER 9202), was converted to a barn post-Dissolution and is currently beneath stable buildings.

Earthworks that possibly relate to Old Buckenham Castle are known to the northeast of the site (NHER 57337).

To the southwest of the proposed development, site NHER 9221 is situated in a field labelled *Hempland* on the 1841 tithe map of Old Buckenham. There is a possibility that this may relate to a linen or flax manufacturing site. It has been suggested that this may have been a location used in the 16th century to produce hemp for making rope for the English navy.

Site NHER 57861, to the south of the proposed development, produced evidence of *in situ* medieval finds and archaeological deposits within the historical centre of Old Buckenham. A sequence of well-preserved late medieval—post-medieval deposits was recorded across much of the site, including a small number of waste pits that pre-date a 15th–16th-century yard surface and culvert.

An undated flint and mortar wall (NHER 9220) was found along Abbey Road in 1955.

A deer park (NHER 44620) was laid out by William D'Albini in around 1100 to the southeast of the development site. The park was expanded by his son, William the Strong, in the 12th century, probably as part of his development of the new castle (NHER 40577) and the planned town of New Buckenham (NHER 9200). The park is marked on maps made in 1597 and 1693. It probably went out of use in the early 18th century.

4.0 METHODOLOGY

The objective of the evaluation was to determine as far as reasonably possible the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

The Brief required that targeted trial trenches should be positioned across the proposed development area, and a total of 61m of linear trenching was excavated. Trenches were situated to investigate magnetic anomalies (interpreted as possible archaeological features) recorded by a geophysical survey of the site (Webb 2014).

Machine excavation was carried out under constant archaeological supervision by a wheeled hydraulic 360° excavator equipped with a toothless ditching bucket.

Spoil, exposed surfaces and features were scanned with a metal-detector. All metal-detected and hand-collected finds other than those that were obviously modern were retained for inspection.

Environmental samples were taken from 11 contexts. Samples <1>-<11> were taken from deposits (4), (12), (16), (17), (23), (25), (32), (36), (39), (45) and (47).

All archaeological features and deposits were recorded using NPS Archaeology pro forma. Trench locations, plans and sections were recorded at appropriate scales. Monochrome and digital photographs were taken of all relevant features and deposits where appropriate.

All trenches were located using a Leica GPS9000 surveying system.

Site conditions were good with clear access in and around the site.

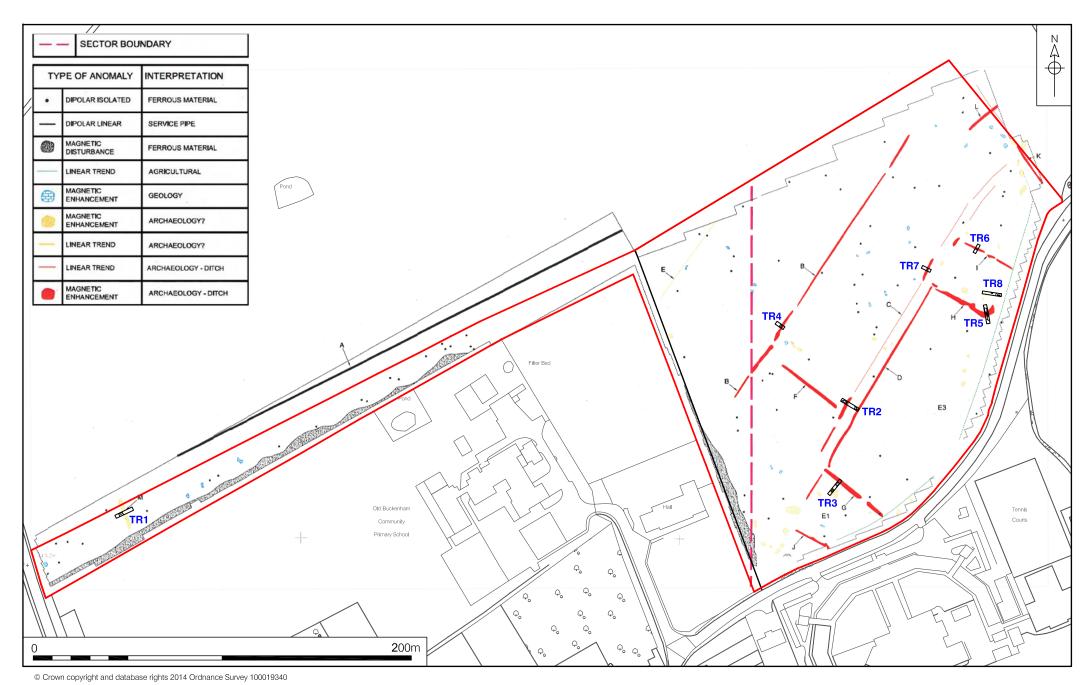


Figure 2. Location of trenches with geophysics results. Scale 1:2000

5.0 RESULTS

Archaeological features and deposits were identified in each of the eight trenches excavated.

The survival of sub-surface archaeological remains was good across the site. The topsoil measured between 0.25m and 0.35m deep with subsoil recorded in all eight trenches; it measured between 0.20m and 0.30m deep.

The results for each trench are tabulated below in Trench number order. A photograph of each trench accompanies the trench description with additional images of features where appropriate.

Trench 1



Plate 1. Trench 1, looking southwest

Figs 2 and 3, Plate 1		
Location		
Orientation	Northeast-southwest	
West End	606302.597, 291811.500	
East End	606311.621, 291815.792	
Dimensions		
Length	10.00m	
Width	1.60m	
Depth	0.55m	
Levels		
West End Top	42.89m OD	
East End Top	42.99m OD	

Context	Туре	Description and Interpretation	Thickness	Depth BGL
1	Topsoil	Dark greyish brown sandy clay	0.35m	0.00-0.35m
2	Subsoil	Mid-brownish sandy clay	0.20m	0.35–0.55m
46	Cut	Ditch	0.75m	0.55–1.25m
47	Deposit	Fill of ditch [46]	0.75m	0.55–1.25m

Discussion

Trench 1 was placed to test a north–south aligned geophysical anomaly 'M' (Fig. 2), which was located at the west end of the access route (Webb 2014, 4).

Ditch [46] was located at the west end of the trench and corresponds to geophysical anomaly 'M' (Figs. 2 and 3). The ditch was aligned north—south and measured at least 1.60m long by 2.00m wide by 0.75m deep (Fig. 3). It contained a single fill (47) consisting of mixed ginger brown clayey silty sand. No finds were recovered from the feature. Environmental sample <9> taken from deposit (47) producing evidence of barley, rye, wheat, cereal grains, knotweed, charcoal, black porous 'cokey' material, bone and open-country species of snail.

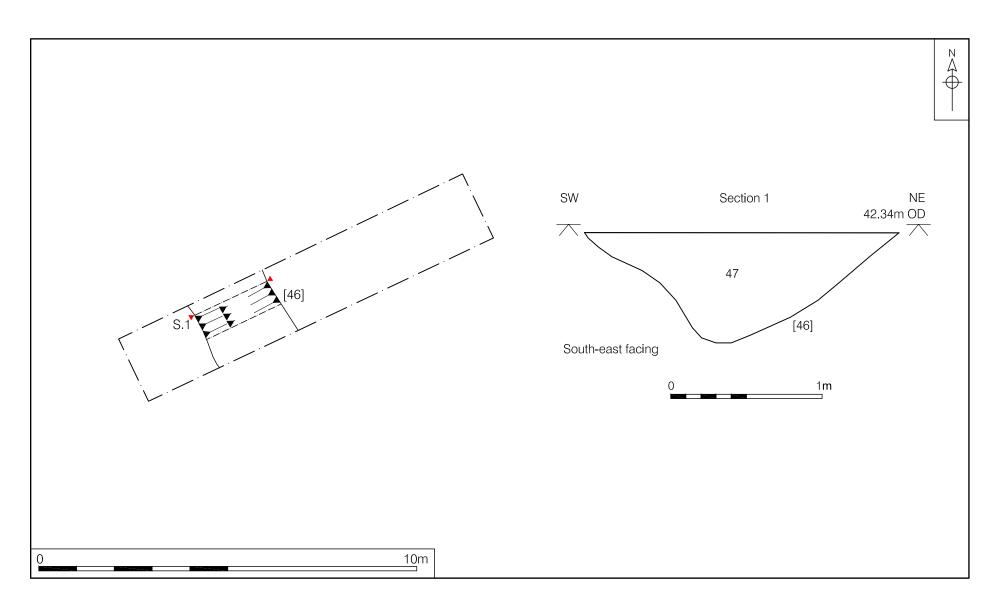


Figure 3. Trench 1, plan and section. Scale 1:100 and 1:25



Figs 2 and 4, Plates 2 and 3	
Location	
Orientation	Northwest-southeast
West End	606695.58, 291867.93
East End	606686.94, 291873.19
Dimensions	
Length	10.50m
Width	1.60m
Depth	0.50m
Levels	
West End Top	43.14m OD
East End Top	43.27m OD

Context	Туре	Description and Interpretation	Thickness	Depth BGL
1	Topsoil	Dark greyish brown sandy clay	0.35m	0.00-0.35m
2	Subsoil	Mid-brownish sandy clay	0.20m	0.35-0.50m
18	Cut	Ditch	0.20m	0.50-0.70m
19	Deposit	Fill of [18]	0.20m	0.50-0.70m
20	Cut	Ditch	0.20m	0.50-0.70m
21	Deposit	Fill of [20]	0.20m	0.50-0.70m
22	Cut	Ditch	0.52m	0.50-1.02m
23	Deposit	Fill of [22]	0.52m	0.50-1.02m
24	Cut	Pit	0.38m	0.50-0.88m
25	Deposit	Fill of [24]	0.38m	0.50-0.88m
26	Deposit	Fill of [22]	0.20m	0.74-0.94m
27	Deposit	Fill of [22]	0.24m	0.50-0.74m
28	Cut	Pit	0.30m	0.50-0.84m
29	Deposit	Fill of [28]	0.30m	0.50-0.84m

Discussion

Trench 2 was placed over two geophysical anomalies 'C' and 'D' that were aligned northeast-southwest (Fig. 2). The anomalies appear to form the main axis of the field system that extends across the entire site (Webb 2014, 4).

Two possible ditches [18] and [20] were located in the southeast of the trench, of which [18] corresponded to 'D' in the geophysical survey (Fig. 2). Although the evidence was limited because of the proximity of the features to the edge of the trench, it appears that the features ditches were perpendicular to each other (Fig. 4). A slot placed across the ditches to test their relationship provided no clear evidence. No finds were recovered from the ditches.

A linear feature in the northwest of the trench related to geophysical anomaly 'C' (Fig. 2). Although there was no indication of intercut features at the level of the machined surface, excavation demonstrated that potentially two pits [24] and [28] had truncated an earlier ditch

[22] (Fig. 4).

Excavation revealed a thickening in the southwest edge of the linear feature: pit [24]. In section, pit [24] appeared to be a later cut into existing ditch [22]. The west side of the cut sloped gradually while the east side was almost vertical. It measured 0.85m wide by 0.40m deep and contained a single fill (25) (Fig. 4, section 4). Forty-six body sherds of a late 1st-century tall-necked bowl were recovered from deposit (25). Environmental sample <7> from deposit (25) produced cereal grains, charcoal flecks and burnt/fired clay.

Pit [28] was located on the east side of the excavated section, and was seen in the northeast-and southwest-facing sections (Fig. 4, sections 4 and 5). The excavation showed that the pit measured 1.36m wide by 0.45m deep and contained a single fill (29). Deposit (29) consisted of a mid-brown clayey sand from which nine sherds of Roman pottery were recovered.

Ditch [22] was aligned northwest–southeast and corresponds to the geophysical results (Figs 2 and 4, Plate 3). Because of its truncation by pits [24] and [28] the width of the ditch was unclear (Fig. 4, section 4). The excavated portion demonstrated that ditch [22] measured at least 1.00m wide by 0.50m deep and it contained potentially three deposits (23), (26) and (27). Deposits (26) and (27) were limited in extent as it appeared (in section) that they were truncated by pit [24]. There was a clear distinction between deposit (23) and deposits (26) and (27), and in section it appeared that ditch [22] may have been re-cut (containing deposit (23)) (Fig. 4). During the excavation of deposit (23), it was clearly visible that the soil matrix contained frequent charcoal flecks, probable burnt material, and 43 sherds of Roman pottery were collected. Environmental sample <6> taken from deposit (23) produced barley, wheat, cereal seeds, glume bases of probable emmer—a kind of wheat mainly used for fodder, it is believed that the production of emmer had largely ceased by the end of the Roman period. Legumes, bone, burnt daub (?) and black porous 'cokey' material were also present in the sample.



Plate 3. Trench 2, ditch [22], looking northeast

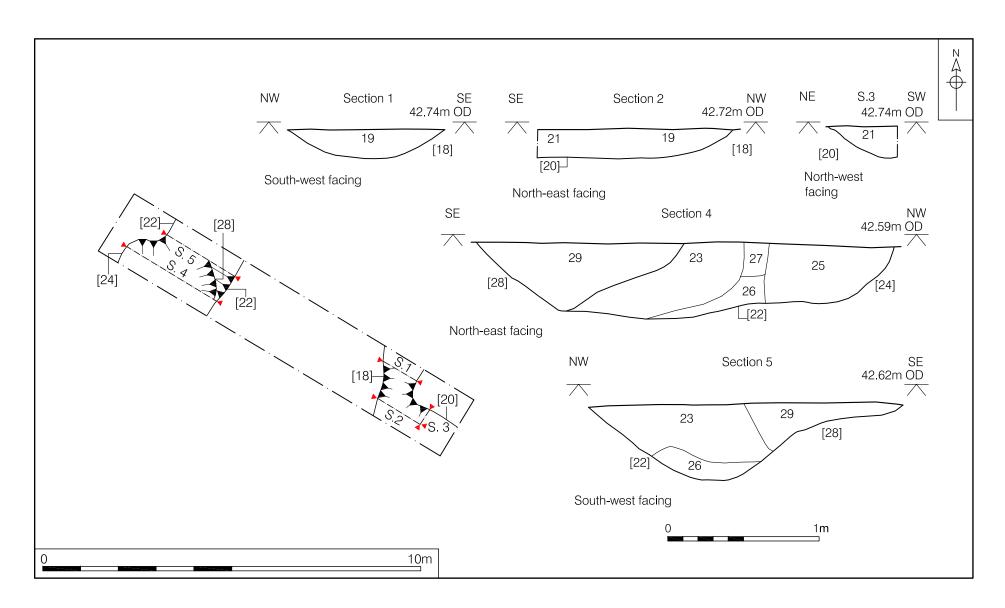


Figure 4. Trench 2, plan and sections. Scale 1:100 and 1:25



Plate 4.	Trench 3,	looking	southwest
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	Figs 2 and 5, Plates 4 and 5	
	Location	
	Orientation	Northeast-southwest
	West End	606679.88, 291823.22
	East End	606686.24, 291830.93
	Dimensions	
	Length	10.00m
	Width	1.60m
	Depth	0.55m
Levels		
	West End Top	43.54m OD
	East End Top	43.46m OD

Context	Туре	Description and Interpretation	Thickness	Depth BGL
1	Topsoil	Dark greyish brown sandy clay	0.35m	0.00-0.35m
2	Subsoil	Mid-brownish sandy clay	0.20m	0.35–0.55m
13	Cut	Ditch	0.53m	0.55–1.03m
14	Deposit	Fill of [13]	0.53m	0.55–1.03m
15	Cut	Pit	1.05m	0.55–1.58m
16	Deposit	Upper fill of [15]	0.64m	0.55–1.14m
17	Deposit	Lower fill of [15]	0.55m	1.15–1.60m

Discussion

Trench 3 was placed over a northwest–southeast-aligned geophysical anomaly 'G', which lies perpendicular to anomaly 'D' (Fig. 2) (Webb 2014, 4).

Ditch [13] corresponds to geophysical anomaly 'G' (Fig. 2). The ditch measured 2.05m wide by 0.53m deep and contained a single deposit (14) (Fig. 5, section 1). No finds were recovered from the feature.

A large pit [15], partially obscured by the limit of excavation, was located to the southwest of ditch [13]. Pit [15] measured at least 3.80m (northeast–southwest) and was 1.05m deep. It contained two deposits (16) and (17).

The upper deposit (16) measured 0.64m deep and consisted of mid-brown silty clayey sand (Fig. 5, section 2). A single sherd of Grimston ware dated to the late 12th–14th century was recovered from deposit (16), along with four fragments of animal bone from a sheep or goat. Environmental sample <1> taken from deposit (16) produced oat grains, wheat, cereal grains, legumes, dock, charcoal, charred root stems, small coal fragments. Snail shells were also retrieved from the Sample <1>, including shade-loving and open-countryside species.

The lower fill (17) was dark brown sandy clay with charcoal and chalk flecks. Although no finds were recovered from deposit (17), environmental sample <4> was taken to gain as much information as possible. Sample <4> produced cereal grains, charcoal, charred root stems, Ericaceae (stem), burnt/fired clay, bone, mineralised material, small mammal/amphibian bone and snails.

The types of snails in the assemblage indicate that at the time of deposition the surrounding area had short-turfed grassland. Furthermore, the presence of marsh/freshwater species indicates that certain features were damp or semi-permanently water-filled.



Plate 5. Trench 3, pit [15], looking southwest

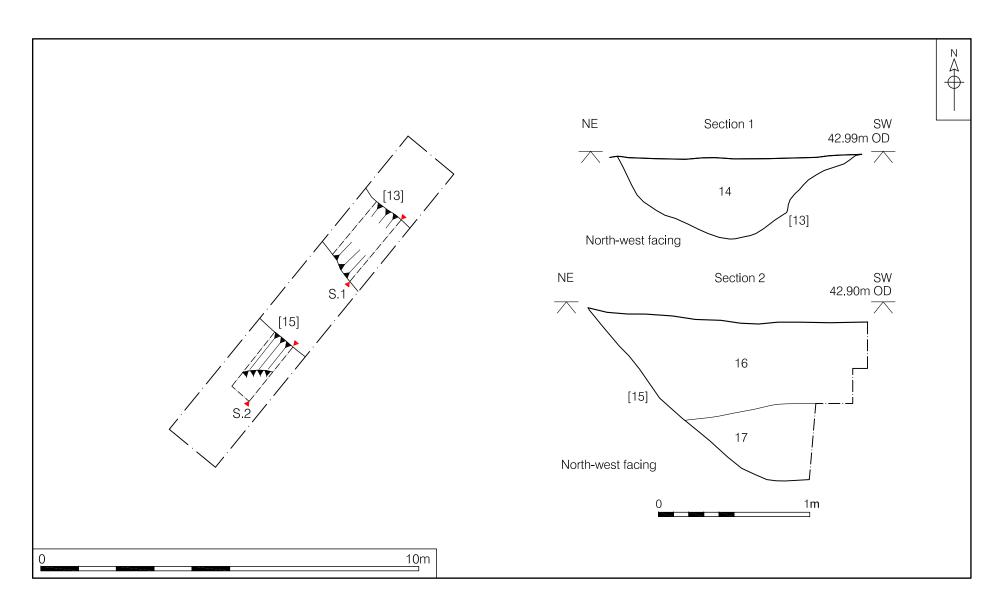


Figure 5. Trench 3, plan and sections. Scale 1:100 and 1:25



Figs 2 and 6, Plates 6 and 7	
Location	
Orientation	Northwest-southeast
West End	606652.01, 291914.13
East End	606656.06, 291911.33
Dimensions	
Length	5.00m
Width	1.60m
Depth	0.60m
Levels	
West End Top	43.51m OD
East End Top	43.49m OD

Context	Туре	Description and Interpretation	Thickness	Depth BGL
1	Topsoil	Dark greyish brown sandy clay	0.30m	0.00–0.30m
2	Subsoil	Mid-brownish sandy clay	0.30m	0.30-0.60m
42	Cut	Ditch	0.70m	0.30–1.00m
43	Deposit	Fill of ditch [42]	0.70m	0.30-1.00m

Discussion

Trench 4 was placed over geophysical anomaly 'B', which is aligned northeast–southwest and parallel to anomaly 'C' (Fig. 2) (Webb 2014, 4).

Ditch [42] equates to anomaly 'B'. It measured 1.20m wide by 0.70m deep and contained a single fill consisting of mid-brown clayey sand (43) (Fig. 6, section 1). No finds were recovered from the feature.

At first, no features were evident in Trench 4 after machining, and it was not until the surface had weathered for a day that ditch [42] became apparent. The clay content of the soil matrix in the ditch was so similar to the surrounding natural as to obscure initial identification.



Plate 7. Trench 4, ditch [42], looking northeast

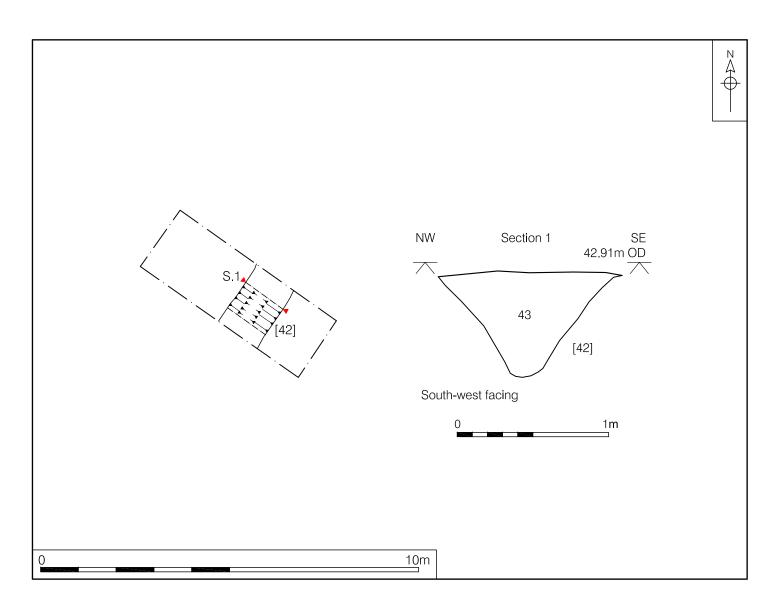


Figure 6. Trench 4, plan and section. Scale 1:100 and 1:25



Plate 8.	Trench 5	, looking	northwest
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Figs 2 and 7, Plate 8		
Location		
Orientation	Northwest–southeast	
North End	606759.19, 291955.57	
South End	606756.81, 291951.14	
Dimensions		
Length	5.00m	
Width	1.60m	
Depth	0.50m	
Levels		
North End Top	41.95m OD	
South End Top	42.01m OD	

Context	Туре	Description and Interpretation	Thickness	Depth BGL
1	Topsoil	Dark greyish brown sandy clay	0.30m	0.00–0.30m
2	Subsoil	Mid-brownish sandy clay	0.20m	0.30-0.50m
5	Cut	Ditch	0.60m	0.50-1.10m
6	Deposit	Lower fill of [5]	0.20m	0.90-1.10m
7	Deposit	Upper fill of [5]	0.40m	0.50-0.90m
8	Cut	Post-hole	0.62m	0.50-1.12m
9	Deposit	Lower fill of [8]	0.35m	0.77-1.12m
10	Deposit	Upper fill of [8]	0.22m	0.50-0.77m
11	Cut	Ditch	0.28m	0.50-0.78m
12	Deposit	Fill of [11]	0.28m	0.50-0.78m
30	Deposit	Below [5] and [8]	0.30m	0.65–0.85m
31	Cut	Ditch same as [5]	1.52m	0.50-1.52m
32	Deposit	Fill of [31]	1.52m	0.50-1.52m
33	Cut	Ditch	0.42m	0.50-0.92m
34	Deposit	Lower fill of [33]	0.20m	0.72-0.92m
35	Deposit	Upper fill of [33]	0.22m	0.50-0.72m
44	Cut	Ditch		0.50-1.52m
45	Deposit	Fill of [44]		0.50-1.52m

Discussion

Trench 5 was aligned northwest–southeast over geophysical anomaly 'H' (Fig. 2). The geophysical anomaly lies perpendicular to geophysical anomaly 'D' and parallel to geophysical anomaly 'I' (Fig. 2) (Webb 2014, 4). Geophysical anomaly 'H' has a curvilinear form at its southeast end and appears to be wider than the other geophysical anomalies at the site (Fig. 2).

Trench 5 contained potentially four linear features [5], [11], [33] and [44], which are probably ditches. Although the ditches were intercut, because of limited excavations and the clayey nature of the soils it was not possible to determine their relationships with complete certainty.

A slot was excavated across a 3m-wide anomaly at the south end of the trench (Fig. 7). The slot revealed two ditches [31] and [33] on the same alignment, and it is possible that they were contemporary. A potential re-cut may have been discernible in the west-facing section, which

perhaps demonstrated that ditch [33] cut the south part of ditch [31] (Fig. 7, section 1).

Ditch [33] measured at least 2.50m wide by 0.40m deep. It contained two deposits (34) and (35). The upper deposit (35) consisted of mid-brown clayey sand with occasional charcoal flecks, and the lower deposit (34) comprised mid-brownish grey silty sand fill. Deposit (34) produced four sherds of medieval pottery dated to the late 12th–14th century. It was unclear whether a gully-like feature located in the north part of the feature was natural or deliberately dug (Fig. 7, section 1).

From the evidence noted above, it is suggested tentatively that ditch [31] was truncated by ditch [33]. Ditch [31] measured at least 1.25m wide by 1.02m deep and contained a single fill (32) consisting of light to mid-greyish brown clayey silty sand (Fig. 7, section 1). A single piece of animal bone and an iron nail, probably of medieval or post-medieval date, were recovered from deposit (32).

Environmental sample <8> taken from deposit (32) produced charcoal, charred roots/stems, black porous 'cokey' material, small coal fragments and both woodland-/shade-loving species and open-country species of snail.

Ditch [5] is considered to be the same as ditch [31]. A slot was placed across the northwest part of ditch [5]=[31] to intersect features [8] and [11]. The slot demonstrated that ditch cut [5] was 0.60m deep, shallower than the eastern cut. The excavated portion of ditch [5] revealed two deposits (6) and (7) (Fig. 7, sections 1 and 2). Upper fill (7) consisted of mid-brown clayey sand with occasional charcoal flecks, and lower fill (8) was mid-brownish grey silty sand. No finds were recovered from ditch [5].

Post-hole [8] was observed to truncate ditches [5] and [11]. Post-hole [8] measured 0.80m wide, tapering to 0.20m at its base (Fig. 7, section 2). It contained two deposits (9) and (10). The later deposit (10) spread across the upper part of the post-hole and consisted of mid-brown clayey sand. The earlier deposit (9) consisted of mid-greyish brown clayey sand. No finds were recovered from the post-hole.

The northeast edge of post-hole [8] appeared to cut ditch [11] (Fig. 7, section 2). Ditch [11] was ambiguous in its appearance: only a limited amount was visible and in part it may have been obscured by ditch [5] (Fig. 7). There was a clear distinction between ditches [31] and [11], however, as natural clay separated the two features. Ditch [11] measured at least 1.30m long by 1.45m wide and was 0.30m deep. It contained a single fill consisting of mid-brown clayey sand (12). Environmental sample <2> taken from deposit (12) produced charcoal, charred root/stem, burnt/fired clay, small mammal/amphibian bones and woodland-/shade-loving species of snail and open-country species of snail.

Ditch [44] was located in the northwest part of the trench. The feature was only partially excavated as heavy rain made strata and relationships difficult to ascertain, whilst the clayey nature of the soils made the area of the ditch very slippery. In spite of the limited excavation of the ditch, its fill (45) produced fired clay, and six sherds of medieval pottery with a date range of 11th–14th century, mostly 11th–12th century. Environmental sample <5> taken from deposit (45) produced cereal grains, charcoal, charred root/stem, black porous 'cokey' material, burnt/fired clay, small mammal/amphibian bones and woodland-/shade-loving species of snail and open-country species of snail.

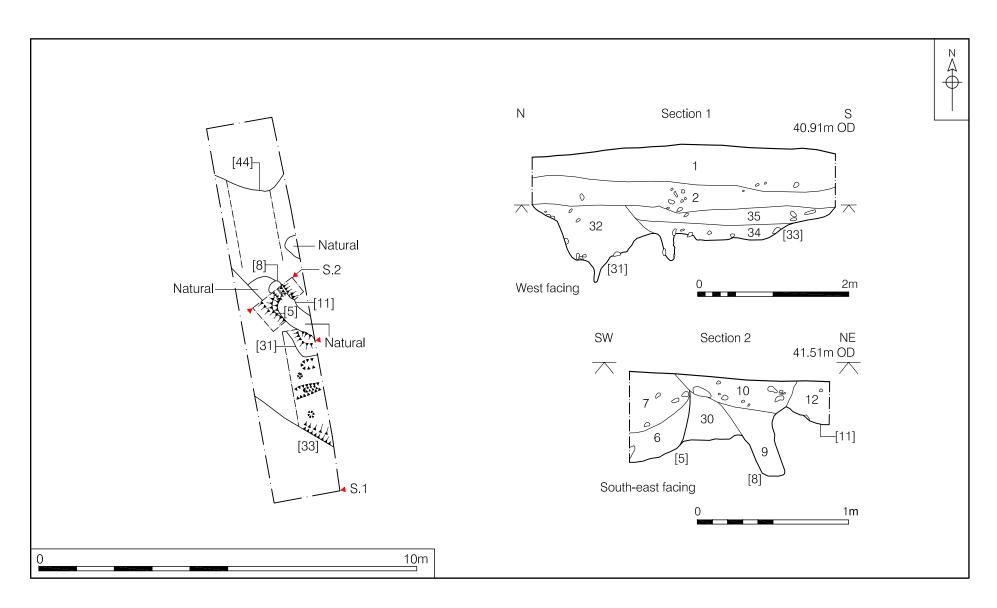


Figure 7. Trench 5, plan and sections. Scale 1:100, 1:50 and 1:25



Plate 9	Trench 6	looking	southwest
i late o.	TICHOLI O,	100KIIIQ	Southiwost

Figs 2 and 8, Plate 9		
Location		
Orientation	Northeast–southwest	
North End	606759.19, 291955.57	
South End	606756.81, 291951.14	
Dimensions		
Length	5.00m	
Width	1.60m	
Depth	0.50m	
Levels		
North End Top	41.95m OD	
South End Top	42.01m OD	

Context	Туре	Description and Interpretation	Thickness	Depth BGL
1	Topsoil	Dark greyish brown sandy clay	0.30m	0.00–0.30m
2	Subsoil	Mid-brownish sandy clay	0.20m	0.30-0.50m
3	Cut	Ditch	0.20m	0.50–0.70m
4	Deposit	Fill of [3]	0.20m	0.50-0.70m

Discussion

Trench 6 was placed over east—west aligned geophysical anomaly 'I'. Anomaly 'I' lies perpendicular to geophysical anomaly 'D' and parallel to anomaly 'H' (Fig. 2) (Webb 2014, 4).

Ditch [3] was located in the central part of Trench 6 and corresponds to geophysical anomaly 'I' (Fig. 2). Ditch [3] was 0.70m wide by 0.20m deep and contained a single deposit (4) of mottled black and orange clayey sand. Two sherds of pottery were recovered from deposit (4): one piece of Late Saxon St Neot's ware (AD 850–1150), and one fragment of early medieval ware dating to the 11th–12th century.

Environmental sample <3> taken from deposit (4) produced oats, barley, rye, wheat, cereal grains, small and large legumes, goosegrass, flax, hazel shell, charcoal, charred root/stem, fruit stones, flower heads of plants, black porous 'cokey' material, bone, burnt/fired clay, small mammal/amphibian bones and woodland-/shade-loving and open-country species of snail.

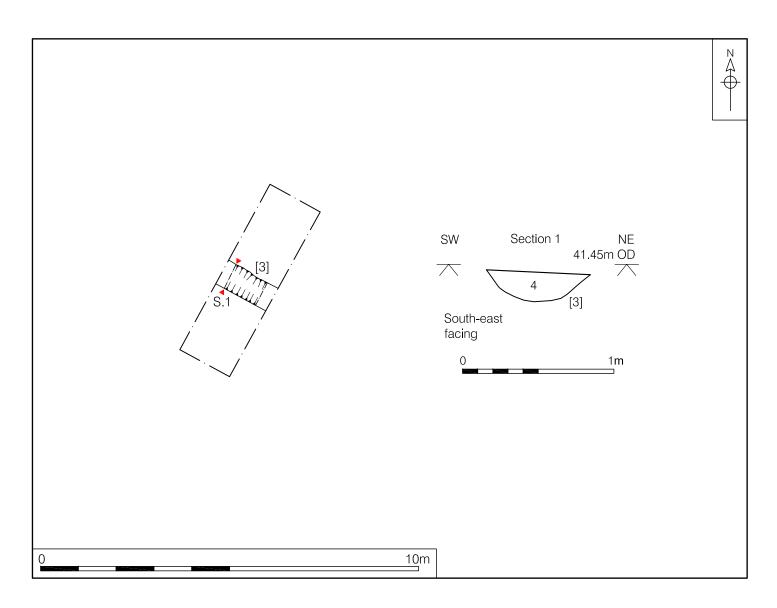


Figure 8. Trench 6, plan and section. Scale 1:100 and 1:25



Plate 10	Trench 7	looking	southeast
i late io.		IOOKIIIQ	Southeast

Figs 2 and 9, Plate 10		
Location		
Orientation	Northwest-southeast	
West End	606729.20, 291943.66	
East End	606733.67, 291941.54	
Dimensions		
Length	5.00m	
Width	1.60m	
Depth	0.50m	
Levels		
West End Top	42.52m OD	
East End Top	42.45m OD	

Context	Туре	Description and Interpretation	Thickness	Depth BGL
1	Topsoil	Dark greyish brown sandy clay	0.30m	0.00–0.30m
2	Subsoil	Mid-brownish sandy clay	0.20m	0.30-0.50m
49	Cut	Ditch		0.30-0.50m
50	Deposit	Fill of [49]		0.30-0.50m

Discussion

Trench 7 was placed over northeast–southwest aligned geophysical anomaly 'C'. The anomaly is parallel to geophysical anomaly 'D' (Fig. 2) (Webb 2014, 4).

As with ditch [22] in Trench 2, (Figs 2 and 4), feature [49] was not identified immediately. It also took time to 'weather-out', and was not observed until the trench was about to be backfilled. Consequently, the feature was not excavated, although its location at the southeast end of the trench was recorded.

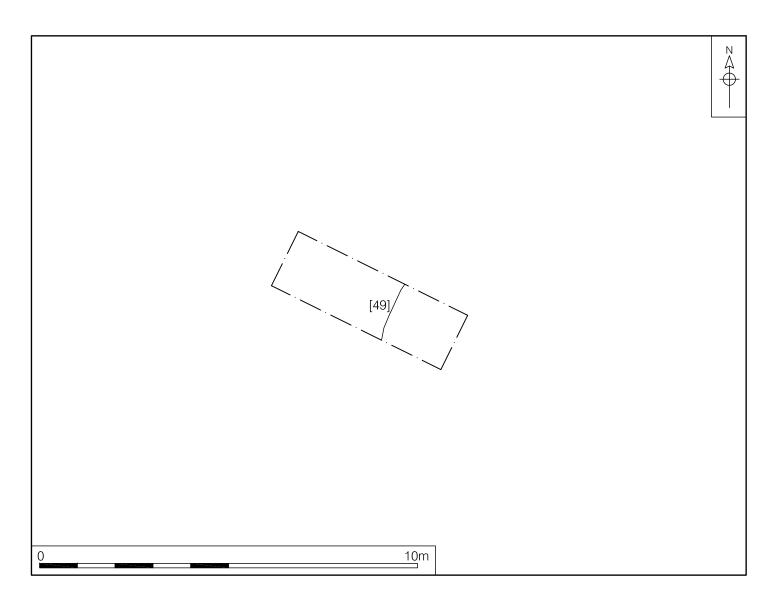


Figure 9. Trench 7, plan. Scale 1:100



Plate 11.	Trench 8	looking	weet
riale i i.	Hencho	, lookiiiq	wesi

Figs 2 and 10, Plate 11		
Location		
Orientation	East-west	
West End	606761.14, 291930.19	
East End	606770.99, 291928.63	
Dimensions		
Length	13.00m	
Width	1.60m	
Depth	0.50m	
Levels		
West End Top	42.02m OD	
East End Top	42.015m OD	

Context	Туре	Description and Interpretation	Thickness	Depth BGL
1	Topsoil	Dark greyish brown sandy clay	0.30m	0.00-0.30m
2	Subsoil	Mid-brownish sandy clay	0.30m	0.30m-0.60m
36	Cut	Pit	0.60m	0.60m-1.20m
37	Deposit	Fill of [36]	0.60m	0.60m-1.20m
38	Cut	Pit	0.30m	0.60m-0.90m
39	Deposit	Fill of [38]	0.30m	0.60m-0.90m
40	Cut	Pit	0.32m	0.60m-0.92m
41	Deposit	Fill of [40]	0.32m	0.60m-0.92m

Discussion

Trench 8 was aligned east—west over a discrete magnetic anomaly in geophysics area 'E2'. The anomaly is bounded by geophysical anomalies 'H' to the south and 'I' to the north, inside a probable enclosure (Fig. 2) (Webb 2014, 4).

Three pits [36], [38] and [40] were located in Trench 8 (Fig. 10).

Pit [36] continued beyond the northern limits of the trench. The excavated portion demonstrated that it measured at least 0.70m long by 1.00m wide by 0.60m deep (Fig. 10, section 1). It contained a single fill (37) consisting of dark greyish brown clayey silt with occasional flecks of charcoal. A single sherd of medieval pottery dating to the 11th–12th century and four fragments of fired clay were recovered from deposit (37). Environmental sample <10> taken from deposit (37) produced barley, legumes, charcoal, charred root/stem, black porous 'cokey' material, bone and woodland-/shade-loving species of snail and open-country species of snail.

Two intercut pits [38] and [40] were recorded to the east of pit [36] (Fig. 10). From the excavated section, it appeared that pit [38] was cut by pit [40] (Fig. 10, section 2). The excavated portion of [38] showed that it measured at least 0.30m long by 0.30m wide by 0.30m deep, and contained one fill (39). Four sherds of medieval pottery dating from the late 12th–14th century, fired clay and a single piece of animal bone were recovered from deposit (39). Environmental sample <11> taken from deposit (39) produced barley, cereal grains, hazel shell, charcoal, black porous 'cokey' material, burnt/fired clay, small fragments of coal and open-country species of snail.

The excavated portion of pit [40] demonstrated that it was irregular in plan and measured 0.90m wide by 0.32m deep, and that it contained a single fill (41) consisting of mid-yellowish brown clayey silt (Fig. 10, section 2). No finds were recovered from the pit.

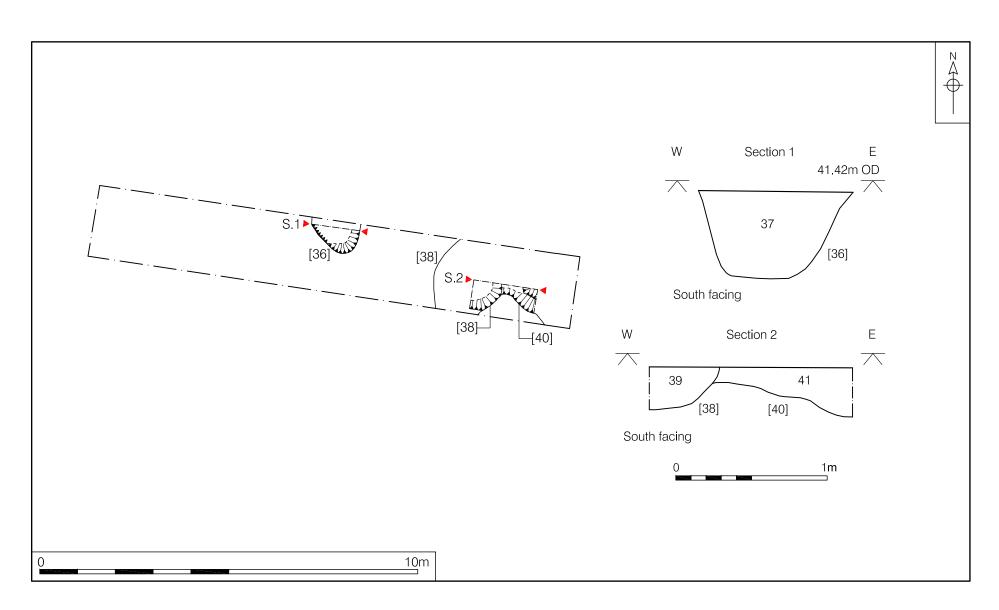


Figure 10. Trench 8, plan and sections. Scale 1:100 and 1:25

6.0 THE ARCHAEOLOGICAL MATERIAL

Finds were processed and recorded by count and weight and information entered onto a Microsoft Excel spreadsheet outlining broad dating. Each material type has been considered separately and is presented below. A list of finds in context number order can be found in Appendix 2a.

6.1 Roman Pottery

by Andrew Peachey

6.1.1 Introduction

Excavations recovered a total of 98 sherds (497g) of Roman pottery in a highly fragmented and moderately abraded condition (Appendix 3). The Roman pottery is entirely comprised of locally produced coarse wares that based on limited diagnostic sherds date to the mid-late 1st century AD, potentially associated with a low scale, expedient domestic kiln.

6.1.2 Methodology

The pottery was quantified by sherd count and weight (g), with fabrics analysed at x20 magnification, and all data entered into an Excel spreadsheet that forms part of the site archive. The pottery fabrics are described, below, and quantified (Table 1)

GRS1 Sandy grey ware. Inclusions comprise common, moderately-sorted quartz (0.1-0.5mm), with sparse iron rich grains/ore and flint (<3mm). Hard with an abrasive feel. Generic Roman coarse ware, produced locally.

OXS1 Sandy orange ware. Inclusions comprise common, moderately-sorted quartz (0.1-0.5mm), with sparse iron rich grains/ore and flint (<3mm). Hard with an abrasive feel. Generic Roman coarse ware, produced locally.

Fabric	Sherd Count	Weight (g)
GRS1	74	283
OXS1	24	214
Total	98	497

Table 1: Quantification of Roman fabric types

6.1.3 Commentary

Ditch [22] and post-hole [24] contained small groups of *c.* 40-45 sherds of locally-produced coarse ware, with the former including GRS1 and OXS1, and the latter only GRS1, with further sparse GRS1 sherds contained in Pit [28]. Medium sand-tempered fabrics such as these are generic in East Anglia in the Roman period, but such are the similarities between and within the GRS1 and OXS1 in this assemblage in terms of composition, coarseness and sorting, it appears highly likely they originate from the same kiln. Furthermore the OXS1 may be a misfired version of GRS1, suggesting production in the local vicinity. Ditch [22] (23) contained the highly fragmented remnants of two small jars with everted bead rims in GRS1 and OXS1, with identical rim diameters and profiles, further supporting a common kiln source close to the site. Also in GRS1, post-hole [24] (25) contained body sherds from a tall-necked bowl with a plain neck cordon and carinated body,

comparable to vessels at Fison Way, Thetford (Gregory, 1991, figs. 141.46 &143.84-5) that indicate the fabrics were probably produced in the mid-to late 1st century AD, potentially by an expedient domestic or temporary kiln rather than a provenanced industry in the region.

6.2 Post-Roman Pottery

by Sue Anderson

6.2.1 Introduction

Nineteen sherds of pottery weighing 156g were collected from seven contexts. Table 2 shows the quantification by fabric; a summary catalogue by context is included as Appendix 4.

Description	Fabric	Code	No	Wt(g)	MNV	Eve
St. Neot's Ware	STNE	2.70	1	1	1	
Early medieval ware (general)	EMW	3.10	7	59	7	0.19
Medieval coarsewares (general)	MCW	3.20	6	43	3	
Grimston-type coarseware	GRCW	3.22	1	6	1	
Waveney Valley coarsewares	WVCW	3.41	1	35	1	0.05
Unprovenanced glazed	UPG	4.00	2	5	2	
Grimston Ware	GRIM	4.10	1	7	1	
Totals			19	156	16	0.24

Table 2. Pottery quantification by fabric

6.2.2 Methodology

Quantification was carried out using sherd count, weight and estimated vessel equivalent (eve). The minimum number of vessels (MNV) within each context was also recorded, but cross-fitting was not attempted unless particularly distinctive vessels were observed in more than one context. A full quantification by fabric, context and feature is available in archive. All fabric codes were assigned from the author's post-Roman fabric series, which includes East Anglian and Midlands fabrics, as well as imported wares. Local wares were identified following Jennings (1981). Form terminology for medieval pottery is based on MPRG (1998). Recording uses a system of letters for fabric codes together with number codes for ease of sorting in database format. The results were input directly onto an MS Access database.

6.2.3 Pottery by period

6.2.3.1 Late Saxon

A single, abraded body sherd of St Neot's Ware was found in ditch fill (4), in association with an early medieval sherd.

6.2.3.2 Early medieval

Handmade wares of early medieval date (11th–12th/13th century) were relatively frequent in this group. They were typically in a fine to medium sandy fabric with sparse ferrous and flint inclusions, oxidised on one or both surfaces. Seven sherds represented thirteen vessels. Three everted jar rims were recovered from ditch fills (4) and (45), two with squared ends. All other fragments were undecorated body sherds.

6.2.3.3 Medieval

Eight sherds of five medieval coarseware vessels were present in fine and medium sandy fabrics. Only one rim was present: a square beaded bowl rim in Waveney Valley coarseware (13th/14th-century type) from ditch fill (45).

Two green-glazed body sherds in a medium sandy fabric with occasional coarse inclusions were unprovenanced but probably locally-made. Similar wares have been identified in Attleborough (Anderson 2011 and 2014). Both were oxidised to an orange colour externally and were grey internally. A body sherd of Grimston Ware was also recovered.

6.2.4 Pottery by context

A summary of the pottery by feature is provided in Table 3, below.

Trench	Context	Description	Fabric	Spotdate
3	16	Fill of ditch [15]	GRIM	13th-14th c.
5	34	Fill of ditch [33]	MCW	12th-14th c.
5	45	Fill of ditch [44]	EMW, MCW, WVCW	13th-14th c.
6	4	Fill of ditch [3]	STNE, EMW	11th-12th c.
8	37	Fill of Pit [36]	EMW	11th-12th c.
8	39	Fill of Pit [38]	EMW, GRCW, MCW, UPG	13th-14th c.
8	48	Unstratified	UPG	13th-14th c.

Table 3. Pottery types present by context

Earlier medieval pottery was recovered from Trenches 5, 6 and 8 but was residual in two contexts. Most of the features contained pottery which could be dated to the 13th/14th centuries, but some was abraded and may be residual.

6.2.5 Discussion

Overall the assemblage provides evidence for possible continuity of use of the site between the early and high medieval periods. No later pottery was recovered. The early medieval pottery and some of the wheelmade coarsewares were in a similar fabric and may represent a local production site. The presence of a Suffolk fabric and forms in the later part of the medieval period may indicate that the local pottery was no longer in business. Similar pottery fabrics have been identified in Attleborough. The assemblage is too small for further interpretation but it is a useful addition to the current corpus of material from south Norfolk, as this area has produced very little medieval pottery from rural sites in recent years.

6.3 Fired Clay

by Sue Anderson

Ten fragments (27g) of fired clay were recovered from four contexts (Appendix 5).

All fragments were in medium sandy fabrics with common coarse rounded chalk inclusions. Most pieces were orange with cream streaks. Fragments from ditch fill (4) had one flat surface each. None is diagnostic, but chalk-tempered clays were commonly used to form oven domes in the medieval period.

6.4 Metal Finds

by Rebecca Sillwood

A single iron nail was recovered from ditch fill (32) in Trench 5. The piece is small, measuring only 22mm in apparently complete length, and with a square head measuring 11mm x 10mm. The date for this object if not certain, but given the presence of mainly early medieval pottery on this site, it is possible that this nail is of a similar date. Given the size of this piece it is also possible that this a horseshoe nail.

6.5 Flint

by Andrew Peachey

The excavation recovered two pieces (15g) of struck flint, with solitary debitage flakes found in ditch [22] (23) and post-hole [24] (25).

Both pieces are tertiary flakes of mottled dark grey-brown flint with blade-like proportions. They exhibit the characteristics of flakes removed from a single platform core using soft-hammer percussion, typical of the technology of the earlier Neolithic period, (although this interpretation is based on very limited evidence).

6.6 Stone

by Rebecca Sillwood

Six pieces of grey vesicular lava, weighing 59g were recovered from a single unstratified context (48) from Trench 8. The pieces are probably the remains of a quernstone, or more than one quernstone, although this cannot be properly verified due to the fragmented nature of the pieces, and because there are no remaining grinding surfaces.

The lava is likely to have been imported from the Rhineland region of Germany, and this could have happened at any point from the later Iron Age period through to the Roman or medieval periods. Given that the area of the trench from which the pieces came produced predominantly medieval material, it seems reasonable to consider that the quernstone may also have been used in that period.

6.7 Animal Bone

by Julie Curl

6.7.1 Methodology

The bone in this assemblage consisted of hand-collected remains. All of the bone was identified to species wherever possible using a variety of comparative reference material. Where a complete identification to species was not possible, bone was assigned to a group, such as 'sheep/goat' or 'mammal' whenever possible. The bones were recorded using a modified version of guidelines described in Davis (1992).

Any butchering was recorded, noting the type of butchering, such as cut, chopped or sawn and location of butchering. A note was also made of any burnt bone. Pathologies were also recorded with the type of injury or disease, the element

affected and the location on the bone. Other modifications were also recorded, such as any possible industrial or craft working waste or animal gnawing.

Weights and total number of pieces counts were also taken for each context, along with the number of pieces for each individual species present (NISP) and these appear in the appendix. All of the information was input directly into an Excel catalogue. A summary table of the faunal catalogue is in a table in the appendix and the full catalogue is available in the digital archive.

6.7.2 The faunal assemblage

6.7.2.1 Quantification, provenance and preservation

A total of 180g of bone, consisting of 17 pieces, was recovered. (Appendix 6). The faunal remains were produced from five contexts, four of which were ditch fills and one pit fill. Some of the bone was recovered with finds of a medieval date, while some elements were found without datable artefacts. Quantification of the assemblage by feature type, feature number and fragment count can be seen in Table 4 and by weight in Table 5.

Feature No	Feature Ty fragment	Feature Total	
	Ditch	Pit	
15	4		4
3	3		3
31	1		1
33	8		8
38		1	1
Feature Total	16	1	17

Table 4. Quantification of the faunal assemblage by feature number, feature type and fragment count

The assemblage is in a reasonable condition, although quite heavily fragmented from butchering and wear. Some of the bone from both the ditch fills and the pit deposit showed invertebrate or root damage and some erosion. No burnt remains were seen and there was no evidence of canid gnawing in this assemblage.

Feature No	Feature T	Feature Total	
	Ditch	Pit	
15	17g		17g
3	6g		6g
31	58g		58g
33	93g		93g
38		6g	6g
Feature Type Total	174g	6g	180g

Table 5. Quantification of the faunal assemblage by feature number, feature type and weight in grams

6.7.3 Species and modifications

Two species were positively identified in this assemblage. The sheep/goat were seen in both the pit [38], fill (39) and in the ditch [15], fill (16), while the cattle were only recorded from ditches [31], fill (32) and from [33], fill (35). Quantification of the species by feature type and NISP can be seen in Table 6.

Species	Feature	e Type and NISP	Species Total		
	Ditch	Pit			
Cattle	5		5		
Mammal	7		7		
Sheep/goat	4	1	5		
Feature Total	16	1	17		

Table 6. Quantification of the faunal assemblage by species, feature type and NISP

Butchering was noted on both the cattle and sheep/goat, with heavier chops from dismemberment and preparation of cuts and some fine knife cuts were seen on the sheep/goat scapula from ditch [15], fill (16) from removal of the meat. A fine knife cut was also noted on the cattle metatarsal from ditch [33], fill (35), which probably occurred when the young animal was skinned.

No estimation of stature could be made for any species as the bone was too heavily fragmented and the sample of bone too small for any meaningful analysis. However, the size of the small and slender cattle metatarsal would suggest a female of a light build.

6.7.4 Conclusions

This is a very small assemblage that appears to be largely derived from butchering and food waste of domestic stock animals. One of the cattle bones showed some skinning evidence from the processing stage, but the chop on the bone suggests it might have also been used for marrow. The remains and species are typical of many small assemblages of most periods where the primary source of meat was from domestic stock.

6.8 Finds Conclusions

Two main periods are represented in the finds assemblage from this site - Roman and medieval. A small amount of possible prehistoric flint found with the Roman pottery is likely to be residual. A piece of St Neot's ware (of Late Saxon date) was found with pottery of 11th–12th century date, and is also likely to be residual in context.

The Roman activity appears to be confined to the 1st century AD, relatively early in the Roman period in Britain.

The medieval material provides evidence of continuous activity from the 11th to the 14th centuries, with an absence of later material.

Although the number of individual finds recovered was low, the material from the site at Old Buckenham provides an homogeneous group, uncontaminated by any material later than 14th century.

7.0 ENVIRONMENTAL EVIDENCE

by Val Fryer

7.1 Plant Macrofossils

7.1.1 Introduction and method statement

Evaluation excavations at Old Buckenham, undertaken by NPS Archaeology, recorded pits, ditches and other discrete features possibly associated with either the Augustinian Priory or Old Buckenham Castle. Samples for the evaluation of the content and preservation of the plant macrofossil assemblages were taken and eleven were submitted for assessment.

The samples were processed by manual water flotation/washover and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x16 and the plant macrofossils and other remains noted are listed in Appendix 7. Nomenclature within the table follows Stace (1997). All plant remains were charred. Modern roots and seeds were also recorded.

The non-floating residues were collected in a 1mm mesh sieve and will be sorted when dry. Any artefacts/ecofacts will be retained for further specialist analysis.

7.1.2 Results

Cereal grains and seeds are present at a low to moderate density within all but two assemblages. Preservation is generally quite poor, with a large proportion of the grains being severely puffed and distorted, almost certainly as a result of exposure to extremely high temperatures during combustion. In addition, many macrofossils are heavily coated with mineral encrustations and small grits, which may have precluded full retrieval during processing.

Oat (*Avena* sp.), barley (*Hordeum* sp.), rye (*Secale cereale*) and wheat (*Triticum* sp.) grains are recorded along with a number of grains which are too poorly preserved for close identification. Cereal chaff is all but absent, although two glume bases of probable emmer (*T. dicoccum*) type are recorded in the assemblage from Sample <6> ditch [22]. However, it is thought most likely that these are residual within the ditch fill, as the production of emmer had largely ceased by the end of the Roman period. Two possible cotyledon fragments of indeterminate large legumes (Fabaceae) are present within the assemblages from Samples <3> ditch [3] and <10> pit [36].

Weed seeds are rare, occurring within only four of the assemblages studied. With the exception of a single possible flax (*Linum usitatissimum*) type seed, all are of common segetal weeds including brome (*Bromus* sp.), small legumes (Fabaceae), goosegrass (*Galium aparine*), grasses (Poaceae) and dock (*Rumex* sp.). Small fragments of hazel (*Corylus avellana*) nutshell are present within Samples <3> and <11> pit [38].

Charcoal/charred wood fragments are present throughout, although rarely at a high density. Many are heavily coated with mineral concretions and it is also noted that the material with Sample <3> displays evidence of extreme temperatures of combustion in the form of flaking and/or puffing. Occasional puffed fragments are also fringed with small tarry droplets. Other plant macrofossils are scarce, but

root/stem fragments (including pieces of heather (Ericaceae) stem) are recorded along with indeterminate culm nodes and inflorescence fragments.

Other remains are also scarce. The black porous residues are mostly thought to be derived from the high temperature combustion of organic remains including cereal grains. Bone fragments (some of which are burnt/calcined) are also recorded along with possible fragments of burnt daub.

Although specific sieving for molluscan remains was not undertaken, shells of a number of terrestrial and marsh/freshwater slum species are recorded in all but three assemblages. Whilst some specimens are moderately well preserved and possibly intrusive within the feature fills, others are bleached and abraded and are almost certainly contemporary. Open-country species (particularly those commonly found within areas of short-turfed grassland) are predominant, but the presence of marsh/freshwater slum species may indicate that certain features were damp or semi-permanently water-filled.

7.1.3 Conclusions and recommendations for further work

In summary, the limited nature of the current assemblages almost certainly indicates that the remains are largely derived from scattered detritus, much of which was accidentally incorporated within the feature fills. The possible exception to this is Sample <3>, which appears to contain a small but deliberate deposit of hearth or midden waste, including cereals which may have been accidentally charred during culinary preparation. The paucity of smaller macrofossils (including chaff and seeds) may in part be due to mineral encrustation, an issue which can be rectified at the processing stage if further sampling is anticipated.

Although the current assemblages are generally quite sparse, they clearly illustrate that charred plant macrofossils are preserved within the archaeological horizon in this historically important area of Old Buckenham. Therefore, if further interventions are planned, it is strongly recommended that additional plant macrofossil samples of approximately 20–40 litres in volume are taken from all dated and well-sealed features recorded during excavation.

8.0 CONCLUSIONS

Trial trenching at Abbey Road, Old Buckenham to test the geophysical evidence has demonstrated that the linear magnetic anomalies recorded during the geophysical survey represent significant archaeological features and deposits in the form of rectangular ditched enclosures or land divisions. The enclosures were aligned northwest—southeast and so almost perpendicular to Abbey Road, although it should be considered that the alignment of Abbey Road may have changed over time. None of the trenches were positioned close to Abbey Road itself, therefore it was not possible to determine whether or not there was associated historical roadside settlement.

The rectangular shape and the double-ditched form of the enclosures appear to have prehistoric or Roman characteristics. Close parallels for the shape, form and the alignment of the double-ditched enclosures have been recorded during the National Mapping Programme covering Norfolk's Coastal Zone at Hemsby (NHER 27337) and Hickling (NHER 45218), where similar enclosures were interpreted as probably Bronze Age or late prehistoric in date (Albone, Massey and Tremlett 2007, 57), although both of these examples are located a significant distance from Old Buckenham. The finds evidence, however, does not support interpretation of the Old Buckenham enclosures as prehistoric in date—the two prehistoric worked flints recorded in Trench 2 possibly originated in the earlier Neolithic period, but were residual finds in Roman features dated to the 1st century AD.

Trench 1 in the access route proved the existence of north–south aligned geophysical anomaly 'M' by the identification of ditch [46].

Trench 2 was placed to test geophysical anomalies 'C' and 'D' and the archaeological evidence observed corresponds to the geophysical results (Figs 2 and 4). The Roman features and deposits match anomaly 'C' (Fig. 2). Although 'C' shares the same alignment and lies parallel to 'D', its trace across the site was fainter. It was noted that the archaeological features and deposits recorded in Trenches 2 and 7 needed to be weathered before they became visible at the machined level to the surface of the natural.

A small group of potentially intercut Roman features—pits [24] and [28] and ditch [22]—were recorded in Trench 2 (Fig. 4, sections 1 and 2) in the location of 'C'. These features produced a total of 98 sherds of mid- to late 1st-century AD local coarse wares. The environmental evidence from fill (23) of ditch [22] produced glume bases of probable emmer, a kind of wheat mainly used for fodder (it is believed that the production of emmer had largely ceased by the end of the Roman period).

Two ditches [18] and [20] were recorded in the southeast of Trench 2, which was sited over geophysical anomaly 'D'. One [18] of the ditches shares the same alignment as 'D'.

Although evidence of Roman-period activity was recorded in Trench 2, no further Roman finds were collected from the other seven trenches; an appraisal of data held in the NHER close to the evaluation site does not reveal a significant Roman presence. A broader range of finds indicative of medieval activity was recovered from Trenches 3, 5, 6 and 8).

Trench 3 was placed to intersect geophysical anomaly 'G' (Fig. 2), which most likely corresponds on the ground to ditch [13] (Fig. 5). Anomaly 'G' lies perpendicular to, and does not appear to extend beyond 'D' (Fig. 2), giving the impression that these linear features were contemporary. No finds were recovered from ditch [13]. A very large pit [15], which was not identified in the geophysical survey, was found to the southwest of ditch [13] (Figs. 2 and 5). This demonstrates that the geophysical results should not be used as a definitive guide as to the overall density of archaeological remains at the site. A single sherd of 13th/14th-century glazed Grimston ware was recovered from fill (16) in pit [15].

Four intercut ditches and potential structural evidence were recorded in Trench 5. The ditches seem to correspond to geophysical anomaly 'H' (which lies perpendicular to 'D' and parallel to 'I'). On the whole, anomaly 'H' appears to be wide with an irregular curve at its east end (Fig. 2). As noted above for Trench 3, it is possible that the geophysical survey did not detect all of the archaeological features, as ditch alignments recorded in Trench 5 differ from the geophysical interpretations (Figs 2 and 7). A total of 10 pottery sherds with a date range between the 11th and 14th centuries was recovered from the ditches.

Trench 6 was designed to intersect geophysical anomaly 'I' (Fig. 2), and ditch [3] corresponds with this feature. Fill (4) in ditch [3] produced a sherd of St. Neot's ware (AD 850-1150), the earliest of the Late Saxon—early medieval pottery from the site. Amongst evidence of oats, barley, rye, wheat and cereal grains, the environmental sample taken from deposit (4) also produced evidence of flax. To the southwest of the site is a possible medieval—post-medieval linen or flax manufacturing site (NHER 9221), but the evidence for flax on the site is too scant to posit a connection. More certainly, ditch [3] contained charcoal/charred wood fragments evident of extreme combustion temperatures, along with charred cereals and other burnt detritus including bone. The inference is that these ecofacts represent deposition of hearth or midden waste, and thereby the potential for human settlement activity close by.

Trench 8 was placed to intersect 'E2' (Fig. 2), a group of discrete anomalies within the enclosures to test whether they were of archaeological or natural origin. The results from the trial trench revealed the features as pits, two of which were intercut (Fig. 10). Five sherds of pottery, with a date range between the 11th and 12th centuries were recovered from the pits.

Cereal grains and weed seeds were generally recovered in small quantities from the environmental soil samples, although this may in part have been due to masking by mineral encrustation. Many of the grains have been charred at high temperatures, and other burned material such as daub and bone was also retrieved. The restricted nature of the environmental assemblage indicates that the remains derive from scattered detritus that became incorporated incidentally into the feature fills.

Many of the environmental samples taken during the evaluation contained snail shells, predominantly of open-country species, but also of woodland-/shade-loving species. Snails are specific to particular habitats and the molluscan evidence can be taken to suggest that, by the medieval period, the site was probably located in an area of open, arable land with water retained in nearby ditches.

A sustained period of use during the Roman and medieval periods would almost certainly have left physical traces of divisions and boundaries in the landscape. It appears that the results of the trial trench evaluation largely uphold this view, although definitive dating of many of the ditched enclosures to the Roman or medieval period remains ambiguous at this stage.

Recommendations for mitigation work (if required based on the evidence presented in this report) will be made by Norfolk Historic Environment Service.

Acknowledgements

The author would like to thank Richard Pollard of NPS Property Consultants Ltd for his help throughout the project. Karin Heap, head teacher of Old Buckenham School, is thanked for her interest and for organising a school field trip. The author would like to thank Nigel Byram, James Fish and Liz Matthews for their work on site.

The trenches were set out by Adam Harper of the NPS Land Survey Team.

The machining and reinstatement of trenches was undertaken by Bryn Williams Builders and Civil Engineering.

The author would like to thank Norfolk Historic Environment Service for the site visit, which proved to be informative about the local surroundings.

The finds were processed by Jean Weetman and recorded by Louise Weetman. The Roman pottery and worked flint were analysed by Andrew Peachey and the post-Roman pottery and fired clay by Sue Anderson. The animal bone was reported on by Julie Curl. The metalwork and stone were written up by Rebecca Sillwood. The author would like to thank Rob and Val Fryer for the quick turnaround of the processing and the analysis work of the environmental samples.

The digitising of plans and sections was undertaken by Holly Payne. The plans, sections and report were formatted and illustrated by David Dobson. Editing of the report was undertaken by Jayne Bown, and the text was revised by Andrew Crowson. The project was overseen by David Adams.

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Appendix 1a: Context Summary

Context	Category	Fill Of	Description Period		Trench
1	Deposit		Topsoil	Modern	1 - 8
2	Deposit		Subsoil	Modern	1 - 8
3	Cut		Ditch	Late Saxon / medieval	6
4	Deposit	3	Fill of ditch [3]	Late Saxon / medieval	6
5	Cut		Ditch	Unknown	5
6	Deposit	5	Fill of ditch [5]	Unknown	5
7	Deposit	5	Fill of ditch [5]	Unknown	5
8	Cut		Post-hole	Unknown	5
9	Deposit	8	Fill of post-hole [8]	Unknown	5
10	Deposit	8	Fill of post-hole [8]	Unknown	5
11	Cut		Ditch	Unknown	5
12	Deposit	11	Fill of ditch [11]	Unknown	5
13	Cut		Ditch	Unknown	3
14	Deposit	13	Fill of ditch [13]	Unknown	3
15	Cut		Ditch	Medieval	3
16	Deposit	15	Fill of ditch [15]	Medieval	3
17	Deposit	15	Fill of ditch [15]	Medieval	3
18	Cut		Ditch	Unknown	2
19	Deposit	18	Fill of ditch [18]	Unknown	2
20	Cut		Ditch	Unknown	2
21	Deposit	20	Fill of ditch [20]	Unknown	2
22	Cut		Ditch	Unknown	2
23	Deposit	22	Fill of ditch [22]	Roman	2
24	Cut		Post-hole/pit	Roman	2
25	Deposit	8	Fill of post-hole/pit [24]	Roman	2
26	Deposit	22	Fill of ditch [22]	Roman	2
27	Deposit	22	Fill of ditch [22]	Roman	2
28	Cut		Pit	Roman	2
29	Deposit	28	Fill of pit [28]	Roman	2
30	Deposit	5	Deposit associated with [5]	Unknown	5
31	Cut		Ditch	Medieval/Post- Med.	5
32	Deposit	31	Fill of ditch [31]	Medieval/Post- Med.	5
33	Cut		Ditch	Medieval	5
34	Deposit	33	Fill of ditch [33]	Medieval	5
35	Deposit	33	Fill of ditch [33]	Medieval	5
36	Cut		Pit	Medieval	8
37	Deposit	36	Fill of pit [36]	Medieval	8

Context	Category	Fill Of	Description	Period	Trench
38	Cut		Pit	Medieval	8
39	Deposit	38	Fill of pit [38]	Medieval	8
40	Cut		Pit	Unknown	8
41	Deposit	40	Fill of pit [40]	Unknown	8
42	Cut		Ditch	Unknown	4
43	Deposit	42	Fill of ditch [42]	Unknown	4
44	Cut		Ditch	Medieval	5
45	Deposit	44	Fill of ditch [44]	Medieval	5
46	Cut		Ditch	Unknown	1
47	Deposit	46	Fill of ditch [46]	Unknown	1
48	Deposit		Unstratified	Medieval	8
49	Cut		Ditch	Unknown	7
50	Deposit	49	Fill of [49]	Unknown	7

Appendix 1b: Feature Summary

Period	Category	Total
Roman	Pit	1
	Post-hole/pit	1
Late Saxon/medieval	Ditch	1
Medieval	Ditch	3
	Pit	2
Medieval/post-medieval	Ditch	1
Uncertain	Ditch	9
	Post-hole	1
	Pit	1

Appendix 2a: Finds by Context

Context	Material	Qty	Wt	Period	Notes
4	Animal Bone	3	6g	Unknown	
4	Fired Clay	4	13g	Unknown	
4	Pottery	1	1g	Late Saxon	850 - 1150
4	Pottery	1	12g	Medieval	11th - 12th c.
16	Animal Bone	4	17g	Unknown	
16	Pottery	1	7g	Medieval	12th - 14th c.
23	Flint – Struck	1	7g	Unknown	
23	Pottery	43	280g	Roman	
25	Flint – Struck	1	8g	Unknown	
25	Pottery	46	207g	Roman	
29	Pottery	9	10g	Roman	
32	Animal Bone	1	58g	Unknown	
32	Iron	1	4g	Med./Post-Med.	Nail
34	Pottery	4	20g	Medieval	12th - 14th c.
35	Animal Bone	8	93g	Unknown	
37	Fired Clay	4	9g	Unknown	
37	Pottery	1	1g	Medieval	11th - 12th c.
39	Animal Bone	1	6g	Unknown	
39	Fired Clay	1	4g	Unknown	
39	Pottery	4	28g	Medieval	11th - 14th c.
45	Fired Clay	1	1g	Unknown	
45	Pottery	6	84g	Medieval	11th - 14th c.
48	Pottery	1	3g	Medieval	12th - 14th c.
48	Stone	6	59g	Unknown	

Appendix 2b: Finds Summary

Period	Material	Total
Roman	Pottery	98
Late Saxon	Pottery	1
Medieval	Pottery	18
Med./Post-Med.	Iron	1
Uncertain	Animal Bone	17
	Fired Clay	10
	Flint – Struck	2
	Stone	6

Appendix 3: Roman Pottery Catalogue

Context	Description	Total	Total Pottery GRS1			OXS1		OXS1		OXS1		OXS1		OXS1		OXS1		OXS1		OXS1		OXS1		OXS1		Comment
		No.	Wt.	No.	Wt.	No.	Wt.																			
23	Fill of ditch [22]	43	280g	19	66	24	214	small jars with everted bead rims in both GRS1 and OXS1, both with d=8 (R.EVE: 0.1); highly fragmented but similarities in form and fabric suggest they may be associated with local domestic coarseware production																		
25	Fill of post-hole/pit [24]	46	207g	46	207			body sherds of tall-necked bowl with plain neck cordon and carinated body, mid-late 1st C AD (Gregory 1991: figs.141.46 &143.84-5)																		
29	Fill of pit [28]	9	10g	9	10			1																		
		98	497g	74	283	24	214																			

Appendix 4: Post-Roman Pottery Catalogue

Context	Fabric	Form	Rim	No	Wt/g	Spotdate
4	EMW	jar	wedged	1	12	11th-12th c.
4	STNE			1	1	850-1150
16	GRIM			1	7	L.12th-14th c.
34	MCW			4	20	L.12th-14th c.
37	EMW			1	1	11th-12th c.
39	GRCW			1	6	11th-M.13th c.
39	UPG			1	2	L.12th-14th c.
39	EMW			1	2	11th-12th c.
39	MCW			1	18	L.12th-14th c.
45	EMW			2	8	11th-12th c.
45	EMW	jar	simple everted	1	8	11th-12th c.
45	EMW	jar	flaring	1	28	11th-12th c.
45	MCW			1	5	L.12th-14th c.
45	WVCW	bowl	square beaded	1	35	13th-14th c.
48	UPG			1	3	L.12th-14th c.

Appendix 5: Fired Clay Catalogue

Context	Fabric	No	Wt/g	Colour	Surface	Abrasion	Notes
4	msc	1	9	buff	flat		14mm thick
4	msc	3	4	orange	1 flattish surface on each		>10mm thick
37	msc	4	9	orange/cream	none surviving	+	
39	msc	1	4	orange			
45	msc	1	1	orange		+	

Appendix 6: Animal Bone Catalogue

Context	Feature No	Ctxt Qty	Wt (g)	Species	NISP	Ad	Juv	Neo	MNI	Element range	Butchery	Ch	С	Comments	
4	3	3	6.00	Mammal	3					vert					
16	15	4	17.00	Sheep/goat	4	4				mand, t, scap	c, ch	1	1	chopped and finely cut scapula, mandible, lower molar 2	
32	31	1	58.00	Cattle	1	1				ul	ch	1		proximal radius	
35	33	8	93.00	Cattle	4		4			II, scap	c, ch	2	1	small slender metatarsal, scapula in three pieces	
35	33			Mammal	4					frags				small fragments	
39	38	1	6.00	Sheep/goat	1	1				scap	ch	1			

Key:

NISP = Number of Individual Species elements Present
Age – a = adult, j = juvenile (older than 1 month)
Element range: ul = upper limb, II = lower limb, scap = scapula, t = tooth, mand = mandible, vert = vertebrae

Butchering = c = cut, ch = chopped

Appendix 7: Environmental Evidence

Sample No.	1	2	3	4	5	6	7	8	9	10	11
Context No.	16	12	4	17	45	23	25	32	47	37	39
Feature No.	15	11	3	15	44	22	24	31	46	36	38
Feature type	Pit	Ditch	Ditch	Pit	Ditch	Ditch	Pit	Ditch	Ditch	Pit	Pit
Cereals and other potential food plant remains										<u> </u>	
Avena sp. (grains)	xcf		xcf								
Hordeum sp. (grains)			xcf			х			х	х	xcf
Secale cereale L. (grains)			xcf						xcf		
Triticum sp. (grains)	х		xx			xcf			х		
T. dicoccum Schubl (glume bases)						xcf					
Cereal indet. (grains)	xfg		xxx	Χ	х	х	Χ		х		Х
Large Fabaceae indet.			xcffg							xcffg	
Herbs											
Bromus sp.						xcf			xcf		
Fabaceae indet.	Х		х								<u> </u>
Galium aparine L.			х								
Linum usitatissimum L.			xcf								
Large Poaceae indet.			х			х					<u> </u>
Polygonaceae indet.									х		
Rumex sp.	Х										
Tree/shrub macrofossils											
Corylus avellana L.			х								xcf
Other plant macrofossils											
Charcoal <2mm	XX	xx	xxxx	XX	xxx	xxx	XX	х	xxx	х	xx
Charcoal >2mm	Х	xxx	xxxx	XX	xxx	xxxx	XX		xxx	х	xxx
Charcoal >5mm		x	xxx	Х	х	xx	Х		xx	х	xxx

Sample No.	1	2	3	4	5	6	7	8	9	10	11
Charcoal >10mm						Х			x		х
Charred root/stem	х	Х	х	Х	х			х		х	х
Ericaceae indet. (stem)	x			xcf							
Indet. culm node						Х					
Indet. fruit stone/nutshell fragment			xcf								
Indet. inflorescence frag.			х								
Indet. seeds	х		х				х				
Other remains											
Black porous 'cokey' material			xxx		XX	XX		х	х	х	х
Bone			x xb	Х		Х			х	х	
Burnt ? Daub						Х			х		
Burnt/fired clay		Х	х	Х	х		х		х		х
?Mineralised/faecal material				Х							
Small coal frags.	x							х			х
Small mammal/amphibian bones	x	Х	х	Х	x xb						
Mollusc shells											
Woodland/shade loving species											
Aegopinella sp.				Х				х			
Carychium sp.			х								
Oxychilus sp.			х								
Vitrea sp.				Х							
Zonitidae indet.	х										
Open country species											
Helicidae indet.	x										
Vallonia sp.	xx	Х		XX				х		х	х
V. costata	x			Х							
V. excentrica	xcf										х

Sample No.	1	2	3	4	5	6	7	8	9	10	11
V. pulchella		x	xcf		xcf					x	
Catholic species											
Ceapaea sp.		x									
Cochlicopa sp.	х	x	х	x	x						
Trichia hispida group	х	х	х	х	х			х		х	
Marsh/freshwater slum species											
Anisus leucostoma											x xb
Lymnaea sp.		х			х			х		х	х
Sample volume (litres)	15	15	16	14	15	16	14	12	15	17	15
Volume of flot (litres)	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Key to Table

x = 1-10 specimens xx = 11-50 specimens xxx = 51-100 specimens xxxx = 100+ specimens cf = compare fg = fragment b = burnt ph = post hole

Appendix 8: OASIS Report Summary

OASIS DATA COLLECTION FORM: England

List of Projects □ | Manage Projects | Search Projects | New project | Change your details | HER coverage | Change country | Log out

Printable version

OASIS ID: norfolka1-190644

Project details

Project name Abbey Road, Old Buckenham

of the project

Short description An archaeological evaluation was conducted by NPS Archaeology in September and October 2014 for NPS Property Consultants Ltd ahead of an application for planning permission for the development of an education establishment at Old Buckenham School, Norfolk. A geophysical (magnetometer) survey of the site was conducted in August 2014 and revealed evidence of linear features. possibly forming part of a double ditched enclosure or land divisions indicative of settlement activity. Based on the geophysical results; a total of eight trial trenches were excavated, all of which produced archaeological features and deposits. The presence archaeological features and deposits revealed that cultural activity was present throughout the site. The ditched enclosure boundaries are predominately dated to the medieval periods of the 11th-14thcenturies, however, the presence of Romano-British pottery confuses their interpretation as being of this date. The Romano-British pottery recovered is dated to the 1st century AD. The rectilinear form of the enclosures or land divisions are probably more indicative of prehistoric or Romano-British features. however the amount of known medieval activity in close proximity of the site may suggest a planned medieval landscape away from the historical core of Old Buckenham.

Start: 25-09-2014 End: 06-10-2014 Project dates

Previous/future

work

No / Not known

Any associated project reference codes

ENF135130 - HER event no.

Type of project Field evaluation

Site status None

Current Land use Cultivated Land 3 - Operations to a depth more than 0.25m

Monument type PIT Roman

FEATURE Roman Monument type Monument type **DITCH Medieval** PIT Medieval Monument type

DITCH Post Medieval Monument type **DITCH Uncertain** Monument type

POST-HOLE Uncertain Monument type

PIT Uncertain Monument type

Significant Finds POT Roman

Significant Finds POT Early Medieval

Significant Finds POT Medieval Significant Finds FLINT Uncertain

Methods & techniques "Targeted Trenches"

type

Development Public building (e.g. school, church, hospital, medical centre, law courts etc.)

National Planning Policy Framework - NPPF Prompt

Position in the Pre-application

planning process

Project location

Country England

Site location NORFOLK BRECKLAND OLD BUCKENHAM Abbey Road, Old Buckenham

Study area 3.30 Hectares

60673 29191 60673 00 00 N 29191 00 00 E Point Site coordinates

Project creators

Name of NPS Archaeology

Organisation

originator

Project brief Norfolk Historic Environment Service

Project design originator

NPS Archaeology

Project

director/manager

Jayne Bown

Project supervisor John Ames

Type of

sponsor/funding

body

Local Authority

Project archives

Physical Archive

recipient

Norfolk Museums Service

Physical Contents "Animal Bones", "Ceramics", "Environmental", "Metal", "Worked stone/lithics"

Digital Archive recipient

NPS Archaeology

Digital Contents

"Animal Bones", "Ceramics", "Environmental", "Metal", "Worked stone/lithics"

Digital Media available

"Images raster / digital photography", "Images vector", "Spreadsheets", "Survey", "Text"

Paper Archive recipient

Norfolk Museums Service

Paper Contents

"Animal Bones", "Ceramics", "Environmental", "Metal", "Worked stone/lithics"

Paper Media available

"Aerial Photograph", "Context sheet", "Photograph", "Plan", "Report", "Section"

Project bibliography 1

Grey literature (unpublished document/manuscript)

Publication type

Title Archaeological Trial Trench Evaluation at land off Abbey Road, Old

Buckenham, Norfolk

Author(s)/Editor

(s)

Ames, J.

Other Report 2014/1080

bibliographic details

2014 Date

Issuer or publisher NPS Archaeology

Place of issue or Norwich

publication

Entered by J Bown (jayne.bown@nps.co.uk)

Entered on 26 November 2014

OASIS:

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Appendix 9: Archaeological Specification

01-02-14-1-1080



nps archaeology

Archaeological evaluation Land at Abbey Road, Old Buckenham, Norfolk

Written Scheme of Investigation





Prepared for NPS Property Consultants Ltd



NPS Archaeology

September 2014



Location	Land at Abbey Road, Old Buckenham, Norfolk
District	Breckland
Planning reference	
Grid reference	TM 067 919
Client	NPS Property Consultants Ltd

REVIEW CHECKLIST					
Completed by	Jayne Bown	19.09.14			
Reviewed by	David Adams	22.09.14			
Issue 1					

NPS Archaeology

Scandic House 85 Mountergate Norwich NR1 1PY

T 01603 756150 F 01603 756190 E nau.mail@nps.co.uk W http://nau.nps.co.uk

01-02-14-1-1080 © NPS Archaeology

Abbey Road, Old Buckenham, Norfolk Archaeological Evaluation Written Scheme of Investigation

1. Introduction

- 1.1 Proposals for development of the education establishment at Old Buckenham School land to the north of Abbey Road (TM 067 919) requires a programme of archaeological works to support it through the planning process.
- 1.2 A geophysical survey¹ has identified that the proposed development site contains evidence of linear features, possibly forming part of an early co-axial field system. NPS Property Consultants Ltd on behalf of their client has requested that NPS Archaeology produce a fee quote and this Written Scheme of Investigation for a programme of archaeological evaluation to satisfy the requirements of Norfolk Historic Environment Service (NHES).

2. Aims

- 2.1 The Programme of Archaeological Work requested by Norfolk Historic Environment Service focuses on features identified during the geophysical survey and is designed to recover by archaeological evaluation, information relating to the extent, date, phasing, character, function, status and significance of remains at the site. Determination of the state of preservation of features, deposits and structures (if present) is also required.
- 2.2 The aims of the archaeological work may therefore be summarised as follows:
 - i. To establish the presence or absence of archaeological remains within the proposed development area.
 - ii. To determine the extent, condition, nature, quality and date of any archaeological remains occurring within the site and the possible impacts of the proposed development on them.
 - iii. Ensure that any archaeological features discovered during trial trenching are identified, sampled and recorded and, where it is desirable, recommendations for their preservation in situ are made.
 - iv. To establish, as far as possible, the extent, character, stratigraphic sequence and date of archaeological features and deposits, and the nature of the activities which occurred at the site during the various periods or phases of its occupation
 - v. To establish the palaeoenvironmental potential of subsurface deposits by ensuring that any deposits with the potential to yield palaeoenvironmental data are sampled and submitted for assessment to the appropriate specialists.
 - vi. To explore evidence for social, economic and industrial activity.
 - vii. To disseminate the archaeological data recovered by the evaluation in the form of a report which will provide a basis for any decisions regarding further archaeological intervention and mitigation proposals should they be necessary.

¹ Archaeological Services WYAS 2014, Land at Old Buckenham, Norfolk; Geophysical Survey (Report 2646)

3. Method Statement

3.1 Introduction

- 3.1.1 A three-stage evaluation strategy will be undertaken to assess the archaeological potential of the proposed development site. The stages of this strategy may be summarised as follows.
 - i. Trial Trenching. Machine and manual excavation will be employed to investigate the presence, condition, character and date of any subsurface archaeological deposits and features occurring within the site. Any archaeological features identified will be cleaned and sample excavated to determine function, form and relative date. Trenches will focus on remains identified by the geophysical survey
 - ii Post-fieldwork Processes. The drawn and written stratigraphic/structural record will be cross-referenced and analysed to provide a synthesis of the results of the work. The cleaning and cataloguing of any artefactual and ecofactual materials recovered will be carried out throughout the duration of the fieldwork. The finds will be cleaned, marked and packaged in accordance with the archive requirements of the Norfolk Museums Service.
 - iii. Report and Archive. The report will describe the results of the trial trenching with data presented in tabular, graphic and appendix form. Copies of the reports will be submitted to the client and to Norfolk Historic Environment Service.
- 3.1.2 The procedures and methodology for each of the stages outlined above are described in detail below.

3.2 Trial Trenching

- 3.2.1 Trial trenching will be concerned with establishing the condition, character and date of any subsurface archaeological features and deposits present. Guidelines set out in the documents *Standard and Guidance for an Archaeological Field Evaluation* (Institute for Archaeologists 1994, revised 2001 and 2008) and *Standards for Field Archaeology in the East of England* (Gurney 2003) will be followed.
- 3.2.2 Eight trenches, measuring 10m x 1.8m or 5m x 1.8m, will be excavated to provide a total of 55m of linear trenching across the proposed development area (see figure).
- 3.2.3 The trenches have been arrayed across the site to test the features identified during the geophysical survey and includes the access route. The final locations of some trenches may be determined on the basis of surface or below ground obstructions and Health and Safety considerations.
- 3.2.3 The trenches will be set out by NPS Archaeology and CAT-scanned prior to excavation.
- 3.2.4 Excavation will be by mechanical excavator fitted with a toothless bucket in 100mm spits until natural ground or archaeological deposits are identified.
- 3.2.5 Initial excavation will be undertaken to the top of any undisturbed archaeological deposits or the surface of the underlying natural deposits, whichever is the highest. If neither is encountered it may be necessary to excavate to a maximum depth of 1.2m below the present ground surface (or less is conditions dictate). If further depth of excavation is required, the trench sides may need to be locally stepped or shored. The requirement for and the scope of works below a safe working depth will be determined by Norfolk Historic Environment Service and agreed and costed as a contingency.

- 3.2.6 If the deposits within the trenches are thought to extend too deep to evaluate safely or below the likely level of any development impacts a hand auger may be used to retrieve information about the nature of the lower deposits.
- 3.2.7 Areas of deep excavation will be fenced using Netlon high-visibility fencing and appropriate warning signage will be displayed.
- 3.2.8 Spoil from the trenches will not be removed from site. The trenches will not be backfilled by NPS Archaeology until agreement to do so is given by Norfolk Historic Environment Service. This backfilling will not attempt consolidation or compaction over and above that possible with a mechanical excavator. Full surface reinstatement will not be attempted, but all trenches will be left in a safe condition.
- 3.2.9 Exposed surfaces and all archaeological features and deposits will be excavated by hand and screened by metal detector. The metal detector will be utilised to scan excavated spoil and *in situ* horizons with the operator ensuring that it is used in a correct fashion. All artefactual and ecofactual materials will be collected and bagged by context.
- 3.2.10 Detailed strategies for levels of sampling of buried soils, structures, pits, post-holes and ditches will be determined on site in agreement with Norfolk Historic Environment Service. Allowance will be made for total recovery where appropriate; percentage sampling will apply in areas where complex stratified deposits are encountered. Buried soils will be sampled by sieving to determine artefact densities. In general, the feature/deposit sampling strategy will be employed throughout the evaluation in accordance with the document Standards for Field Archaeology in the East of England (Gurney 2003).
- 3.2.11 All archaeological deposits, features and layers will be assigned individual context numbers and recorded on standardised forms employing the NPS Archaeology's pro forma recording system. The records will include full written, graphic and photographic elements with site and context numbering compatible with the Norfolk Historic Environment Record numbering system. Plans will be made at a scale of 1:50, with provision for 1:20 and 1:10 drawings. Sections will be recorded at scales of 1:10 and 1:20 depending on the detail considered necessary. A photographic record in black and white and colour (35mm film/digital) will be maintained of all archaeological deposits, layers and features to record their characteristic and relationships. Photographs will also be taken to record the progress of the evaluation.
- 3.2.12 Human remains will be left *in situ* unless otherwise instructed by Norfolk Historic Environment Service. If any human remains or burials are encountered which must be removed an application for a Licence For the Removal of Human Remains will be made in compliance with the 1857 and 1981 Burial Acts and within all relevant Ministry of Justice guidelines. Backfilling of features containing human remains will be done manually to ensure that the remains are appropriately protected from any damage or disturbance.
- 3.2.13 Soil samples for palaeoenvironmental materials will be collected if suitable sealed and well-dated deposits are encountered. Standard 10 litre bulk soil samples, column or monolith samples and Kubiena tins will be collected from such deposits as appropriate, in consultation with the English Heritage Regional Advisor for Archaeological Science and other consultant environmentalists. In all instances, sampling procedures will follow the guidelines set out in the document Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation (English Heritage 2002). Full written, graphic and photographic sample records will be made using NPS Archaeology's pro forma recording system.

3.3 Post-Fieldwork Processes

3.3.1 The drawn and written stratigraphic/structural record will be cross-referenced and analysed to provide a synthesis of the results of the work.

- 3.3.2 The cleaning and cataloguing of any artefactual materials recovered will be undertaken on completion of the trial trenching. All retained materials will be cleaned, marked and packaged in accordance with the requirements of the Norfolk Museums Service.
- 3.3.3 Post-fieldwork analyses will start upon completion of the finds processing and will involve the identification and description of the artefactual materials recovered by the relevant specialists. In general, the following strategies will be employed in the analysis of the artefactual materials recovered:
 - Pottery. Analysed to determine date and tabulated by context unit.
 - Worked flint. Sorted and tabulated by context unit.
 - Metal artefacts. Assessed for dating and significance, catalogued by context unit and where necessary conserved within four weeks of completion of fieldwork, in accordance with UK Institute of Conservators Guidelines.
 - Faunal Remains. Sorted and tabulated by context unit. Assessed for the potential for further analysis and for sieving for the recovery of smaller bird and fish bones.
 - Environmental Samples. Processed and assessed for content and significance.
 - Other categories of artefactual materials will be analysed in a similar fashion.
- 3.3.4 All finds work will follow the procedures set out in the document Standards and Guidelines for the collection, documentation, conservation and research of archaeological materials (Institute for Archaeologists 2001). Finds data will be stored on a database to aid analysis and report preparation.

3.4 Report and Archive

- 3.4.1 An evaluation report will be prepared that presents the stratigraphic, structural, artefactual and environmental evidence and analyses, and a synthesis of the results of the trial trenching.
- 3.4.2 The report will present data in tabular, graphic and appendix form. A list of archive components generated by the work will also be included in the report. Copyright of the reports will be retained by NPS Archaeology.
- 3.4.3 Multiple copies of the report will be produced as appropriate and presented to NPS Property Consultants Ltd and three copies to Norfolk Historic Environment Service. The evaluation report will include a reference to the archive and the intended place of archive deposition. The report will be submitted within eight weeks of the completion of the fieldwork.
- 3.4.4 An online OASIS record will be initiated immediately prior to the start of fieldwork and completed when the final report is submitted to Norfolk Historic Environment Service. This will include uploading a pdf version of the final report.
- 3.4.5 A single integrated archive for all elements of the work will be prepared according to the recommendations set out in *Environmental standards for the permanent storage of excavated material from archaeological sites* (UKIC, Conservation Guidelines 3, 1984) and *Guidelines for the preparation of excavation archives for long-term storage* (Walker 1990), and in accordance with the Norfolk Museums Service's own requirements for archive preparation, storage and conservation.
- 3.4.6 The archive will be fully indexed and cross-referenced It will also be integrated with the Norfolk Museums Service's Project accession number and the Norfolk Historic Environment Record numbering system. Deposition of the archive and finds (by prior agreement with the landowners) will take place within six months of the completion of the final report and confirmed in writing to the Norfolk Museums Service (NMAS). A full listing of archive contents and finds boxes will accompany the deposition of the archive and finds. If NMAS are not making new archive accessions and there is no confirmation of

- when new archives will be accepted, NPS Archaeology reserve the right to make alternative arrangements,
- 3.4.7 All archaeological materials, excepting those covered by the *Treasure Act*, 1996, will remain the property of the landowners. NPS Archaeology will seek to reach a formal agreement with the landowners for the donation of the finds to the Norfolk Museums Service.

4. Timetable

- 4.1 The timetable for fieldwork assumes that are no major delays to the work programme caused by vandalism, repeated plant breakdown, restricted access, programme changes by the Client or major periods of adverse weather conditions.
- 4.2 It is estimated that the fieldwork will take less than one week with a team of three archaeologists.

5. Staffing

- 5.1 The project will be co-ordinated by a Project Officer who will be dedicated to the project throughout its duration. The Archaeology Manager will assume responsibility for all aspects of the project including finance, logistics, standards, health and safety, and liaison with the client and curators. The Project Officer will have substantial experience in large area trench evaluation and post-excavation analysis. Fieldwork is expected to take 1 week with 2 staff.
- 5.2 Other members of staff involved in the project will be the Experienced Excavators and Finds Co-ordinator staff. Experienced Excavator staff will have experience in excavation and experience with NPS Archaeology's *pro forma* recording system or similar systems. The Project Officer and/or Experienced Excavator staff will be experienced metal detector users.
- 5.3 NPS Archaeology staff associated with the project will be as follows:

Project Management

Archaeology Manager	Jayne Bown
	1
Project Staff	
Project Officer	John Ames
Finds Officer	Becky Sillwood
Experienced Excavators	To be nominated

- 5.4 NPS Archaeology reserves the right, because of its developing work programme, to change its nominated personnel at any time. This will be in consultation with Norfolk Historic Environment Service
- 5.5. The analysis of artefactual and ecofactual materials will be undertaken by NPS Archaeology staff or nominated external specialists Nominated NPS Archaeology and external specialists and their areas of expertise are as follows:

5.5.1 Specialists used NPS Archaeology

Specialist	Research Field
Sue Anderson	Post-Roman Pottery, CBM, human remains
Andy Barnett	Metal-detectorist, Numismatic Items
Sarah Bates	Worked Flint
Julie Curl	Faunal Remains
Debbie Forkes	Conservation
Val Fryer	Macrofossil analysis
Frances Green	Palaeoenvironmental
Jo Mills	Worked Stone Artefacts
Andy Peachey	Prehistoric and Roman Pottery, Fired Clay, worked flint

6. General Conditions

- 6.1 NPS Archaeology will not commence work until a written order or signed agreement is received from the Client. Where the commission is received through an Agent, the Agent is deemed to be authorised to act on behalf of the Client. NPS Archaeology reserve the right to recover unpaid fees for the service provided from the Agent where it is found that this authority is contested by said Client.
- 6.2 NPS Archaeology would expect information on any services crossing the site to be provided by the client.
- 6.3 A 7.4 hour working day is normally operated by NPS Archaeology, although their agents may work outside these hours.
- 6.4 NPS Archaeology would expect the client to arrange suitable access to the site for its staff, plant and welfare facilities on the agreed start date.
- 6.5 NPS Archaeology would expect any information concerning the presence of TPOs and/or, protected flora and fauna on the site to be provided by the client prior to the commencement of works and accept no liability if this information is not disclosed. No excavation will take place within 8m or canopy width (whichever is the greater) of any trees within or bordering the site.
- NPS Archaeology shall not be held responsible for any delay or failure in meeting agreed deadlines resulting from circumstances beyond its reasonable control. Such circumstances would include without limitation; long periods of adverse weather conditions, flooding, repeated vandalism, ground contamination, delays in the development programme, unsafe buildings, conflicts between the archaeological excavation method and the protection of flora and fauna on the site, disease restrictions, and unexploded ordnance.
- 6.7 Whether or not CDM regulations apply to this work, NPS Archaeology would expect the client to provide information on the nature, extent and level of any soil contamination present. Should unanticipated contaminated ground be encountered during the trial trenching, excavation will cease until an assessment of risks to health has been undertaken and on-site control measures implemented. NPS Archaeology will not be liable for any costs related to the collection and analysis of soils or other assessment methods, on-site control measures, and the removal of contaminated soil or other materials from site.
- 6.8 Should any disease restrictions be implemented for the area during the evaluation, fieldwork will cease and staff redeployed until they are lifted. NPS Archaeology will not be liable for any costs related to on-site disease control measures and for any additional costs incurred to complete the fieldwork after the restrictions have been removed.
- 6.9 NPS Archaeology will not accept responsibility for any tree surgery, removal of undergrowth, shrubbery or hedges or reinstatement of gardens. NPS Archaeology will endeavour to restrict the levels of disturbance of to a minimum but wishes to bring to the

attention of the client that the works will necessarily alter the appearance of landscapes and especially gardens.

7. Quality Standards

- 7.1 NPS Archaeology is an Institute for Archaeologists Registered Archaeological Organisation and fully endorses the Code of Practice and the Code of Practice for the Regulation of Contractual Arrangements in Field Archaeology. All staff employed or subcontracted by NPS Archaeology will be employed in line with The Institute for Archaeologists Code of Practice.
- 7.2 The guidelines set out in the document *Standards for Field Archaeology in the East of England* (Gurney 2003) will be adhered to. Provision will be made for monitoring the work by Norfolk Historic Environment Service in accordance with the procedures outlined in the document *Management of Archaeological Projects* (English Heritage 1991). Monitoring opportunities for each phase of the project are suggested as follows:
 - · during Trial Trenching
 - during Post-Fieldwork Analysis
 - · upon completion of the archive
 - upon receipt of the Evaluation Report
- 7.3 A further monitoring opportunity will be provided at the end of the project upon deposition of the integrated archive and finds with the Norfolk Museums Service.
- 7.4 NPS Archaeology operates a Project Management System. Most aspects of this project will be co-ordinated by a Project Officer who is responsible for the successful completion of the project. The Project Manager retains responsibility for the delivery of the project. The Archaeology Manager has the responsibility for all of NPS Archaeology's work and ensures the maintenance of quality standards within the organisation.

8. Health and Safety

- 8.1 NPS Archaeology will ensure that all work is carried out in accordance with NPS Property Consultants Limited's Health and Safety Policy, to standards defined in the Health and Safety at Work, etc Act, 1974 and The Management of Health and Safety Regulations, 1992, and in accordance with the health and safety manual Health and Safety in Field Archaeology (SCAUM 2007).
- 8.2 A risk assessment will be prepared for the fieldwork. All staff will be briefed on the contents of the risk assessment and required to read it. Protective clothing and equipment will be issued and used as required.
- 8.3 NPS Archaeology will provide copies of NPS Property Consultants Limited's Health and Safety policy on request.

9. Insurance

9.1 NPS Archaeology's Insurance Cover is:

Employers Liability £ 5,000,000
Public Liability £50,000,000
Professional Indemnity £ 5,000,000

9.2 Full details of NPS Archaeology's Insurance cover can be supplied on request.

Figure

