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LAND EAST OF BARROW HILL, BARROW, SUFFOLK

ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

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District: St Edmundsbury Site Code: BRR 060

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OASIS SUMMARY

Project details	
Project name	Land East of Barrow Hill, Barrow, Suffolk

In July 2016, Archaeological Solutions Ltd carried out an archaeological trial trench evaluation of land east of Barrow Hill, Barrow, Suffolk (TL 7670 6310). The survey was commissioned to inform and support a planning application for a residential development.

The principal features recorded during the evaluation were medieval (12th – 14th century). Trenches 12, 13 and 17, located on the western side of the southern sector of the site, each contained four or five medieval features. At some slight distance Trenches 10 and 11 each contained a medieval feature. The majority of the dated medieval features were ditches, but discrete features were also recorded: Pit F1035 (Trench 13), Pit F1014 and Post Holes F1019 and F1021 (Trench 17). The latter are indicative of structural remains and daub was found within Ditches F1005, F1007 (Trench 22) and F1037 (Trench 13). Undated pits were recorded in Trenches 12 (F1082) and 17 (F1010, F1012 and F1023) and may be associated with the medieval remains.

Trench 22 contained Ditches F1003, F1005 and F1007. The three ditches were part of the same interrupted enclosure identified during the geophysical survey. Ditch F1007 contained medieval pottery. Ditches F1003 and F1005 however, contained Late Medieval Transitional pottery (15th-16th centuries), and a sherd of post-medieval glazed red earthenware (as well as residual medieval sherds). There was no evidence of internal features, and further investigation of the enclosure would resolve its dating and function.

Project dates (fieldwork)	July 2016				
Previous work (Y/N/?)	N		e work	TBC	
P. number	6667	Site co		BRR (260
Type of project	Trial trenc			DIVIN	566
Site status	Trial treffic	ii Evaluali	UII		
Current land use	Agricultura	o.l			
	Residentia				
Planned development Main features (+dates)			oloo		
	Ditches, p			lious (10 th	14 th C) cocombleres
Significant finds (+dates) Project location	Sparse, re	siduai siri	uck IIIII, IIIec	ilevai (12 –	14 th C) assemblages
	0 % "		0,5,		1.5
County/ District/ Parish	Suffolk		St Edmund		Barrow
HER/ SMR for area	Suffolk His	Suffolk Historic Environment Record			
Post code (if known)	-				
Area of site	3.75ha	3.75ha			
NGR	TL 7670 6310				
Height AOD (max/ min)	c. 93m				
Project creators					
Brief issued by	Suffolk County Council Archaeological Service Conservation Team				
Project supervisor/s	Julie Walker				
Funded by	Mr B Phizacklea				
Full title	Land East of Barrow Hill, Barrow, Suffolk. Archaeological Trial Trench				
	Evaluation	1			
Authors	Walker, J.	and Wilso	on, L.		
Report no.	5164				
Date (of report)	July 2016 (Revised 16/08/2016)				

LAND EAST OF BARROW HILL, BARROW, SUFFOLK

ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

SUMMARY

In July 2016, Archaeological Solutions Ltd carried out an archaeological trial trench evaluation of land east of Barrow Hill, Barrow, Suffolk (TL 7670 6310). The survey was commissioned to inform and support a planning application for a residential development.

The site lies on the edge of the medieval green at Barrow (HER BRR 14) and house plots are shown adjacent on 16th century maps (HER BRR 026). Bronze Age and medieval remains have been recorded during investigations at a site opposite (HER BRR 052).

A geophysical survey had identified three E-W positive magnetic anomalies of probable archaeological origin; one in the NW part of the northern field, and two located in the centre of the southern field. Several other weakly positive linear anomalies of possible archaeological origin were observed, and also a discrete cluster of high amplitude responses that might relate to former industrial activity. The geophysical survey also identified three positive linear anomalies which relate to historic field boundaries recorded on the first edition OS map.

The principal features recorded during the evaluation were medieval (12^{th} – 14^{th} century). Trenches 12, 13 and 17, located on the western side of the southern sector of the site, each contained four or five medieval features. At some slight distance Trenches 10 and 11 each contained a medieval feature. The majority of the dated medieval features were ditches, but discrete features were also recorded: Pit F1035 (Trench 13), Pit F1014 and Post Holes F1019 and F1021 (Trench 17). The latter are indicative of structural remains and daub was found within Ditches F1005, F1007 (Trench 22) and F1037 (Trench 13). Undated pits were recorded in Trenches 12 (F1082) and 17 (F1010, F1012 and F1023) and may be associated with the medieval remains.

Trench 22 contained Ditches F1003, F1005 and F1007. The three ditches were part of the same interrupted enclosure identified during the geophysical survey. Ditches F1003 and F1005 were comparable in their profiles and fills but Ditch F1007 was not. Ditch F1007 contained medieval pottery. Ditches F1003 and F1005 however, contained Late Medieval Transitional pottery (15th-16th centuries), and a sherd of post-medieval glazed red earthenware (as well as residual medieval sherds). There was no evidence of internal features, and further investigation of the enclosure would resolve its dating and function.

1 INTRODUCTION

1.1 In July 2016, Archaeological Solutions Ltd (AS) carried out an archaeological trial trench evaluation on 3.75 hectares of land east of Barrow Hill, Barrow, Suffolk

(NGR TL 7670 6310). The evaluation was commissioned to inform and support a planning application for a proposed residential development (planning reference: DC/16/0300), based on the advice of Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT). It followed a geophysical survey, also conducted by AS (Blagg-Newsome 2016).

1.2 The evaluation was carried out in accordance with a brief issued by SCC AS-CT (12th April 2016), and a specification compiled by AS (21st April 2016) and approved by SCC AS-CT. The project conformed to the Chartered Institute for Archaeologists (ClfA) Code of Conduct and Standard and Guidance for an Archaeological Evaluation (2014), as well as the document Standards for Field Archaeology in the East of England (Gurney 2003).

Objectives

- 1.3 The principal objectives of the evaluation were:
 - ➤ to establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation *in situ*;
 - ➤ to identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation;
 - to evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits, along with the potential for the survival of environmental evidence; and
 - ➤ to provide sufficient information to construct an archaeological conservation strategy dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.

Planning Policy Context

- 1.4 The National Planning Policy Framework (NPPF 2012) states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The NPPF aims to deliver sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. The NPPF requires applications to describe the significance of any heritage asset, including its setting that may be affected in proportion to the asset's importance and the potential impact of the proposal.
- 1.5 The NPPF aims to conserve England's heritage assets in a manner appropriate to their significance, with substantial harm to designated heritage assets (i.e. listed buildings, scheduled monuments) only permitted in exceptional

circumstances when the public benefit of a proposal outweighs the conservation of the asset. The effect of proposals on non-designated heritage assets must be balanced against the scale of loss and significance of the asset, but non-designated heritage assets of demonstrably equivalent significance may be considered subject to the same policies as those that are designated. The NPPF states that opportunities to capture evidence from the historic environment, to record and advance the understanding of heritage assets and to make this publicly available is a requirement of development management. This opportunity should be taken in a manner proportionate to the significance of a heritage asset and to impact of the proposal, particularly where a heritage asset is to be lost.

2 DESCRIPTION OF THE SITE

2.1 The site is an elongated strip of agricultural land lying parallel to Barrow Hill, to the south east of the village of Barrow. It extends to 3.75 hectares and lies at *c.* 93m AOD.

3 GEOLOGY, TOPOGRAPHY AND SOILS

3.1 The underlying geology is chalk, with the site's soils of the Ashley Association. These comprise 'fine loamy over clayey soils with slowly permeable subsoils and slight seasonal waterlogging, associated with similar but wetter soils'. Some 'calcareous and non-calcareous slowly permeable clayey soils' are also likely to occur (Soil Survey of England and Wales 1983, 13).

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 4.1 There are few prehistoric finds from within proximity to the site. A small Neolithic quern stone was found 430m to the north-east in Barrow (Suffolk Historic Environment Record (SHER) BRR 006). An archaeological evaluation and excavation across the road from the site, given a central grid reference centred 120m to the west, identified a Bronze Age pit (SHER BRR 052). During the Roman period the area was quite intensively exploited, but the only finds close to the site are Roman coins and a possible cemetery containing "urns and ashes" from Mill Field in Barrow, some 380m to the north (SHER BRR 033).
- 4.2 The Domesday Survey records 27 heads of household suggesting a quite sizeable population of between perhaps 80 and 150 people. Mixed farming was practised, but there appears to have been an emphasis on the pastoral with 100 sheep, 60 goats and 40 pigs recorded (Goult 1990). During the medieval period Barrow was a scattered settlement focused around two greens, with a main street containing the moated site of Barrow Hall to the north (SHER BRR 003, SAM 33309), near the parish church. In 1319 Bartholomew Badlesmere was lord of the manor, though probably seldom in residence; he was captured at Bannockburn in 1314, and executed for treason in 1322 following the battle of Boroughbridge, while his wife, Margaret de Clare, had the dubious distinction of being the first named female to be incarcerated in the Tower of London.

- 4.3 The two greens probably originated in the 12th century of which Barrow Green is located almost immediately to the north of the site (SHER BRR 013; Martin 1999). *Barroughe greene'* is named and shown on a map of 1597, as triangular in shape with houses on three sides and with a rectangular enclosure in the centre containing a building (SHER BRR 014). Burthorpe Green was located further to the north-east of the site (SHER BRR 015).
- 4.4 Two sub-manors were also present, Felton's which was 500m to the northeast of the site (SHER BRR 007), and Montfordes which was 600m to the south of the site (SHER BRR 013). A medieval ditch and pit were identified at the excavation immediately across the road to the west of the site (SHER BRR 052). Two post-medieval pits and other undated features were also present. A 13th century lead seal was found on the west side of Barrow Green, some 300m north-west of the site (SHER BRR Misc). The map of 1597 (Fig. 11) also shows a house located approximately 40m south of the site (SHER BRR 026), and a second building 170m south of the site (SHER BRR 025).
- 4.5 The 1597 Parish map shows a field boundary crossing the site from east to west, which is located approximately 80m north of the site's south-west corner. A second field boundary crosses the site approximately 220m from the south-west corner (Fig. 11). A third field boundary is just north of this. The 1841 Tithe map and the 1853 Inclosure map show the two southernmost field boundaries, but the northern one is gone (Figs. 12 -13). By the time of the 1884 First Edition OS map, the northernmost of these two field boundaries is gone (Fig. 14), but the southern boundary remains and is still present on the 1950 OS map (Fig. 15), but has since gone. The only other changes to the immediate environs is the presence of Green Farm on the site, built after 1950, and the urban spread of the village around the northern part of the site.
- 4.6 The evaluation and subsequent excavation by AS of a site to the west of Barrow Hill in 2013/14 revealed medieval ditches and pits as well as pottery and animal remains of this date (SHER BRR 052; ESF22769; Gorniak 2013).

5 PREVIOUS INVESTIGATION: GEOPHYSICAL SURVEY

5.1 The geophysical survey identified several anomalies which appear to be of archaeological origin (Fig. 3). The majority of these features appeared as positively trending linear magnetic responses, two of which had associated negative responses, synonymous with in-filled ditch type features (1-13). Three of these can be attributed to historic field boundaries noted in the first edition OS map from 1884 (11-13; Fig. 14). Three positive linear anomalies are likely cut features of archaeological origin (1, 3 and 4) with one of these (4) a possible field boundary predating, or not recorded by, the first edition OS map. Three weakly positive linear responses were also observed in the data (2, 5 and 6), which may represent cut features of archaeological significance, but could also represent features with a natural origin (peri-glacial scarring or water solution channels). The origins of 3 further clusters of anomalous magnetic responses (7-9) are not immediately clear, but might also represent surviving cut features of archaeological origin. The collection of high amplitude anomalies (10) may represent some form of industrial

activity involving heating processes.

- 5.2 Much of the site's boundary displayed areas of magnetic disturbance (15 and 16). Such magnetic disturbance could potentially be obscuring smaller anomalous responses, or other weaker magnetic responses.
- 5.3 The relatively clear magnetic contrasts seen within the data indicate that the underlying geology and site formation processes were generally conducive to magnetic geophysical survey, and that the data recovered are likely to be representative of underlying archaeological features.

6 METHODOLOGY

- 6.1 The brief required a 4% sample of the proposed development site to be investigated by trial trenching (with a further 1% sample held in reserve to clarify any remains that were revealed). The trenches targeted the anomalies identified by the geophysical survey and also 'blank' areas. Twenty two trenches, 40m in length, were excavated (Fig.3). Two trenches, 13 and 22, were extended to examine anomalies.
- 6.2 The topsoil and subsoil were mechanically excavated under close archaeological supervision. Exposed surfaces were cleaned by hand and examined for archaeological features. Deposits were recorded using *pro forma* recording sheets, drawn to scale, and photographed as appropriate. Excavated spoil was searched for finds and the trenches were scanned by a metal detector.
- 6.3 The site area was subject to an archaeological field walking and metal detector survey and the finds are plotted (Fig.3) and concorded (Appendix 1). The metal detector survey was based on a 10m grid and a C-Scope CS1220XD instrument was utilised.

7 DESCRIPTION OF RESULTS

7.1 The individual trench descriptions are presented below:

Trench 1 (Figs. 3 and 4)

Sample section	1A	
0.00 = 93.98m	AOD	
0.00 – 0.34m	L1000	Topsoil. Firm, mid grey brown clayey silt with moderate chalk and stones.
0.34 – 0.52m	L1001	Subsoil. Firm, mid orange brown clayey silt with frequent chalk and stones.
0.53m+	L1009	Natural deposits. Firm, dark orange clay with chalk and flint.

Sample section 18 0.00 = 94.10m A0		
0.00 – 0.28m	L1000	Topsoil. As above
0.28 - 0.40m	L1001	Subsoil. As above.
0.40m+	L1009	Natural deposits. As above.

Description: Trench 1 contained Ditch F1058. It contained CBM.

Ditch F1058 was linear, orientated E / W (1.80+ \times 0.83 \times 0.40m). It had steep sides and a flattish base. Its fill, L1059, was a firm, mid grey brown, clayey silt with occasional stones. It contained CBM (2490g).

Trench 2 (Figs. 3 and 4)

Sample section 2 0.00 = 94.15m A		
0.00 – 0.28m	L1000	Topsoil. As Above, Trench 1
0.28 – 0.46m	L1001	Subsoil. As above, Trench 1
0.46m+	L1009	Natural deposits. As above, Trench 1

Sample section 2B		
0.00 = 93.67m AOD		
0.00 – 0.20m	L1000	Topsoil. As above, Trench 1
0.20 – 0.35m	L1001	Subsoil. As above, Trench 1
0.45m +	L1009	Natural deposits. As above, Trench 1

Description: Trench 2 contained Ditches F1092 and F1062. Ditch F1092 equates to F1101 (Trench 3) and is visible on the early OS maps (Fig.14). ?Ditch F1062 may have been a natural feature.

?Ditch F1062 was linear, orientated NW/ SE (2.40+ x 1.01 x 0.58m). It had shallow steep sides and a flattish base. Its fill, L1063, was firm, mid orange brown, clayey silt with occasional stones. It contained no finds. This feature may have been natural.

Ditch F1092 was linear, orientated N / S (1.80+ x 2.01 x ?m). Its profile was unseen. Its fill, L1093, was a friable, grey brown, clayey silt. It contained modern ($18^{th} - 19^{th}$) century pottery (1; 8g).

Trench 3 (Figs. 3 and 4)

Sample section 3	A		
0.00 = 93.93m AOD			
0.00 – 0.28m	L1000	Topsoil. As above, Trench 1	
0.28 – 0.35m	L1001	Subsoil. As above, Trench 1	
0.35m+	L1009	Natural deposits. As above, Trench 1	

Sample section 3B				
0.00 = 93.66m AOD				
0.00 – 0.30m	L1000	Topsoil. As above, Trench 1		
0.30 – 0.36m	L1001	Subsoil. As above, Trench 1		
0.36m+	L1009	Natural deposits. As above, Trench 1		

Description: Trench 3 contained Ditch F1101 which equates to F1092 (Trench 2) and is visible on the early OS maps (Fig.14).

Ditch F1101 was linear, orientated N / S (1.80+ \times 1.16 \times ?m). Its profile was unseen. Its fill, L1102, was a firm, dark grey brown, clayey silt.

Trench 4 (Figs. 3 and 5)

Sample section 4 0.00 = 93.73m A		
0.00 – 0.30m	L1000	Topsoil. As above, Trench 1
0.30 – 0.34m	L1001	Subsoil. As above, Trench 3
0.34m+	L1009	Natural deposits. As above, Trench 1

Sample section 4E	3	
0.00 = 93.73		
0.00 – 0.32m	L1000	Topsoil. As above, Trench 1
0.32m+	L1009	Natural deposits. As above, Trench 1

Description: Trench 4 contained Ditch F1103 which equate to F1060 (Trench 5) and is visible on the early OS maps (Fig.14).

Ditch F1103 was linear, orientated E / W (1.80+ \times 2.06 \times ?m). Its profile was unseen. Its fill, L1104, was a firm, dark grey brown, clayey silt.

Trench 5 (Figs. 3 and 5)

Sample section 0.00 = 94.22m A		
0.09 – 0.27m	L1000	Topsoil. As above, Trench 1
0.27 – 0.32m	L1001	Subsoil. As above, Trench 1
0.32m+	L1009	Natural deposits. As above, Trench 1

Sample section 5B				
0.00 = 94.40m AOD				
0.00 – 0.28m	L1000	Topsoil. As above, Trench 1		
0.28 – 0.34m	L1001	Subsoil. As above, Trench 1		
0.34m+	L1009	Natural deposits. As above, Trench 1		

Description: Trench 5 contained Ditches F1060 and F1064. F1060 equates to F1103 (Trench 4) and is visible on the early OS maps (Fig. 14). Ditch F1060 contained modern pottery. The northern part of Trench 5 intersected a positive anomaly (a possible cut feature of archaeological origin) identified by the geophysical survey (Fig. 3); no corresponding feature was encountered.

Ditch F1060 was linear, orientated E / W (1.80+ x 3.40 x 0.80m). It had uneven moderately sloping sides and a concave base. Its fill, L1061, was firm, dark grey, clayey silt with occasional stones. It contained modern (late $18^{th} - 20^{th}$ century pottery (5; 24g), CBM (1106g), animal bone (162g), clay pipe stem fragments (5g) and iron fragments (25g).

Ditch F1064 was linear, orientated E / W (1.80+ x 1.40 x 0.25m). It had moderately sloping sides and a concave base. Its fill, L1065, was a friable, mid brown, clayey silt with occasional stones. It contained modern (late $18^{th} - 20^{th}$ century pottery (2; 9g) and CBM (11g).

Trench 6 (Figs. 3 and 5)

Sample section 6A			
0.00 = 93.69m A	AOD		
0.00 – 0.16m	L1000	Topsoil. As above, Trench 1	
0.16 – 0.24m	L1001	Subsoil. As above, Trench 1	
0.24m+	L1009	Natural deposits. As above, Trench 1	

Sample section 6B				
0.00 = 93.76m AOD				
0.00 – 0.18m	L1000	Topsoil. As above, Trench 1		
0.18m+	L1002	Natural deposits. Mid yellow chalky clay and mid orange clay		

Description: Trench 6 contained undated Ditch F1066.

Ditch F1066 was linear, orientated N / S (1.80+ x 1.01 x 0.38m). It had moderately sloping sides and a concave base. Its fill, L1067, was a firm, grey brown, clayey silt with occasional stones. It contained no finds.

Trench 7 (Fig. 3)

Sample section 7/	Sample section 7A			
0.00 = 93.79m AC	D			
0.00 – 0.30m	L1000	Topsoil. As above, Trench 1		
0.30- 0.35m	L1001	Subsoil. As above, Trench 1		
0.35m+	L1009	Natural deposits. As above, Trench 1		

Sample section :	Sample section 7B				
0.00 = 93.71m AOD					
0.00 – 0.28m	L1000	Topsoil. As above, Trench 1			
0.28m+	L1009	Natural deposits. As above, Trench 1			

Description: Trench 7 contained no archaeological features or finds

Trench 8 (Fig. 3)

Sample section 8A			
0.00 = 93.61m A	OD		
0.00 – 0.25m	L1000	Topsoil. As above, Trench 1	
0.25 – 0.44m	L1001	Subsoil. As above, Trench 1	
0.44m+	L1009	Natural deposits. As above, Trench 1	

Sample section	8B	
0.00 = 93.66m A	OD	
0.00 – 0.27m	L1000	Topsoil. As above, Trench 1
0.27 – 0.40m	L1001	Subsoil. As above, Trench 1
0.40m+	L1009	Natural deposits. As above, Trench 1

Description: Trench 8 contained no archaeological features or finds

Trench 9 (Fig. 3)

Sample section 9A			
0.00 = 93.96m AC	D		
0.00 – 0.24m	L1000	Topsoil. As above, Trench 1	
0.24 – 0.35m	L1001	Subsoil. As above, Trench 1	
0.35m+	L1002	Natural deposits. As above, Trench 6	

Sample section 9B			
0.00 = 93.44m A0	OD		
0.00 – 0.29m	L1000	Topsoil. As above, Trench 1	
0.29 – 0.46m	L1001	Subsoil. As above, Trench 1	
0.46m+	L1009	Natural deposits. As above, Trench 1	

Description: Trench 9 contained no archaeological features or finds.

Trench 10 (Figs. 3 and 6)

Sample section 10.00 = 94.02m AC		
0.00 – 0.28m	L1000	Topsoil. As above, Trench 1
0.28- 0.37m	L1001	Subsoil. As above, Trench 1
0.37m+	L1009	Natural deposits. As above, Trench 1

Sample section 10B				
0.00 = 93.63m A	4 <i>OD</i>			
0.00 – 0.30m	L1000	Topsoil. As above, Trench 1		
0.30 – 0.52m	L1001	Subsoil. As above, Trench 1		
0.52m+	L1009	Natural deposits. As above, Trench 1		

Description: Trench 10 contained Ditches F1049, F1051, F1068 and F1105. F1049 and F1068 were undated. F1105 contained CBM and F1051 contained medieval pottery. The north-east end of Trench 10 intersected a positive anomaly (a possible cut feature of archaeological origin) identified by the geophysical survey (Fig. 3); no corresponding feature was encountered. The same anomaly corresponded to F1099

(Trench 11).

Ditch F1049 was linear, orientated N / S $(1.80m + x 0.78m \times 0.14m)$. It had moderately sloping sides and a concave base. Its fill, L1050, was firm, mid grey brown, silty clay with occasional stones. It contained no finds.

Ditch F1051 was linear, orientated E / W (1.80 + x 1.45 x 0.45m). It had uneven moderately sloping sides and a concave base. Its fill, L1052, was firm, mid grey brown, clayey silt with occasional stones. It contained medieval ($12^{th} - 13^{th}$ century) pottery (1; 6g), animal bone (29g), a fragment of very worn lava quern (390g) and slag (315g).

Ditch F1068 was linear, orientated NW / SE (1.80+ x 1.69 x 0.17m). It had shallow sides and an uneven irregular base. Its fill, L1069, was friable, dark brown, clayey silt. It contained no finds.

Ditch F1105 was linear, orientated N / S (1.80+ \times 1.50 \times 0.61m). It had irregular moderately sloping sides and a concave base. Its fill, L1106, was a firm, dark brown, clayey silt with occasional stones. It contained CBM (193g), animal bone (22g) and an iron fragment (12g).

Trench 11 (Figs. 3 and 6)

Sample section 0.00 = 93.59m A		
0.00 – 0.24m	L1000	Topsoil. As above, Trench 1
0.24– 0.46m	L1001	Subsoil. As above, Trench 1
0.46m+	L1009	Natural deposits. As above, Trench 1

Sample section 11 0.00 = 93.30m AC		
0.00 – 0.25m	L1000	Topsoil. As above, Trench 1
0.25 – 0.39m	L1001	Subsoil. As above, Trench 1
0.39m+	L1009	Natural deposits. As above, Trench 1

Description: Trench 11 contained undated Pit F1097 and Ditch F1099. The latter contained medieval (12th – 14th century) pottery.

Pit F1097 was sub circular (0.39 x 0.35 x 0.08m). It had steep sides and a flattish base. Its fill, L1098, was a firm, mid reddish brown clayey silt. It contained no finds.

Ditch F1099 was linear, orientated N / S (1.80+ x 1.02 x 0.78m). It had shallow sides and a concave base. Its fill, L1100, was a firm, mid orange brown, clayey silt with occasional stones and chalk. It contained medieval ($12^{th} - 14^{th}$ century) pottery (3; 22g).

Trench 12 (Figs. 3 and 6)

Sample section 0.00 = 94.14m A		
0.00 – 0.23m	L1000	Topsoil. As above, Trench 1
0.23 – 0.29m	L1001	Subsoil. As above, Trench 1
0.29m+	L1009	Natural deposits. As above, Trench 1

Sample section 12B			
0.00 = 94.06m A	AOD		
0.00 – 0.21m	L1000	Topsoil. As above, Trench 1	
0.21 – 0.40m	L1001	Subsoil. As above, Trench 1	
0.40m+	L1009	Natural deposits. As above, Trench 1	

Description: Trench 12 contained undated Pit F1082, and Ditches F1045, F1071, F1075 and F1084. The ditches contained medieval (12th – 14th century) pottery.

Ditch F1045 was linear, orientated NW / SE (1.80+ x 1.52 x 0.68m). It had moderately steep sides and a concave base. Its fills are tabulated:

L1046	Friable, dark brown clayey silt	Medieval (12 th – 14 th century) pottery (11;
Uppermost	with occasional stones	38g), animal bone (26g), oyster shell (119g)
		and struck flint (7g)
L1054	Friable, dark grey clayey silt with	Medieval (12 th – 13 th century) pottery (2;
	charcoal	6g), animal bone (2g), oyster shell (32g)
L1053	Firm, dark brown silty clay with	None
Basal	occasional stones and chalk	

Ditch F1071 was linear, orientated N / S (1.80+ \times 0.72 \times 0.23m). It had shallow sides and an uneven concave base. Its fill, L1072, was a firm, mid orange brown, clayey silt with occasional stones and chalk. It contained medieval ($12^{th} - 14^{th}$ century) pottery (6; 49g).

Ditch F1075 was linear, orientated N / S (1.80+ x 1.02 x 0.23m). It had shallow sides and a concave base. Its fill, L1076, was a firm, dark brown, clayey silt. It contained medieval ($12^{th} - 14^{th}$ century) pottery (2; 5g) and animal bone (19g)

Pit F1082 was sub circular $(0.73 \times 1.05 \times 0.61 \text{m})$. It had steep sides and a concave base. Its fill, L1083, was a firm, dark brown, clayey silt. It contained no finds.

Ditch F1084 was linear, orientated NE / SW (1.80+ x 0.98 x 0.89m). It had moderately sloping sides and a concave base. Its fill, L1085, was a firm, mid grey brown, clayey silt with occasional flint and chalk. It contained medieval ($12^{th} - 14^{th}$ century pottery (20; 226g), animal bone (47g), and shell (14g).

Trench 13 (Figs. 3 and 7)

Sample section 1 0.00 = 94.12m A		
0.00 – 0.23m	L1000	Topsoil. As above, Trench 1
0.23 – 0.39m	L1001	Subsoil. As above, Trench 1
0.39m+	L1009	Natural deposits. As above, Trench 1

Sample section 1		
0.00 = 94.19m A	OD	
0.00 – 0.24m	L1000	Topsoil. As above, Trench 1
0.24 – 0.40m	L1001	Subsoil. As above, Trench 1
0.40m+	L1009	Natural deposits. As above, Trench 1

Sample section	13C	
0.00 = 94.13m A	OD	
0.00 – 0.22m	L1000	Topsoil. As above, Trench 1
0.22 – 0.41m	L1001	Subsoil. As above, Trench 1
0.41m+	L1009	Natural deposits. As above, Trench 1

Description: Trench 13 contained ?Tree Hollow F1031, Pit F1035, and Ditches F1029, F1037, F1039, F1041, F1047 and F1080. Ditch F1041 equates to Ditches F1088 (Trench 14) and F1095 (Trench 15), and is visible on the Tithe Map (Fig.12) but not later (1884 Fig.14). It contained modern (18th – 19th century) pottery. The ?Tree Hollow contained no finds, Ditch 1080 was undated, and Ditch F1047 contained post-medieval and medieval pottery. The remaining features all contained medieval pottery.

Ditch F1029 was linear, orientated NW / SE (1.80+ x 0.86 x 0.61m). It had moderately sloping sides and a concave base. Its fill, L1030, was a friable, light orange brown clayey silt with occasional flint. It contained medieval $(12^{th} - 13^{th}$ century) pottery (3; 25g) and an iron fragment (1; 26g).

?Tree Hollow F1031 was sub circular $(0.61 \times 0.29 \times 0.16m)$. It had shallow sides and a concave base. Its fill, L1032, was a friable, dark brown clayey silt with occasional flint. It contained no finds.

Pit F1035 was sub circular (0.48 x 0.44 x 0.33m). It had steep sides and an uneven concave base. Its fill, L1036, was a firm, dark grey brown clayey silt. It contained medieval ($12^{th} - 14^{th}$ century) pottery (3; 30g).

Ditch F1037 was linear, orientated NE / SW (1.90+ x 0.80 x 0.33m). It had steep sides and a concave base. Its fill, L1038, was a friable, dark brown clayey silt with occasional flint and chalk. It contained medieval ($12^{th} - 14^{th}$ century) pottery (5; 30g), CBM (2g) and animal bone (5g).

Ditch F1039 was linear, orientated NE / SW (1.80+ x 1.04 x 0.19m). It had gently sloping sides and an uneven concave base. Its fill, L1040, was a firm, mid brown clayey silt with occasional stones. It contained medieval ($12^{th} - 14^{th}$ century) pottery (10; 73q), animal bone (64q) and oyster shell (24q).

Ditch F1041 was linear, orientated NW / SE (2.20+ x 1.31 x 0.97m). It had steep sides and a concave base. Its fill, L1042, was a firm, mid yellow brown clayey silt with occasional flint and chalk. It contained $18^{th} - 19^{th}$ century pottery (7; 134g)

Ditch F1047 was linear, orientated E / W (1.00+ x 3.65 x 0.76m). It had irregular sides and an irregular base. Its basal fill, L1107, was a friable, dark brown clayey silt with occasional flint and chalk. It contained no finds. Its principal fill, L1048, was a friable, dark brown clayey silt with occasional flint and chalk. It contained post-medieval $(17^{th} - 18^{th}$ century) pottery (15; 129g), animal bone (37g) and iron fragments (100g). Ditch F1047 was cut by Ditch F1080.

Ditch F1080 was linear, orientated E / W (1.80+ \times 0.65 \times 0.36m). It had gently sloping sides and a narrow base. Its fill, L1081, was a friable, dark reddish brown clayey silt with occasional chalk. It contained no finds. Its fill was similar to that of Ditch F1047, and it cut F1047.

Trench 14 (Figs. 3 and 8)

Sample section 14A			
0.00 = 93.78m AOD			
0.00 – 0.23m	L1000	Topsoil. As above, Trench 1	
0.23– 0.49m	L1001	Subsoil. As above, Trench 1	
0.49m+	L1009	Natural deposits. As above, Trench 1	

Sample section 14B				
0.00 = 94.00m AOD				
0.00 – 0.27m	L1000	Topsoil. As above, Trench 1		
0.27 – 0.47m	L1001	Subsoil. As above, Trench 1		
0.47m+	L1009	Natural deposits. As above, Trench 1		

Description: Trench 14 contained Ditch F1088. This ditch equates to Ditches F1041 (Trench 13) and F1095 (Trench 15), and is visible on the Tithe Map (Fig. 12) but not later (1884 Fig. 14). It contained modern pottery. The northern and southern ends of Trench 14 intersected positive anomalies (probable cut features of archaeological origin) identified by the geophysical survey (Fig. 3); no corresponding features were encountered. The northernmost anomaly broadly corresponded to features in Trenches 13 and 15.

Ditch F1088 was linear, orientated E / W (1.80+ x 0.98 x ?m). Its profile was unseen. Its fill, L1089, was a firm, orange brown, clayey silt with occasional stones. It contained modern ($18^{th} - 19^{th}$ century) pottery (2; 17g), and CBM (12g)

Trench 15 (Figs. 3 and 8)

Sample section 15A				
0.00 = 93.45m AOD				
0.00 – 0.24m	L1000	Topsoil. As above, Trench 1		
0.24 – 0.42m	L1001	Subsoil. As above, Trench 1		
0.42m+	L1009	Natural deposits. As above, Trench 1		

Sample section 15B			
0.00 = 93.57m A	AOD		
0.00 – 0.25m	L1000	Topsoil. As above, Trench 1	
0.25 – 0.52m	L1001	Subsoil. As above, Trench 1	
0.52m+	L1009	Natural deposits. As above, Trench 1	

Description: Trench 15 contained Ditch F1095 which equates to Ditches F1041 (Trench 13) and F1088 (Trench 14), and is visible on the Tithe Map (Fig.12) but not later (1884 Fig.14).

Ditch F1095 was linear, orientated E / W (1.80+ x 2.05 x ?m). Its profile was unseen. Its fill, L1096, was a firm, dark brown, clayey silt with occasional stones. It contained residual medieval ($12^{th} - 14^{th}$ century) pottery (3; 9g) and CBM (31g).

Trench 16 (Figs. 3 and 8)

Sample section 16A				
0.00 = 94.01m A	OD			
0.00 – 0.30m	L1000	Topsoil. As above, Trench 1		
0.30– 0.37m	L1001	Subsoil. As above, Trench 1		
0.37m+	L1009	Natural deposits. As above, Trench 1		

Sample section 16B			
0.00 = 93.90m AC	D		
0.00 – 0.35m	L1000	Topsoil. As above, Trench 1	
0.35 – 0.52m	L1001	Subsoil. As above, Trench 1	
0.52m+	L1009	Natural deposits. As above, Trench 1	

Description: Trench 16 contained undated Ditch F1043. The south-east and central parts of Trench 16 intersected positive anomalies (probable cut features of archaeological origin) identified by the geophysical survey (Fig. 3); no corresponding features were encountered. The southernmost anomaly corresponded to F1033 in Trench 17.

Ditch F1043 was linear, orientated NE / SW (1.80+ x 1.27 x 1.17m). It had moderately steep sides and an uneven base. Its fill, L1044, was a firm, mid orange brown clayey silt with occasional flint. It contained copper alloy fragments (23g).

Trench 17 (Figs. 3 and 9)

Sample section 17A				
0.00 = 94.26m A	4 <i>OD</i>			
0.00 – 0.21m	L1000	Topsoil. As above, Trench 1		
0.21– 0.26m	L1001	Subsoil. As above, Trench 1		
0.26m+	L1009	Natural deposits. As above, Trench 1		

Sample section 17B			
0.00 = 93.94m A	IOD		
0.00 – 0.24m	L1000	Topsoil. As above, Trench 1	
0.24 – 0.37m	L1001	Subsoil. As above, Trench 1	
0.37m+	L1002	Natural deposits. As above, Trench 6	

Description: Trench 17 contained Post Holes F1019 and F1021, Pits F1010, F1012, F1014 and F1023; and Ditches F1016, F1025 and F1033, and Ditch Re-cut F1027. The dated features contained medieval (F1014, F1016, F1019, F1021 and 1033) and post-medieval pottery (F1027).

Pit F1010 was sub circular (0.53m \times 0.40 \times 0.09m). It had uneven moderately sloping sides and a concave base. Its fill, L1011, was a firm, mid grey brown clayey silt with occasional flint and chalk. It contained no finds.

Pit F1012 was sub circular (0.47m x 0.41 x 0.05m). It had shallow moderately sloping sides and an uneven base. Its fill, L1013, was a firm, dark reddish brown clayey silt. It contained burnt clay. Its uppermost fill, L1018, was a layer of charcoal.

Pit F1014 was sub circular (0.79m x 0.21 x 0.12m). It had uneven moderately sloping sides and a concave base. Its fill, L1015, was a firm, mid orange brown clayey silt with occasional flint. It contained medieval ($12^{th} - 13^{th}$ century) pottery (5; 62g). F1014 cut F1019 and F1021.

Ditch F1016 was linear, orientated NW / SE (2.00m+ x 0.79 x 0.16m). It had moderately sloping sides and a concave base. Its fill, L1017, was a firm, mid grey brown clayey silt with occasional flint. It contained medieval ($12^{th} - 13^{th}$ century) pottery (14; 30g).

Post Hole F1019 was sub circular (0.32m x 0.30 x 0.28m). It had steep sides and a concave base. Its fill, L1020, was a friable, dark orange brown clayey silt with occasional stones. It contained medieval ($12^{th} - 13^{th}$ century) pottery (8; 37g). F1019 was cut by F1014.

Post Hole F1021 was sub circular (0.25m x 0.24 x 0.29m). It had steep sides and a concave base. Its fill, L1022, was a friable, dark orange brown clayey silt with occasional stones. It contained medieval ($11^{th} - 13^{th}$ century) pottery (2; 27g). F1021 was cut by F1014.

Pit F1023 was circular (0.32m x 0.08m). It had shallow irregular sides and an irregular concave base. Its fill, L1024, was a friable, dark red fired clay. It contained no finds.

Ditch F1025 was linear, orientated SW / NE (1.80+ x 0.31+ x 0.15m). It had moderately sloping sides and a concave base. Its fill, L1026, was a firm, mid orange brown clayey silt with occasional chalk. It contained no finds. F1025 was cut by F1027.

Re-cut Ditch F1027 was linear, orientated SW / NE $(1.80 + x 0.65 \times 0.18m)$. It had steep sides and a narrow base. Its fill, L1028, was a firm, mid brown clayey silt with

moderate stones. It contained $17^{th} - 19^{th}$ century pottery and residual medieval sherds (20; 245g). F1027 was a re-cut of Ditch F1025.

Ditch F1033 was linear, orientated NE / SW (2.60+ x 1.01 x 0.89m). It had moderately sloping sides and a concave base. Its fill, L1034, was a firm, mid grey brown clayey silt with occasional flint and chalk. It contained medieval ($12^{th} - 13^{th}$ century) pottery (52; 762g) and animal bone (285g)

Trench 18 (Fig. 3)

Sample section 0.00 = 93.90m A		
0.00 – 0.31m	L1000	Topsoil. As above, Trench 1
0.31– 0.39m	L1001	Subsoil. As above, Trench 1
0.39m+	L1009	Natural deposits. As above, Trench 1

Sample section 18B			
0.00 = 93.48m AC)D		
0.00 – 0.26m	L1000	Topsoil. As above, Trench 1	
0.26 - 0.49m	L1001	Subsoil. As above, Trench 1	
0.49m+	L1009	Natural deposits. As above, Trench 1	

Description: Trench 18 contained no archaeological features and finds.

Trench 19 (Figs. 3 and 9)

Sample section 19A			
0.00 = 93.92m AOD			
0.00 – 0.28m	L1000	Topsoil. As above, Trench 1	
0.28m+	L1002	Natural deposits. As above, Trench 6	

Sample section 19B 0.00 = 93.71m AOD		
0.00 – 0.31m	L1000	Topsoil. As above, Trench 1
0.31m+	L1009	Natural deposits. As above, Trench 1

Description: Trench 19 contained undated Ditch F1086.

Ditch F1086 was linear, orientated N / S (1.80+ x 1.84 x 0.09m). It had shallow sides and a flattish base. Its fill, L1087, was a firm, pale brown, clayey silt with occasional chalk. It contained no finds.

Trench 20 (Fig. 3)

Sample section 20A 0.00 = 93.72m AOD		
0.00 – 0.23m	L1000	Topsoil. As above, Trench 1
0.23m+	L1009	Natural deposits. As above, Trench 1

Sample section 20B 0.00 = 93.50m AOD		
0.00 – 0.27m	L1000	Topsoil. As above, Trench 1
0.27m+	L1009	Natural deposits. As above, Trench 1

Description: Trench 20 contained no archaeological features or finds. The central part of Trench 5 intersected a positive anomaly (a possible cut feature of archaeological origin) identified by the geophysical survey (Fig. 3); no corresponding feature was encountered.

Trench 21 (Figs. 3 and 10)

Sample section 21A			
0.00 = 93.63m AOD			
0.00 – 0.26m	L1000	Topsoil. As above, Trench 1	
0.26m+	L1009	Natural deposits. As above, Trench 1	

Sample section 21B 0.00 = 93.73m AOD		
0.00 – 0.30m	L1000	Topsoil. As above, Trench 1
0.30m+	L1009	Natural deposits. As above, Trench 1

Description: Trench 21 contained undated Pit F1077 and Ditch F1090. The latter is visible on early OS maps (Fig. 14).

Pit F1077 was sub circular $(0.80 \times 0.77 \times 0.13m)$. It had shallow sides and a concave base. Its basal fill, L1078, was a friable, dark grey brown clayey silt. It contained no finds. Its upper fill, L1079, was a firm, mid brown clayey silt. It contained no finds.

Ditch F1090 was linear, orientated E / W (1.80+ x 2.65 x 0.09m). Its profile was unseen. Its fill, L1091, was a friable, dark reddish brown, clayey silt with occasional chalk. It contained animal bone (10339g).

Trench 22 (Figs. 3 and 10)

Sample section 22A			
0.00 = 93.97m AC	DD		
0.00 – 0.22m	L1000	Topsoil. As above, Trench 1	
0.22 – 0.30m	L1001	Subsoil. As above, Trench 1	
0.30m+	L1002	Natural deposits. As above, Trench 6	

Sample section 22B			
0.00 = 93.93m AOD			
0.00 – 0.22m	L1000	Topsoil. As above, Trench 1	
0.22m+	L1002	Natural deposits. As above, Trench 6	

Sample section 2 0.00 = 93.84m A		
0.00 – 0.27m	L1000	Topsoil. As above, Trench 1
0.27m+	L1004	Fill of Ditch

Description: Trench 22 contained Ditches F1003, F1005 and F1007. The three ditches were part of the same interrupted enclosure identified during the geophysical survey. Ditches F1003 and F1005 were comparable in their profiles and fills but Ditch F1007 was not. Ditch F1007 contained medieval pottery. Ditches F1003 and F1005 however, contained Late Medieval Transitional pottery (15th-16th centuries), and a sherd of post-medieval glazed red earthenware (as well as residual medieval sherds). There was no evidence of internal features, and further investigation of the enclosure would resolve its dating and function.

Ditch F1003 was linear, orientated N / S (1.80m+ x 2.35m x 1.09m). It had steep sides and a concave base. The basal fill, L1073, was a firm, orange brown clay. It contained no finds. The secondary fill, L1074, was a firm, pale orange brown clayey silt with sparse stones and chalk. It contained medieval (late $12^{th} - 15^{th}$ century pottery (7; 156g), CBM (50g), animal bone (405g), and shell (19g). Its principal fill, L1004, was firm, dark grey brown, clayey silt with frequent chalk flecks. It contained no finds.

Ditch F1005 was linear, orientated E / W (1.80m+ x 2.80m x 1.21m). It had moderately sloping sides and a concave base. Its basal fill, L1057, was a firm, dark orange brown clayey silt with occasional stones and chalk. It contained post-medieval pottery (16th – 18th century) and medieval pottery (40; 221g), CBM (85g), animal bone (111g), oyster shell (5; 88g), struck flint (1; 1g) and iron fragments (10g). Its secondary fill, L1056, was a firm, mid orange brown clayey silt with occasional stones and chalk. It contained medieval (mid 12th – mid 14th century) pottery (15; 61g) and animal bone (7g). Its upper fill, L1006, was a friable, dark brown clayey silt with occasional small sub angular stones. It contained medieval (mid 12th – mid 14th century) pottery (12; 141g), CBM (36g), animal bone (191g), oyster shell (25g) and metal fragments (78g).

Ditch F1007 was linear, orientated NW / SE (1.80m+ \times 4.12m \times 0.63m). It had irregular moderately sloping sides and a flattish base. Its fill, L1008, was a mid brown clayey silt with occasional flint and chalk. It contained medieval (mid 12^{th} – mid 14^{th} century) pottery (80; 957g), CBM (335g), and animal bone (105g).

8 CONFIDENCE RATING

8.1 Within the areas of the site examined, it is not felt that any factors inhibited the recognition of archaeological features or finds.

9 DEPOSIT MODEL

- 9.1 Uppermost Topsoil L1000 was a firm, mid grey brown clayey silt with moderate chalk and stones. In the majority of trenches it overlay Subsoil L1001, a firm, mid orange brown clayey silt with frequent chalk and stones.
- 9.2 The natural geology, L1009, was a firm, dark orange clay with chalk and flint. It varied slightly, L1002, a firm, mid yellow chalky clay and mid orange clay and was *c*.40m below the present day ground surface.

10 DISCUSSION

10.1 The features recorded in each trench are tabulated:

Trench	context	description	Date
1	F1058	Ditch	
2	F1062	?Ditch. Possibly natural	-
	F1092 (=1101 Tr.3)	Ditch	Visible on OS Map, 1884
3	F1101 (=1092 Tr.2)	Ditch	Visible on OS Map, 1884
4	F1103 (=1060 Tr.5)	Ditch	Visible on OS Map, 1884
5	F1060 (=1103 Tr.4)	Ditch	Visible on OS Map, 1884
	F1064	Ditch	Late 18 th - early 20 th C
6	F1066	Ditch	-
10	F1049	Ditch	-
	F1051	Ditch	12 ^{th -} 14 th C
	F1068	Ditch	-
	F1105	Ditch	Modern
11	F1097	Pit	-
	F1099	Ditch	12 ^{th -} 14 th C
12	F1045	Ditch	12 ^{th –} 13 th C
	F1071	Ditch	12 ^{th -} 14 th C
	F1075	Ditch	12 ^{th -} 14 th C
	F1082	Pit	-
	F1084	Ditch	12 ^{th -} 14 th C
13	F1029	Ditch	12 ^{th -} 14 th C
	F1031	?Tree hollow	-
	F1035	Pit	12 ^{th -} 14 th C
	F1037	Ditch	12 ^{th -} 14 th C
	F1039	Ditch	12 ^{th -} 14 th C
	F1041 (=F1088 Tr.14	Ditch	Visible on Tithe Map,1841
	and F1095 Tr.15)		, , , , , , , , , , , , , , , , , , ,
	F1047	Ditch	17 ^{th -} 18 th C (+ residual med)
	F1080	Ditch	-
14	F1088 (=F1041 Tr.13	Ditch	Visible on Tithe Map, 1841
	and F1095 Tr.15)		1,
15	F1095 (=F1041 Tr.13	Ditch	Visible on Tithe Map, 1841
	and F1088 Tr.14)		.,
16	F1043	Ditch	-
17	F1010	Pit	-
	F1012	Pit	-
	F1014	Pit	12 ^{th -} 13 th C
	F1016	Ditch	12 ^{th -} 13 th C
	F1019	Post Hole	12 ^{th -} 13 th C 11 ^{th -} 13 th C
	F1021	Post Hole	11 ^{th -} 13 th C
	F1023	Pit	-
	F1025	Ditch	-
	F1027	Ditch Re-cut	17 ^{th-} 19 th C (+ residual med.) 12 ^{th-} 13 th C
	F1033	Ditch	12 ^{th -} 13 th C
19	F1086	Ditch	-
21	F1077	Pit	-
	F1090	Ditch	Visible on OS Map, 1884
22	F1003	Enclosure Ditch	Visible on OS Map, 1884 Late 12 ^{th -} 15 th C
	F1005	Enclosure Ditch	16 th -18 th C and mid 12 ^{th -} mid 14 th C
	F1007	Enclosure Ditch	Mid 12 ^{th-} mid 14 th C
L	1		

Correlation with the Geophysical Survey

10.2 The recorded archaeological features generally reflected the anomalies identified by the geophysical survey (Fig. 3), in particular the ditches visible on the 1884 OS map. The majority of positive anomalies titled, probable cut features of archaeological origin were detected but the positive anomalies of possible archaeological were less evident.

Fieldwalking and Metal Detecting Survey

10.3 The fieldwalking and metal detector surveys recovered post-medieval and modern CBM, pottery and metalwork fragments

Prehistoric

10.4 Two residual pieces of struck flint contained in medieval Ditches F1005 (Trench 22) and F1045 (Trench 12). The flakes may date from Mesolithic and Neolithic periods (Struck Flint report below)

Medieval

- 10.5 Trenches 12, 13 and 17, located on the western side of the southern sector of the site, each contained four or five medieval features. At some slight distance to the east, Trenches 10 and 11 each contained a medieval feature. These archaeological features may suggest the presence of roadside settlement, with Barrow Green less than 200m to the north. This is supported by the 1597 map (Fig. 11), which depicts a house in the field to the north of these features which is an open field on the Tithe map (Plot 271), suggesting that the medieval settlement may have been more extensive than previously known. A ditch is also shown crossing the site in this location, which is not present on any of the later maps, but does appear to show up partially on the geophysical survey.
- 10.6 The majority of the dated medieval features were ditches, but discrete features were also recorded: Pit F1035 (Trench 13), Pit F1014 and Post Holes F1019 and F1021 (Trench 17). The latter are indicative of structural remains and daub was found within Ditches F1005, F1007 (Trench 22) and F1037 (Trench 13). Undated pits were recorded in Trenches 12 (F1082) and 17 (F1010, F1012 and F1023) and may be associated with the medieval remains.
- 10.7 The geophysical survey revealed an enclosure in the southernmost sector of the site and within Trench 22 Enclosure Ditches F1003, F1005 and F1007 were revealed. Ditch F1007 contained medieval pottery including fragments of a Hedingham ware jug of 13th early 14th centuries date. Ditches F1003 and F1005 however, contained Late Medieval Transitional pottery (15th-16th centuries), and a sherd of post-medieval glazed red earthenware (as well as residual medieval sherds). The parish map of 1597 shows a house just to the south of this enclosure (Fig. 11), and so the enclosure may be associated with this. There was no evidence of internal features, and further investigation of the enclosure would resolve its dating and function.

10.8 The finds assemblages associated with the medieval pottery comprise CBM, animal bone, oyster shell, slag and some metal fragments. Ditch F1051 (Trench 10) contained a very worn piece of a lava quern. The presence of slag suggests that iron working may have been carried out in the vicinity of the site. The assemblages are suggestive of domestic activity, for example, the adherence of sooting on some of the coarseware pottery sherds and the presence of medieval glazed pottery in just three features, suggests a domestic assemblage. The animal bone assemblage is dominated by the principal domestic meat producing mammalian taxa (cattle and sheep/goat). Further the archaeobotanical assessment records widespread preservation of carbonised plant macrofossils in the medieval deposits. Wheat predominated and is likely to represent the primary economic and dietary stable. Other crops, including barley, oats, rye and pulses are likely to have contributed to a mixed arable economy, with less common cereals oat and rye potentially representing fodder crops rather than part of the human diet.

Post-Medieval and Modern

10.9 In the northern sector of the site Ditches F1060 (Trench 5), F1092 (Trench 2), F1101 (Trench 3) and F1103 (Trench 4) were detected by the geophysical survey and were visible on the OS Map of 1884 (Fig. 14). Similarly in the southern half of the site Ditches F1041 (Trench 13), F1088 (Trench 14), F1090 (Trench 21) and F1095 (Trench 15) were detected by the geophysical survey and were visible on the OS Map of 1884 (Fig. 14). These ditches contained post-medieval and modern pottery.

10.10 Ditches F1027 (Trench 17), F1047 (Trench 13), F1064 (Trench 5), F1105 (Trench 10) also contained post-medieval and modern pottery and CBM.

Research Design

10.11 The primary research interest of the site lies in the medieval archaeology that was recorded here. By the medieval period Barrow was a scattered settlement based on two green areas and a main street containing the moated site of Barrow Hall (BRR 003). Settlements around greens in Suffolk are thought to date from the 12th century and are usually located on the periphery of their parish suggesting a secondary feature in the medieval landscape (Martin 1999, 62). The current site lies close to a site previously excavated by AS (Smith and Newton 2014) at which small scale medieval activity was recorded. The current site adds to the corpus of information regarding medieval settlement in the Barrow area and may contribute to furthering understanding of the wider settlement. Indeed, work conducted in Leicestershire has demonstrated how small scale development-led archaeological interventions, such as this one, can assist in establishing the extent, distribution and date of human activity within, across and around currently occupied settlements (Thomas 2006). As further such interventions occur, proper synthesis of the data can help to develop a clear picture of the development of a settlement. Similar work has been conducted by Cambridge University in their Continuously Occupied Rural Settlements (CORS) project which has provided evidence to inform, develop, and challenge existing notions regarding past patterns of occupation (Lewis 2007; Lewis 2010).

10.12 Medlycott (2011, 70) identifies rural settlement as an important area of research for the medieval period in East Anglia. The presence of potential boundary ditches and possible evidence for buildings in what is known to have been a rural area indicates that the site has some potential to contribute to the achievement of research aims associated with this subject. Of particular importance may be the possible building remains; identifying the form and range of medieval buildings in rural settlements is identified as a particularly important research question (Medlycott 2011, 70) as is the relationship between field size and shape and agricultural regime (*ibid.*).

11 DEPOSITION OF THE ARCHIVE

11.1 Archive records, with inventory, will be deposited at Suffolk Archaeological Archives in accordance with their requirements. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data.

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APPENDIX 1 CONCORDANCE OF FINDS

Feature	Context	Trench	Description	Spot Date (Pot Only)	Pot Qty	Pottery (Weight)	CBM (Weight)	A.Bone (Weight)	Other Material	Other Qty	Other (Weight)
	1001		Topsoil	12th-14th	40	858g	<1g	23g	Oyster Shell	-	7g
1003	1074	22	Fill of Ditch	15th-16th	7	156g	50g	405g	Shell		19g
1005	1006	22	Fill of Ditch	16th-18th (residual med sherds)	12	141g	36g	191g	SF5 Fe.Nails		44g
	_								SF5 Cu. Alloy Frag	_	34g
									Oyster Shell	4	25g
	1056	22	Fill of Ditch	mid 12th- mid 14th	15	61g		7g			
	1057	22	Fill of Ditch	16th-18th (residual med sherds)	40	221g	85g	111g	Oyster Shell	2	88g
	_								S.Flint	_	1g
	_								Fe.Frags	4	10g
1019	1020	17	Fill of Post Hole	12th-13th	8	37g					
1021	1022	17	Fill of Post Hole	11th-13th	2	27g					
1027	1028	17	Fill of Ditch	17th-19th (residual med sherds)	20	245g					
1029	1030	13	Fill of Ditch	12th-14th	3	25g			SF1 Fe.Frag	_	26g
1033	1034	17	Fill of Ditch	12th-13th	52	762g		285g			
1035	1036	13	Fill of Pit	12th-14th	3	30g					
1037	1038	13	Fill of Ditch	12th-14th	2	30g	2g	2 g			
1039	1040	13	Fill of Ditch	12th-14th	10	73g		64g	Oyster Shell		24g
1041	1042	13	Fill of Ditch	18th-19th	7	134g					
1043	1044	16	Fill of Ditch						SF2 Cu.Alloy Frags		23g
1045	1046	12	Fill of Ditch	12th-14th	11	38g		26g	Oyster Shell		119g
	_								S.Flint	—	7g
1047	1048	13	Fill of Ditch	17th-18th (with residual med sherds)	15	129g		37g	SF3 Fe.Frag	-	49
									SF4 Fe.Frags		96g
1051	1052	10	Fill of Ditch	12th-14th	1	6g		29g	Lava Quern Fragment	1	390g
									Slag		315g
1045	1054	12	Fill of Ditch	12th-13th	2	6g		2g	Oyster Shell		32g
1058	1059	-	Fill of Ditch				2490g				
1060	1061	2	Fill of Hedgeline	late 18th-early 20th	2	24g	1106g	162g	Clay Pipe	-	5g
									Fe.Frags	4	25g
1064	1065	2	Fill of Ditch	late 18th-early 20th	2	9g	11g				

	14g						10g	12g
	-							_
	Shell						Glass	Fe.Frag
19g	47g							22g
		12g	10339		31g			193g
5g	226g	17g		8g	9g	22g	4g	
2	20	2		-	က	က	-	
12th-14th	12th-14th	18th-19th		18th-19th	12th-14th	12th-14th	late 18th-earl 20th	
Fill of Ditch	Fill of Pit	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch
12	12	14	21	2	15	1	4	10
1076	1085	1089	1091	1093	1096	1100	1104	1106
1075	1084	1088	1090	1092	1095	1099	1103	1105
	1076 12 Fill of Ditch 12th-14th 2 5g	1076 12 Fill of Ditch 12th-14th 2 5g 19g 19g 1 1085 12 Fill of Pit 12th-14th 20 226g 47g Shell 1	1076 12 Fill of Ditch 12th-14th 2 59 19g 19g 1 1085 12 Fill of Ditch 12th-14th 20 226g 47g Shell 1 1089 14 Fill of Ditch 18th-19th 2 17g 12g 1	1076 12 Fill of Ditch 12th-14th 2 5g 19g 7g 19g 1 1085 12 Fill of Ditch 12th-14th 20 226g 47g Shell 1 1089 14 Fill of Ditch 18th-19th 2 17g 12g 1 1091 21 Fill of Ditch 10339 1 10339 1	1076 12 Fill of Ditch 12th-14th 2 59 19g Arg Shell 1 1085 12 Fill of Ditch 18th-19th 2 17g 12g 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>1076 12 Fill of Ditch 12th-14th 2 59 19g A7g Shell 1 1085 12 Fill of Ditch 18th-19th 2 17g 12g A7g Shell 1 1091 21 Fill of Ditch 18th-19th 1 8g 10339 1 1 1096 15 Fill of Ditch 12th-14th 3 9g 31g 3 9g 31g 3</td> <td>1076 12 Fill of Ditch 12th-14th 2 5g 19g A7g Shell 1 1085 12 Fill of Ditch 18th-14th 2 226g 47g Shell 1 1089 14 Fill of Ditch 18th-19th 2 17g 12g 8 1 1093 2 Fill of Ditch 12th-14th 3 9g 31g 8 8 8 1096 15 Fill of Ditch 12th-14th 3 22g 31g 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8</td> <td>1076 12 Fill of Ditch 12th-14th 2 59 479 Shell 1 1085 12 Fill of Ditch 18th-19th 2 179 129 A 1 1 1091 2 Fill of Ditch 18th-19th 1 89 319 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8</td>	1076 12 Fill of Ditch 12th-14th 2 59 19g A7g Shell 1 1085 12 Fill of Ditch 18th-19th 2 17g 12g A7g Shell 1 1091 21 Fill of Ditch 18th-19th 1 8g 10339 1 1 1096 15 Fill of Ditch 12th-14th 3 9g 31g 3 9g 31g 3	1076 12 Fill of Ditch 12th-14th 2 5g 19g A7g Shell 1 1085 12 Fill of Ditch 18th-14th 2 226g 47g Shell 1 1089 14 Fill of Ditch 18th-19th 2 17g 12g 8 1 1093 2 Fill of Ditch 12th-14th 3 9g 31g 8 8 8 1096 15 Fill of Ditch 12th-14th 3 22g 31g 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1076 12 Fill of Ditch 12th-14th 2 59 479 Shell 1 1085 12 Fill of Ditch 18th-19th 2 179 129 A 1 1 1091 2 Fill of Ditch 18th-19th 1 89 319 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

APPENDIX 2 SPECIALIST REPORTS

The Struck Flint

Andrew Peachey MCIfA

The evaluation recovered two pieces (8g) of struck flint in an un-patinated condition; with single blade-like tertiary debitage flakes contained in medieval Ditches F1005 (Trench 22) and F1045 (Trench 12). The flakes were produced utilizing a high quality dark grey flint with a thin white cortex, and are consistent with core reduction techniques employed in the Mesolithic and Neolithic periods, but exhibit no evidence of modification or other technological traits that may identify a more specific chronology.

The Post-Roman Pottery

Peter Thompson

Introduction

The archaeological evaluation recovered 401 sherds weighing 4.359 kg from 27 features and the topsoil. The majority of the pottery (359 sherds) is of medieval date fitting within an approximate 12th-14th centuries date range. Nineteen sherds are Late Medieval Transitional and a further two sherds are post-medieval to Early Modern (Table 1).

Methodology

The sherds were examined using x35 binocular microscope to identify the fabrics, and were recorded in accordance with the Post-Roman Pottery Research Group Guidelines (Slowikowski 2001). Fabric codes comprising letters and numbers, were assigned from the Suffolk post-Roman fabric series. Form terminology is based on the Suffolk post-Roman rim forms and the medieval pottery form descriptions in the MPRG (1998).

Ware	Ware Code	Fabric code	Date range	Sherd No.	Fabric Weight.
					(g)
Medieval coarseware	MCW	3.20	12 th -14 th	130	883
Medieval coarseware (gritty)	MCWG	3.21	11 th -13 th	130	1,795
Grimston coarseware	GRCW	3.22	12 th -13 th	1	8
Bury coarse sandy ware	BCSW	3.32	12 th -14 th	27	188
Medieval chalk tempered ware	MCWC	3.60	12 th -14 th	1	2
Early medieval sparse shelly	EMWSS	3.19	11 th -13 th	2	36
ware					
Developed St Neots ware	DVPSTNE	2.70	12 th -13 th	2	91
Hedingham fine ware	HFW1	4.23	Mid 12 th -mid 14 th	59	794
Unprovenanced glazed ware	UPG	4.00	Late 12 th -14 th	7	16
Late medieval Transitional	LMT	5.70	15 th – 16 th	19	284
Glazed red earthenware	GRE	6.12	16 th -18 th	19	246
Transfer Printed Ware	TPW	8.00	Late 18 th -20 th	4	16
Total				401	4359

Table 1: Quantification of the post-Roman pottery

Description

The majority of the medieval coarsewares (97.9%) are in sandy or gritty fabrics. One sub-group, Bury coarse sandy ware, containing coarse quartz and occasional flint

and chalk inclusions is thought to derive from the Newmarket area. Fifty-nine of the sixty-six medieval glazed sherds are Hedingham fine ware, although all but one of these derives from a single vessel from Ditch F1007 (L1008) (Trench 22). The remaining glazed sherds are unprovenanced, but fit within the 'East Anglian redware' tradition.

Potentially the earliest pottery from the site came from Ditch F1033 (L1034) (Trench 17) comprising two conjoining sherds from a large bowl with simple slightly inturned rim, in St Neots ware. However, the form and also the consistency of the fabric suggests that it is a 'Developed' example and probably of 12th-13th centuries date. The feature also contained a large fragment of costrel including the spout in a gritty fabric. The remaining rims from the site are all developed suggesting that they post-date the 11th century, and include F1, F2 and E4 types often found in 13th-14th century assemblages. Several medieval coarseware body sherds have applied vertical thumb impressed clay strips, and one rim contains incised wavy line decoration. The glazed Hedingham ware vessel from Ditch F1007 is a stamped strip jug with a date range of c. AD 1225-1300/1325 (Walker 2012, 100).

The adherence of sooting on some of the coarseware sherds and the presence of medieval glazed pottery in just three features, suggests a domestic assemblage. The mixing of LMT and GRE sherds amongst larger quantities of medieval pottery in Ditches F1005 (Trench 22), F1027 (Trench 17) and F1047 (Trench 13) might suggest that an area of medieval occupation has been disturbed by later activity. Large fragments of medieval pottery in quite good condition were present within the topsoil also indicating proximity to medieval settlement.

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The Ceramic Building Materials

Andrew Peachey MCIfA

The evaluation recovered a total of 67 fragments (5440g) of CBM (Table 2); predominantly comprised of highly abraded Victorian to early modern material, however a low quantity of daub may have medieval origins. The CBM was entirely in a highly abraded and fragmented condition; in the case of the daub attributable to its friable fabric, and for the remainder due to being re-distributed by agricultural processes.

СВМ Туре	Date	Frequency	Weight (g)
Daub	Medieval?	35	375
Peg tile	Post-medieval/early modern	15	221
Soft red brick	19 th to early 20 th C	7	3738
White earthen ware water pipe	Victorian (19 th C)	10	1106
Total		67	5440

Table 2: Quantification of CBM

The daub occurred in a mottled pale-brown to orange-red fabric that was relatively soft and friable, suggesting it was allowed to dry over a frame rather than baked into an object. The daub was tempered with common to abundant rounded chalk (0.5-5mm), and occasional small areas of slightly uneven 'external' surfaces remained extant; but the fragments were small and no other impressions were recorded. The bulk of the daub: 27 fragments (335g), was contained in Ditch F1007 (Trench 22), with further sparse fragments in Ditches F1005 (Trench 22) and F1037 (Trench 13). Comparable construction methods have been recorded on sites in the region from the Iron Age to the medieval periods, but the associated 12-14th century pottery suggests medieval origins.

The post-medieval peg tile occurs in a highly-fired fine red fabric, but is limited to very sparsely distributed small fragments in ditch features and as un-stratified material. The same can be said for the soft red brick, although five fragments (2490g) in Ditch F1058 (Trench 1) appear to represent a single shattered brick. This example has dimensions of 235x110x65mm with a broad angular frog. It appears that both the peg tile and soft red brick are consistent with types manufactured in the 19th to early 20th centuries, and that they have been repeatedly re-deposited, probably as material distributed to improve soil conditions and drainage. Hedgeline F1060 (Trench 5) contained fragments of white earthen ware pipe with a ribbed exterior, most likely part of a truncated Victorian water pipe.

The Slag

Andrew A.S. Newton

Introduction

Six pieces (315g) of slag, originating from Ditch F1051 (Trench 10), were recovered during the evaluation. The slag was identified on morphological grounds by visual examination.

Visual examination of metalworking residues allows them to be categorised according to morphology, colour, density, and vesicularity. It should be noted, however, that not all slags are diagnostic of a particular metalworking process or part of that process. Slags are also particularly susceptible to morphological and composition alteration by secondary corrosion products.

Reference was made to the National Slag Reference Collection (Dungworth *et al* 2009) where appropriate and to the relevant subject-specific (Bayley *et al* 2008) and regional (Medlycott 2011) research frameworks.

Results

F1051, L1052 6 fragments, 315g.

The six fragments of slag recovered from this context conjoin to form two larger pieces.

Two fragments form an amorphous piece of slag that its light grey brown on colour on its outer surfaces with orange brown surfaces. Breaks reveal a very dark orange brown to black interior. Surfaces are generally rough and dull although glittery deposits in a loose band may represent larger crystalline structures or vitrification. The material is dense with little porosity or air pockets. It gives a slight magnetic response indicating that it is derived from a process associated with ferrous metals but it there are insufficient diagnostic features to identify whether this material is from the smelting or smithing processes.

The remaining four fragments have a light grey brown to very dark grey exterior with an orange brown interior displaying a dark grey core. The outer surfaces are dull but some vitrification is present. The material is extremely dense, with very few very small air pockets. It gives a very slight response to the magnet. When joined together, the fragments form a semi-circular arch shape, indicating that the molten slag cooled around a circular or curved object (DPs 1 and 2). It is possible that this shape represents part of the furnace or hearth in which this material was initially generated.



DP 1: The fragments of slag from F1051 (L1052) which conjoin to form a semi-circle or arch shape. Viewed from above



DP 2: The fragments of slag from F1051 (L1052) which conjoin to form a semi-circle or arch shape. Viewed from an oblique angle

Discussion

The slag recovered from this site cannot easily be reconciled to either the smelting or smithing processes but can be identified as deriving from iron working. The pieces that form the arch or semi-circular shape would appear to have taken on the form of whatever they were adhering to at the time that the cooled. It is possible that this was an air inlet, or tuyere, in the furnace or hearth in which they were formed, but it could equally be another element of the construction of one of these or something else outside of the kiln if this material represents tap slag.

The material was recovered from a medieval ditch and would appear not to be in its primary context. Crew (1995) suggests that it may be expected to find at a least a tonne of slag at a primary iron-working site of this date. The presence of this material does, however, suggest that iron working may have been carried out in the vicinity.

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The Small Finds

Nicholas J. Cooper

The small finds comprise a collection of iron nails and structural strip fittings and a very worn piece of a lava quern from Ditch F1051 (Trench 10). The fragments are not diagnostic

The Shell

Dr Julia E.M. Cussans

A small assemblage of oyster (*Ostrea edulis*) shells was recovered from excavations at Barrow Hill. A total of 37 pieces were recovered which included approximately equal numbers of upper and lower valves (umbone present) and a small number of fragments (Table 3). Preservation was largely rated as good or ok on a five point scale from very poor through to excellent.

A small number of both upper and lower valves had marks on their ventral edges which may have been indicative of opening. Two lower valves (L1046 and L1054) had cuts on their inner surfaces, presumably resulting from the removal of the meat from the shell. A small number of shells also had signs of worm burrows on their outer surfaces. The assemblage shows considerable size variation with a number of particularly small individuals being present. L1057 contained several upper valves with shell lengths of less than 50mm, the smallest of which was only 39mm. The largest shells came from L1046, upper valves in this context had lengths in the region of 60mm; a lower valve from the same context had a length of 77mm.

Feature	Context	Description	Spot Date	Lower	Upper	Fragments	NISP	MNI
	1001	Topsoil	12th-14th		1		1	1
1005	1006	Fill of Ditch	mid 12th-14th	1	3		4	3
1039	1040	Fill of Ditch	12th-14th	2		1	3	2
1045	1046	Fill of Ditch	12th-14th	2	3	2	7	2
1045	1054	Fill of Ditch	12th-13th	2		4	6	2
1005	1057	Fill of Ditch	16th-18th	4	8		12	8
1003	1074	Fill of Ditch	late 12th-15 th	2		1	3	2
1084	1085	Fill of Pit	12th-14th	1			1	1
			Total	14	15	8	37	15

Table 3: Quantification of oyster shell

The Animal Bone

Dr Julia E.M. Cussans

A total of 153 animal bone fragments were recovered from 17 contexts during excavations at Barrow Hill. Bone preservation was largely rated as ok, with a few contexts being rated as poor or good (Table 4) on a five point scale from very poor through to excellent. Bone abrasion was fairly common; there was a small number of fresh breaks and only two incidences of gnawed bone. The majority of the

assemblage could only be identified as large (cattle or horse sized) or medium (sheep or pig sized) mammal (Table 4), the former of which formed the largest group. Specific taxa identified, in order of abundance, were cattle, sheep/goat, pig, horse and goose sized bird. A single fragment of sheep horn core was identified from L1034 (Ditch F1033), no goat bones were positively identified.

Cattle appeared to be largely represented by head and foot elements but a few limb elements were also present. Ageable elements included a mandible (L1005) with the fourth deciduous pre-molar (dp4), first and second molars (M1, M2) present, the latter of which was not fully erupted with the other two teeth both in wear. Following Halstead's (1985) age stages this would indicate an animal at age stage C, with an estimated age of 8-18 months. A further ageable element came from L1074; this was a lower M3 which was found to be at Grant's (1982) wear stage d, giving Halstead's (1985) age stage E with a suggested age of 30-36 months, an animal of prime meat age. Very little butchery evidence was present and no pathological lesions were observed. No measurable bones were present.

Sheep/ goat were represented by head, limb and foot bones. Aside from the fragment of sheep horn core noted above no bones of analytical note (e.g. ageable butchered etc.) were present.

Pigs were represented only by bones of the head and feet, which may indicate that prime meat elements were exported off the site, however the sample size is too small for any reliable conclusions to be drawn. A single ageable mandible was present with the M1 displaying slight wear and the M2 visible but not yet erupted. Following Hambleton's (1999, 65) age stages this would indicate an animal of age stage C with an indicative age of 7-14 months. The presence of two metapodials with unfused distal ends also indicates the presence of relatively young animals. Two lower canine teeth were present in the pig assemblage, both of which belonged to male animals. No butchered, pathological or measurable elements were present.

Horse was largely represented by limb elements, although a single cranial element was also present. No ageable, butchered or pathological elements were present. A piece of distal tibia from L1008 appeared to have had the cancellous bone hollowed out behind the articulation and may have been worked in some way, although this cannot be said with any certainty.

The three bird bones present were all limb bones and all likely belonged to goose, which given the medieval date of the site may well have belonged to domestic birds. No butchery or pathology was noted.

This small assemblage is dominated by the principal domestic meat producing mammalian taxa. Age data are extremely sparse so the exploitation of secondary products is impossible to determine, however the wool trade was particularly important in the medieval period (Grant 1984, Sykes 2006) and sheep are likely to have been exploited for their wool as well as meat. Horses appear likely to have been used as work animals and domestic geese, if present, may have been exploited for eggs meat and feathers as well as being used as guard animals (Serjeantson 2002).

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	1	ı		T	T	T				1	1	T			1	1	1	I
Total	2	17	4	23	2	15	3	7	2	~	~	20	18	24	2	8	_	153
Bird		2						-										က
Medium mammal				2	-	10			~			6	3	~				30
Large Mammal	5	10	8	10	_	5	_	9		-		9	10	11	2	8		62
Horse			_				_						2					4
Pig		2										က		4				6
Sheep/goat		1		5										4				10
Cattle		2		3			_		_		_	2	3	4			-	18
Preservation	poor	poob	ok	ok	ok	ok	ok	ok	ok	poor	ok	ok	ok	poob	poor	poor	ok	Tota/
Spot Date	12th-14th	mid 12th-14th	mid 12th- mid 14th	12th-13th	12th-14th	12th-14th	12th-14th	17th-18th	12th-14th	12th-13th	mid 12th- mid 14th	16th-18th	late 18th-early 20th	late 12th-15th	12th-14th	12th-14th		
Description	Topsoil	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Hedgeline	Fill of Ditch	Fill of Ditch	Fill of Pit	Fill of Ditch	
Context	1001	1006	1008	1034	1038	1040	1046	1048	1052	1054	1056	1057	1061	1074	1076	1085	1106	
Feature		1005	1007	1033	1037	1039	1045	1047	1051	1045	1005	1005	1060	1003	1075	1084	1105	

Table 4: Quantification of animal bone

The Environmental Samples

Dr John Summers

Introduction

During the evaluation, 20 bulk soil samples were taken and processed for environmental archaeological assessment. The sampled deposits are predominantly spot dated to the medieval period (12th-14th century), accompanied by a smaller number of post-medieval and undated contexts.

The aim of the assessment was to investigate the arable economy of the site at Barrow Hill during the medieval period. Additionally, the investigation was concerned with assessing the representation and preservation of carbonised remains within deposits at the site in order to form recommendations for further sampling and archaeobotanical investigations, where necessary.

Methods

Samples were processed at the Archaeological Solutions Ltd facilities in Bury St. Edmunds using standard flotation methods. The light fractions were washed onto a mesh of 500µm (microns), while the heavy fractions were sieved to 1mm. The dried light fractions were scanned under a low power stereomicroscope (x10-x30 magnification). Botanical and molluscan remains were identified and recorded using a semi-quantitative scale (X = present; XX = common; XXX = abundant). Reference literature (Cappers *et al.* 2006; Jacomet 2006; Kerney and Cameron 1979; Kerney 1999) and a reference collection of modern seeds was consulted where necessary. Potential contaminants, such as modern roots, seeds and invertebrate fauna were also recorded in order to gain an insight into possible disturbance of the deposits.

Results

The assessment data from the bulk sample light fractions are presented in Table 5.

Plant macrofossils

Twelve of the 20 samples were taken from deposits spot dated to the medieval period. All twelve of these contained carbonised plant macrofossils in the form of cereals and associated non-cereal weed taxa. The cereal remains recovered were predominantly in the form of carbonised caryopses, with wheat, specifically free-threshing type wheat (*Triticum aestivum/ turgidum* type), dominating the assemblage. A single rachis node in ditch fill L1008 (F1007) was identified as bread wheat (*T. aestivum*), indicating the cultivation of this taxon. However, the evidence of a single rachis node does not rule out the cultivation of the other common medieval crop, rivet wheat (*T. turgidum*). Also common were the remains of barley (*Hordeum* sp.), with occasional angular grains indicating the cultivation of a hulled variety. Oat (*Vavena* sp.) and rye (*Secale cereale*) were also recorded, although they were neither frequent nor abundant. Also present were occasional seeds of pulses (Fabaceae), including pea (*Pisum sativum*). These are likely to represent a further crop, adding to the mixed resource base and nutritional diversity of the settlement.

The presence of predominantly clean grain does not rule out the likelihood that these are the remains of locally cultivated cereals. It is possible that chaff from free threshing cereals is absent due to early stages of processing being carried out away from the main areas of occupation.

Rich samples were recovered from contexts L1008, L1038, L1046 and L1054. Three of these are located in the eastern portion of the site in Trenches 12 and 13, and it is possible that there was a focus on cereal use and processing in this area.

A small range of non-cereal taxa were present within the bulk sample light fractions, the majority of which are likely to be present as arable weeds. These included corncockle (*Agrostemma githago*), vetch/ wild pea (*Vicia/ Lathyrus* sp.), eyebright/ bartsia (*Euphrasia/ Odontites* sp.), stinking chamomile (*Agrostemma githago*) and sedge (*Carex* sp.). Stinking chamomile is indicative of the cultivation of heavy clay soils, which are well suited to the cultivation of bread wheat. The cultivation of more marginal soils may be indicated by eyebright/ bartsia, which grows on less fertile substrates, and sedge, which may reflect wetter areas of arable land. These may be associated with crops such as oat or rye, which are able to tolerate much poorer soils than wheat.

Charcoal

Charcoal fragments >2mm was present to common in a number of deposits spot dated to the medieval period. An assessment of vessel patterns in transverse section identified both ring- and diffuse-porous wood types. One un-dated deposit (L1078) contained abundant charcoal fragments identified as oak (*Quercus* sp.). No deposits appeared to represent the remains of specialised burning activities that would merit detailed analysis of fuel wood selection at this stage.

Terrestrial molluscs

Shells of grassland snails and those characteristic of ground litter were present within the bulk sample light fractions. These indicate rough grassland type conditions in the vicinity of the sampled deposits. Preservation of mollusc shells was good, although none of the features sampled during the evaluation represented significant potential for detailed analysis.

Contaminants

Modern rootlets, seeds, burrowing molluscs (*Cecilioides acicula*) and earthworm egg capsules were present in many of the samples. However, these were not recovered in such high concentrations as to suggest significant biological disturbance of the sampled deposits or to impede the recovery and recognition of environmental archaeological remains.

Conclusions and Statement of Potential

The results of the archaeobotanical assessment have demonstrated the widespread preservation of carbonised plant macrofossils in the medieval deposits at Barrow Hill. Wheat predominated and is likely to represent the primary economic and dietary

stable. Other crops, including barley, oats, rye and pulses are likely to have contributed to a mixed arable economy, with less common cereals oat and rye potentially representing fodder crops rather than part of the human diet. Vetches can also fulfil this role but none of the specimens recovered during the evaluation could be precisely identified to add weight to this view.

The range of cultivars is typical for English rural sites of this period (e.g. Fryer and Summers forthcoming; Ballantyne 2005; Carruthers 2008). The frequency and richness of carbonised remains in the archaeological deposits demonstrates that cereals were in common usage at the site during the medieval period, most likely as part of arable processing activities, as well as preparation and consumption activities.

Should further excavation be undertaken at the site, it is proposed that a detailed programme of bulk sampling would be significant in further investigating the arable economy of the site at Barrow Hill. The collection of large (40-60 litre samples) would maximise the recovery of non-cereal taxa, which have the potential to provide information regarding arable husbandry practices and growing conditions. This is highlighted by van der Veen *et al.* (2013) as a priority for archaeobotanical investigations on British medieval sites. The possible identification of an area of more intensive deposition of carbonised cereals in the east of the site should also be considered in more detail during further work, including an attempt to characterise the activities undertaken in the vicinity of sampled deposits.

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	Earthworm capsules	1	٠		1	×	1	1
ntaminar	Insects		-			1	1	
	Modern seeds	×				ı	1	
	Molluscs	1	-	1	×	ı	1	
	Roots	×	×	×	×	×	×	×
Molluscs	Notes	Carychium sp., Oxychilus sp., Vallonia sp.	-	1	1	Oxychilus sp., Trichia hispida group, Vallonia sp., Vertigo sp.	Caychium sp., Cochlicopa sp., Cochlicopa sp., Trichia sp., Trichia hispida group, Vallonia sp.	Cochlicopa sp., Pupilla muscorum, Vallonia sp., Vertigo sp.
	Molluscs	×				×	×	×
Charcoal	Notes	Diffuse	-	Diffuse porous	1	Diffuse	Diffuse	
Ch	Charcoal>2mm	×		×		×	×	×
Haz	zelnut shell	1		1	1	×	×	1
Non-cereal taxa	Notes	Pisum sativum (X), Vicia/ Lathyrus sp. (X)		ı	1	Medium Fabaceae (X), Large Fabaceae (X), Carex sp. (X)	Vicia/ Lathyrus sp. (X), Large Fabaceae (X), Anthemis cotula (X)	
	Seeds	×	-		1	×	×	
	Notes	Hord (X), FTW (XX), Oat (X), BW rachis	-	NFI (2)	NFI (1)	Hord (X), (XX)	Hord (X), FTW (XX)	FTW (2), NFI 1)
Cereals	Cereal chaff	×	-		1	1	1	×
	Cereal grains	×		×	×	×	×	×
% processed		100%	%00L	%09	100%	100%	100%	%09
Vol	ume processed (litres)	40	10	20	19	30	40	20
Vol	ume taken (litres)	40	10	40	10	30	40	40
Spot date		Mid 12th- mid 14th C AD		12th- 14th C AD	12th- 14th C AD	12th- 14th C AD	12th- 14th C AD	12th- 14th C AD
Tre	nch	22	11	1 3	13	5	2	10
Description		Fill of Ditch	Fill of Pit	Fill of Ditch	Fill of Pit	Fill of Ditch	Fill of Ditch	Fill of Ditch
Feature		1007	1023	1039	1035	1037	1045	1051
Coi	ntext	1008	1024	1040	1036	1038	1046	1052
Sar	mple number	-	2	က	4	വ	9	7

				T	T	1
1		×	ı	ı	ı	1
	1	1		1	1	
	ı	1		1	1	1
		×		1	1	ı
×	×	×	XX	×	×	×
Carychium sp., <i>Trichia</i> hispida group	-	Carychium sp., Sp., Cochlicopa sp., Discus rotundatus, Trichia hispida group,	-	Carychium sp., Discus rotundatus, Pupilla muscorum, Trichia hispida group, Vallonia sp.	Carychium sp., Discus rotundatus, Pupilla muscorum, Trichia hispida group, Vallonia sp.	
×	-	×		×	×	1
Diffuse porous	-	Diffuse porous	-	Diffuse	Ring porous	1
×		×		×	×	
1		1		~	1	1
Agrostemma githago (X), Medium Fabaceae (X), Large Fabaceae (X), Euphrasia/ Odontites sp. (X), Anthemis	Pisum sativum (1), Anthemis cotula (1)	Plantago Ianceolata (X), Medium Poaceae (X)	•	Papaver rhoeas/ dubium (1), Stellaria media (1), Large Fabaceae (2)	Large Fabaceae (2)	1
×	X	×	-	×	×	1
Hord (X), (XX), Oat (X), (X) (X)	FTW (1), NFI (1)	(X)	-	HB (1), FTW (7), NFI (6)	FTW (3), Trit (2), NFI (1)	FTW (1)
	1	1	ı	1	1	1
×	×	×		×	×	×
100%	100%	100%	%09	100%	100%	%09
20	20	40	20	04	40	20
20	20	40	40	40	40	40
12th- 13th C AD	12th- 14th C AD	17th- 18th C AD		16th- 18th C AD	Mid 12th- 14th C AD	12th- 14th C AD
12	13	13	16	22	22	12
1045 Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Ditch
1045	1029	1047	1043	1005	1005	1071
1054	1030	1048	1044	1057	1056	1072
ω	6	10	7	12	13	4

	T	ı	ı	T	
	1	1	1	1	
1	1			ı	
× ×	×	×	×	1	
×	×		×	1	
×	×	×	×	×	×
XX Carychium sp., Cochlicopa sp., Discus rotundatus, Vallonia sp.	<i>Carychium</i> sp., <i>Oxychilus</i> sp.	1		1	
×	×		ı	ı	
1	Ring porous	Quercus sp.	1	1	
	×	××	1	×	
1	1		1	1	
FTW X Anthemis cotula (2), NFI 1)	Medium Fabaceae (1)	1	Medium Fabaceae (1)	1	ı
×	×			1	
FTW (2), NFI 1)	FTW (1), Trit (2), NFI (2)	1	NFI (1) X		
1	ı		ı	ı	-
×	×	1	×	1	
20%	20%	%09	20%	100%	100%
40 20	20	10	20	10	10
	40	20	40	10	10
22 16th- 18th C AD	12th- 14th C AD	1	12th- 14th C AD	Late 18th- early 20th C AD	1
52	12	21	12	2	10
1057 1005 Fill of Ditch	Fill of Ditch	Fill of Pit	Fill of Pit	Fill of Ditch	Fill of Burrow
1005	1075	1077	1084	1064	1094
1057	1076	1078	1085	1065	1070
15	16	17	8	19	20

Table 5: Results from the assessment of bulk sample light fractions from land east of Barrow Hill. Abbreviations: HB = hulled barley (Hordeum sp.); Hord = barley (Hordeum sp.); BW = Bread wheat (Triticum aestivum); FTW = free-threshing type wheat (Triticum aestivum); Trit = wheat (Triticum sp.); Oat (Avena sp.); Rye (Secale cereale); NFI = not formally identified (indeterminate cereal grain)

APPENDIX 3 SPECIFICATION

LAND EAST OF BARROW HILL, BARROW, SUFFOLK

WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL EVALUATION

14th April 2016 Revised 21st April 2016

LAND EAST OF BARROW HILL, BARROW, SUFFOLK ARCHAEOLOGICAL EVALUATION

1 INTRODUCTION

- 1.1 This specification has been prepared in response to a brief (TO BE) issued by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT) (dated 12th April 2016). It provides for a geophysical survey and an archaeological trial trench evaluation to be carried out in advance of the determination of a planning application for residential development on land east of Barrow Hill, Barrow, Suffolk (NGR TL 76726 63076). The evaluation is required by Suffolk County Council and the LPA, based on advice from SCC AS-CT (St Edmundsbury Planning Ref. DC/16/0300/OUT).
- 1.2 It is understood that the programme of archaeological investigation should comprise an archaeological field evaluation, to comply with the planning requirement of the local planning authority (on advice from SCC AS-CT). This WSI for archaeological evaluation has been prepared for the approval of SCC AS-CT.
- 1.3 If further work is required following the evaluation, the final decision for such a need will be made by SCCAS-CT, who will require a separate WSI for any such further work.

2 COMPLIANCE

2.1 If AS carried out the evaluation, AS would comply with SCC AS-CT's requirements.

3 SITE and DEVELOPMENT DESCRIPTION ARCHAEOLOGICAL BACKGROUND

- 3.1 It is proposed to construct a new residential development on land east of Barrow Hill, Barrow. The site lies to the east of Barrow Hill, and is currently agricultural land, extending to some 3.2ha.
- 3.2 The site lies at c.94m AOD on the south eastern edge of Barrow.
- 3.3 The site lies in an area of archaeological potential, as recorded on the Suffolk Historic Environment Record (HER). It lies on the edge of the medieval green at Barrow (HER BRR 14) and a number of house plots are shown adjacent on 16th century maps (HER BRR 026). Bronze Age and medieval remains have been recorded during investigations at a site opposite the current site (HER BRR 052).
- 3.4 The proposed works will cause significant ground disturbance that has the potential to damage any archaeological deposits that exist. The archaeological and historical background of the site will be discussed in the project report and a new HER search will be commissioned (and referenced in the report).

4 BRIEF FOR THE ARCHAEOLOGICAL EVALUATION SPECIFICATION FOR TRIAL TRENCH EVALUATION GENERAL MANAGEMENT

- 4.1 The principal objectives for the evaluation include:
- To establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation *in situ*
- To identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.
- To evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits, along with the potential for the survival of environmental evidence
- To provide sufficient information to construct an archaeological conservation strategy dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.

4.2 Research Design

- 4.2.1 The regional research frameworks are set out in Glazebrook (1997 and Brown and Glazebrook (2000) and updated by Medlycott and Brown (2008) and Medlycott (2011). The key issues for the Neolithic and Bronze Age (as set out by Brown and Murphy in Brown and Glazebrook 2000, 9-13) centre on the theme of the development of farming and the attendant development and integration of monuments, fields and settlements. Medlycott and Brown (2008) and Medlycott (2011, 13) suggest that future research on the Neolithic should include synthetic and regional studies for the region; an examination of the Mesolithic/Neolithic transition through radiocarbon dates; the establishment of a chronology for Neolithic ringditches; improved understanding of the chronological development of pottery; the excavation and study of cropmark complexes; greater understanding of burial practices; a study of the inter-relationships of settlements; greater use of scientific methods of dating and modelling of the environmental conditions during this period; targeted programmes of sedimentological, palynological and macrofossil analyses of sediment sequences in valley bottoms, lakes or the intertidal zone; and the human impact on the natural landscape during this period. The nature of Neolithic burial in the region and the pattern of burial practice, including the relationship between settlement sites and burial, require further research. Settlement sites themselves also form part of an important research subject as there is a requirement to identify if a consensus exists on the subject of non-permanent settlement in the Neolithic (Medlycott 2011, 13). Further work on understanding the effects of plough damage on Neolithic sites is considered to be an important research subject for the region (Medlycott 2011, 13).
- 4.2.2 Inter-relationships between settlements and greater understanding of patterns of burial practice are important areas of research for the Bronze Age (Medlycott and

Brown 2008). Medlycott (2011, 21) identifies artefact studies as of particular importance for the study of the Bronze Age in the region; the typological identification of later Bronze Age pottery linked to close radiocarbon dating, the further study of Bronze Age flintworking and the significance of hoarding and other depositional practices are all identified as being key research subjects. Artefact studies can contribute to the refinement of chronologies for the period and to an assessment of the reasons behind the marked divide in research results between the northern and southern parts of the region, which are identified by Medlycott (2011, 21) as important research areas. Like the Neolithic, sedimentological, palynological and macrofossil analyses of sediment sequences are considered to be important areas of research as are the effects of colluviation and the possibility that colluvial deposits mask some significant sites (Medlycott 2011, 21).

- 4.2.3 Medlycott (2011, 47) identifies regional variation and tribal distinctions as underlying themes for research in the Roman period. Research topics for the Roman period previously set out by Going and Plouviez (in Brown and Glazebrook 2000, 19-22) include analysis of early and late Roman military developments, further analysis of large and small towns, evidence of food consumption and production, further research into agricultural production, landscape research (in particular further evidence for potential woodland succession/regression and issues of relict landscapes, as well as further research into the road network and bridging points), further research into rural settlements and coastal issues. Medlycott (2011, 47-48) states that these research areas remain valid and presents updated consideration of them. To these themes Medlycott and Brown (2008) and Medlycott (2011, 47-48) add rural settlements and landscapes, the process of Romanisation in the region, the evidence for the Imperial Fen Estate, and the Roman/Saxon transition.
- 4.2.4 Wade (in Brown and Glazebrook 2000, 23-26) identifies research topics for the rural landscape in the Saxon and medieval periods. These include examination of population during this period (distribution and density, as well as physical structure), settlement (characterisation of form and function, creation and testing of settlement diversity models), specialisation and surplus agricultural production, assessment of craft production, detailed study of changes in land use and the impact of colonists (such as Saxons, Danes and Normans) as well as the impact of the major institutions such as the Church.
- 4.2.5 Medlycott (2011, 57) states that he study of the Anglo-Saxon period still requires further cooperation between historians and archaeologists. Important research issues for this period comprise: the Roman/Anglo-Saxon transitional period; settlement distribution, which suffers from problems associated with the identification of Saxon settlement sites; population modelling and demographics, which has the potential to be advanced by modern scientific methods; differences within the region in terms of settlement type and economic practice and subjects related to this such as links with the continent, trading practices and cultural influences; rural landscapes and settlements, including detailed study of the changes and developments in such settlements over time and the influence of Saxon landscape organisation and settlements on these issues in the medieval period; towns and their relationships with their hinterland; infrastructure, including river management, the identification of ports and harbours and the role of existing infrastructure in shaping the Saxon period landscape; the economy, based on palaeoenvironmental studies; ritual and religion;

the effect of the Danish occupation; and artefact studies (Medlycott 2011, 57-59).

- 4.2.6 The issues identified by Ayers (in Brown and Glazebrook, 2000) and Wade (in Brown and Glazebrook, 2000) remain valid research subjects (Medlycott 2011, 70) for the medieval period. The study of landscapes is dominated by issues such as water management and land reclamation for large parts of the region, the economic development of the landscape and the region's potential to reveal information regarding field systems, enclosures, roads and trackways. Linked to the study of the landscape are research issues such as the built environment and infrastructure; the main communication routes through the region need to be identified and synthesis needs to be carried out regarding the significance, economic and social importance of historic buildings in the region (Medlycott 2011, 70-71). Also considered to be important research subjects for the medieval period are rural settlements, towns, industry and the production and processing of food and demographic studies (Medlycott 2011, 70-71).
- 4.2.7 As set out above, the principal research objectives will be to identify any further evidence of the known medieval settlement of the area, and any earlier (eg prehistoric) activity.

References

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Medlycott, M. (ed.) 2011, Research and Archaeology revisited: a revised framework for the East of England, ALGAO East of England Region, East Anglian Archaeology Occasional Papers 24

5 SPECIFICATION TRENCHED EVALUATION

5.1 Details of Senior Project Staff

- 5.1.1 AS has developed a professional and well-qualified team who have undertaken numerous archaeological projects (both desk-based and field evaluations) on all types of developments, including commercial, residential, road schemes and golf courses. AS is a Registered Organisation of the CIfA.
- 5.1.2 Profiles of key project staff are provided (Appendix 3).

A Method Statement is presented
Geophysical Survey Appendix 1
Trial Trench Evaluation Appendix 2

5.1.3 The evaluation will conform with the guidelines set down in the brief and the Chartered Institute for Archaeologists Standard and Guidelines for Archaeological Evaluations (revised 2014) and Standard and Guidelines for Historic Environment Desk-based Assessment (revised 2014). It will also adhere to the document Standards for Field Archaeology in the East of England (Gurney 2003) and the requirements of the SCC document Requirements for a Trenched Evaluation 2011 Ver. 1.3. The geophysical survey will conform with the guidelines set down in the Chartered Institute for Archaeologists Standard and Guidance for Geophysical Survey (revised 2014) and English Heritage (now Historic England) Geophysical Survey in Archaeological Evaluation (2008).

5.1.4 Geophysical survey

- 5.1.5 Information regarding the extent and significance of sub-surface features is required in order to target any further trial trenching that may subsequently be required in association with the planning proposals for the site. A programme of geophysical survey will be undertaken in order to achieve this, and is to comprise a magnetometer survey conducted on a regular grid pattern, to include a sampling interval of 1m x 0.25m. The site is not suitable for fieldwalking survey at this stage.
- 5.1.6 The initial geophysical survey will be carried out by AS. It will comprise a detailed magnetometer survey conducted on a regular grid pattern, to include a sampling interval of 1m x 0.25m. The method statement is attached (Appendix 1).
- 5.1.7 The results of the geophysical survey will be supplied to SCC AS-CT to inform the subsequent trial trench locations.
- 5.1.8 SCC AS-CT will require a programme of archaeological trial trenching to cover the site of the proposed development. The trial trenching layout and scope will be agreed with SCC AS-CT following the geophysical survey. An initial 4% sample comprising 22 trenches each 40m x 1.8m is proposed, and an indicative trench plan is appended, to be refined and agreed with SCC AS-CT following the geophysical survey. AS is happy to review the scale/location of the trenches following comment from the client and/or SCC AS-CT. A contingency for a further 1% trenching sample, to characterise the nature and extent of any revealed remains, is allowed for, if required by SCC AS-CT.
- 5.1.9 The environmental strategy will adhere to the guidelines issued by English Heritage (now Historic England) (*Environmental Archaeology; A guide to the theory and practice of methods, from sampling and recovery to post-excavation,* Centre for Archaeology Guidelines, 2011). An assessment of any palaeoenvironmental /geoarchaeological deposits will be undertaken. Dr Rob Scaife/Dr John Summers will be the Environmental Coordinator for the project. The specialist will make his/her results known to the regional science advisor who co-ordinates environmental archaeology in the region on behalf of Historic England. The assessment will aim to address the objectives in the brief (section 3.5). Sampling methodology in contained

in Appendix 2.

5.1.10 Estimate of time and resources required for each phase, to complete the trial trenching, project archive and the production of an evaluation report.

Geophysical Survey
Trial Trenching
Preparation of Report and Archive

c.20 Days

Staff on site: a Project Officer and up to 4 Site Assistant/s (as necessary)

- 5.1.11 In advance of the field work AS will liaise with the County Archive Store to fulfil their requirements for the long term deposition of the project archive. These will encompass: their collection policy, and their financial and technical requirements for long term storage. The resources include provision for the long term-deposition of the project archive.
- 5.1.12 Details of staff and specialist contractors are provided (Appendix 3). The project will be managed by Claire Halpin MCIFA /Jon Murray MCIFA.
- 5.1.13 AS is a member of FAME formerly the Standing Conference of Archaeological Unit Managers (SCAUM) and operates under the 'Health and Safety in Field Archaeology Manual'. A risk assessment and management strategy will be completed prior to the start of works on site.
- 5.1.14 AS is a member of the Council for British Archaeology and is insured under their policy for members.

6 SERVICES

6.1 The client is to advise AS of the position of any services which traverse the site.

7 SECURITY

7.1 Throughout all site works care will be taken to maintain all existing security arrangements, and to minimise disruption.

8 REINSTATEMENT

8.1 No provision has been made for reinstatement, excepting simple backfilling.

9 REPORT REQUIREMENTS

9.1 The report will include (as a minimum):

- a) the archaeological background
- b) a consideration of the aims and methods adopted in the course of the recording
- c) a detailed account of the nature, location, extent, date, significance and quality of any archaeological evidence recorded.
- d) Excavation methodology and detailed results including a suitable conclusion and discussion
- e) plans and sections of any recorded features and deposits
- f) discussion and interpretation of the evidence. An assessment of the projects significance in a regional and local context and appendices.
- g) All specialist reports or assessments
- h) A concise non-technical summary of the project results
- i) A HER summary sheet
- j) An OASIS summary sheet
- 9.2 Draft hard and digital PDF copies of the report will be submitted to SCC AS-CT for approval. If any revisions are required, final hard and digital PDF copies will be supplied to SCC AS-CT for deposition with the HER.
- 9.3 The project details will be submitted to the OASIS database, and the online summary form will be appended to the project report.
- 9.4 A summary report will be submitted suitable for inclusion in the annual roundups of *Proceedings of the Suffolk Institute of Archaeology and History*, dependent on the results of the project.

10 ARCHIVE

- 10.1 The requirements for archive storage will be agreed with the Suffolk Archaeological Archives.
- 10.2 The archive will be deposited within six months of the conclusion of the fieldwork. It will be prepared in accordance with the UK Institute for Conservation's Conservation Guideline No.2 and according to the document Deposition of Archaeological Archives in Suffolk (SCC AS Conservation Team, 2010). A unique event number and monument number will be obtained from the County HER Officer.
- 10.3 The full archive of finds and records will be made secure at all stages of the project, both on and off site. Arrangements will be made at the earliest opportunity for the archive to be accessed into the collections of Suffolk Archaeological Archives; with the landowner's permission in the case of any finds. It is acknowledged that it is the responsibility of the field investigation organisation to make these arrangements with the landowner and Suffolk Archaeological Archives. The archive will be adequately catalogued, labelled and packaged for transfer and storage in accordance with the guidelines set out in the United Kingdom Institute for Conservation's *Conservation Guidelines No.2* and the other relevant reference documents.
- 10.4 Archive records, with inventory, are to be deposited, as well as any donated

finds from the site, at the Suffolk Archaeological Archives and in accordance with their requirements. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data. A unique event number for the report and monument number for any finds will be obtained from the HER.

11 MONITORING

- 11.1 It is understood that SCCAS-CT will monitor the project on behalf of the local planning authority.
- 11.2 **Notification** Archaeological Solutions will give SCCAS-CT notification prior to the commencement of the project on site
- 11.3 **Monitoring** SCCAS-CT will be responsible for monitoring progress and standards throughout the project, both on site and during the post-survey/report stages, to ensure compliance with the planning requirement, the approved WSI and any subsequent Brief and approved WSI for further fieldwork, analyses and publication.
- 11.4 Any variations to the WSI will be agreed in advance with SCCAS-CT prior to them being carried out.

APPENDIX 1

GEOPHYSICAL SURVEY METHOD STATEMENT

STANDARDS and GUIDELINES

All site work and reporting will be carried out in accordance with English Heritage Geophysical Survey in Archaeological Field Evaluation, 2008, IfA Paper 6: The use of Geophysical Techniques in Archaeological Evaluations and CIfA Standard and Guidance for Archaeological Geophysical Survey (revised 2014)

GEOPHYSICAL METHOD

It is proposed to carry out a detailed magnetometer survey. Such a technique can detect a wide variety of structures including cut features, earthworks, pits, burnt structures such as kilns and hearths which may be associated with the anticipated remains.

DETAILED MAGNETIC SURVEY

Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.2 nanoTesla (nT) in an overall field strength of 48,000nT, can be accurately detected using an appropriate instrument. The mapping of the anomaly in a systematic manner will allow an estimate of the type of material present beneath the surface. Strong magnetic anomalies will be generated by buried iron-based objects or by kilns or hearths. More subtle anomalies such as pits and ditches can be seen if they contain more humic material which is normally rich in magnetic iron oxides when compared with the subsoil. To illustrate this point, the cutting and subsequent silting or backfilling of a ditch may result in a larger volume of weakly magnetic material being accumulated in the trench compared to the undisturbed subsoil. A weak magnetic anomaly should therefore appear in plan along the line of the ditch.

DATA COLLECTION

AS has a capacity for cart-based survey, which will be implemented if ground conditions are appropriate. Otherwise the survey will be conducted using hand held gradiometers on a 30m survey grid.

The detailed magnetic survey will be carried out using a Bartington Grad 601-2. The instrument consists of two fluxgates mounted 1m vertically apart, and very accurately aligned to nullify the effects of the earth's magnetic field. Readings relate to the difference in localised magnetic anomalies compared with the general magnetic background.

Readings will be taken at 0.25m centres along traverses 1m apart. This equates to

3600 sampling points in a full 30m x 30m grid. Data collection requires a temporary grid to be established across the survey area using wooden pegs at 30m intervals. The grid will be laid out using hand tapes based on traditional survey methods. The location and the baseline and grids will be recorded using GPS survey equipment. On a large grid, the accuracy of the grid will be checked and adjusted using GPS survey equipment. If a cart-based system is used, it has a built in GPS receiver that will track the cart's progress and enable the display of transects on a plan. The survey and basemap will be tied together through GPS survey of the site boundaries and survey baseline.

The Grad 601-2 has a typical depth of penetration of 0.5m to 1.0m. This would be increased if strongly magnetic objects have been buried in the site. The collection of data at 0.25m centres provides an appropriate methodology balancing cost and time with resolution.

One grid will be selected and surveyed twice each day to demonstrate the repeatability of the technique. A reasonable time delay will be left before the resurvey.

The data will be stored onto a hard drive within the control unit for later transferral to a PC for processing and analysis.

PROCESSING, ANALYSIS, PRESENTATION AND INTERPRETATION OF THE DATA

Processing of the data will be carried out using specialist software, *Terrasurveyor* and in-house software. This can emphasise various aspects contained within the data but which are often not easily seen in the raw data. Basic processing of the magnetic data involves 'flattening' the background levels with respect to adjacent traverses and adjacent grids. 'Despiking' is also performed to remove the anomalies resulting from small iron objects often found on agricultural land. Once the basic processing has flattened the background it is then possible to carry out further processing which may include low pass filtering to reduce 'noise' in the data and hence emphasise the archaeological or man-made anomalies.

The presentation of the data for the survey will be a print-out of the raw data both as grey scale and colour plots of extreme values, together with a grey scale plot of the processed data. Magnetic anomalies will be identified and plotted onto the 'Abstraction and Interpretation of Anomalies' drawing for the site.

The presentation of the data for the survey will be a print-out of the raw data both as grey scale and colour plots of extreme values (magnetic data only) together with a grey scale plot of the processed data. Anomalies will be identified and plotted onto the 'Abstraction and Interpretation of Anomalies' drawing for the site.

REPORTING and ARCHIVE

The report for the survey will comprise a written section describing the background to the survey, the methodologies used and a discussion of the results. The text will be illustrated using plots of the results using CAD to overlay the results and interpretations over the base mapping. The format for these drawings will either be A3 or A1 depending on the size and configuration of the survey areas. The report will describe processing information and the figures wil show scale/key (for nT/m). Three paper copies will be supplied and one digital copy.

The archive for the geophysical survey will be prepared for deposition to a suitable digital repository (see archive guidelines Section 10 above).

The OASIS database will be completed.

APPENDIX 2 METHOD STATEMENT

Method Statement for the recording of archaeological remains

The archaeological evaluation will be conducted in accordance with the project brief, and the code of the Chartered Institute for Archaeologists.

1 Mechanical Excavation

- 1.1 A mechanical excavator fitted with a wide toothless bucket will be used to remove the topsoil/overburden. The machine will be powerful enough for a clean job of work and be able to mound spoil neatly, at a safe distance from the trench edges.
- 1.2 The mechanical stripping will be controlled, and the mechanical excavator will only operate under the full-time supervision of an experienced archaeologist.

2 Site Location Plan

2.1 On conclusion of the mechanical excavation, a `site location plan', based on the current Ordnance Survey 1:1250 map and indicating site north, will be prepared. This will be supplemented by an `area plan' at 1:200 (or 1:100) which will show the location of the area(s) investigated in relationship to the development area, OS grid and site grid.

3 Manual Cleaning and Base Planning of Archaeological Features

3.1 Exposed areas will be hand-cleaned to define archaeological features sufficient to produce a base plan.

4 Full Excavation

Excavation of Stratified Sequences

The trenches will be excavated according to phase, from the most recent to the earliest, and the phasing of features will be distinguished by their stratigraphic relationships, fills and finds.

Deep features e.g. quarry holes, may incorporate stratified deposits which will be excavated by hand-dug sections and recorded.

Excavation of Buildings

Building remains are likely to comprise stake holes, post holes and slots/gullies, masonry foundations and low masonry walls. Associated features may be present e.g. hearths.

The features comprising buildings will be excavated fully and in plan/phase, to a level sufficient for the requirements of an evaluation.

Full Excavation

Industrial remains and intrinsically interesting features e.g hearths, burials will clearly merit full excavation, though will be excavated sufficient to characterise such deposits within the context of an evaluation. Discrete features associated with possible structures and/or settlement will be fully excavated, again sufficient to characterise them for the purposes of an evaluation. Otherwise discrete features (eg pits) will be half-sectioned.

Ditches

The ditches will be excavated in segments up to 2m long, and the segments will be placed to provide adequate coverage of the ditches, establish their relationships and obtain samples and finds.

5 Written Record

- 5.1 All archaeological deposits and artefacts encountered during the course of the excavation will be fully recorded on the appropriate context, finds and sample forms.
- 5.2 The site will be recorded using AS.'s excavation manual which is directly comparable to those used by other professional archaeological organisations, including English Heritage's own Central Archaeological Service.

6 Photographic Record

6.1 An adequate photographic record of the investigations will be made. It will include black and white prints and colour transparencies (on 35mm) illustrating in both detail and general context the principal features and finds discovered. Digital images will also be taken (Nikon Coolpix L29 16.1 megapixel cameras). It will also include 'working and promotional shots' to illustrate more generally the nature of the archaeological operations. The black and white negatives and contacts will be filed, and the colour transparencies will be mounted using appropriate cases. All photographs will be listed and indexed.

7 Drawn Record

7.1 A record of the full extent, in plan, of all archaeological deposits encountered will be drawn on A1 permatrace. The plans will be related to the site, or OS, grid and be drawn at a scale of 1:50 or 1:20, as appropriate. In addition where appropriate, e.g. recording an inhumation, additional plans at 1:10 will be produced. The sections of all archaeological contexts will be drawn at a scale of 1:10 or, where appropriate, 1:20. The OD height of all principal strata and features

will be calculated and indicated on the appropriate plans and sections.

8 Recovery of Finds

GENERAL

The principal aim is to ensure that adequate provision is made for the recovery of finds from all archaeological deposits.

The Small Finds, e.g. complete pots or metalwork, from all excavations will be 3-dimensionally recorded.

A metal detector will be used to enhance finds recovery. The metal detector survey will be conducted on conclusion of the topsoil stripping, and thereafter during the course of the excavation. Trench bases will be scanned and the spoil tips will also be surveyed. Regular metal detector surveys of the excavation area and spoil tips will reduce the loss of finds to unscrupulous users of metal detectors (treasure hunters). All non-archaeological staff working on the site should be informed that the use of metal detectors is forbidden.

In the event of items considered as being defined as treasure being found, then the requirements of the Treasure Act 1996 (with subsequent amendments) will be followed. Any such finds encountered during the investigation will be reported immediately to the Suffolk Portable Antiquities Scheme Finds Liaison Officer who will in turn inform the Coroner within 14 days

WORKED FLINT

When flint knapping debris is encountered large-scale bulk samples will be taken for sieving.

POTTERY

It is important that the excavators are aware of the importance of pottery studies and therefore the recovery of good ceramic assemblages.

The pottery assemblages are likely to provide important evidence to be able to date the structural history and development of the site.

The most important assemblages will come from 'sealed' deposits which are representative of the nature of the occupation at various dates, and indicate a range of pottery types and forms available at different periods.

'Primary' deposits are those which contain sherds contemporary with the soil fill and in simple terms this often means large sherds with unabraded edges. The sherds have usually been deposited shortly after being broken and have remained undisturbed. Such sherds are more reliable in indicating a more precise date at which the feature was 'in use'. Conversely, 'secondary' deposits are those which often have small, heavily abraded sherds lacking obvious conjoins. The sherds are

derived from earlier deposits.

HUMAN BONE

Any human remains present would not normally be excavated at the stage of an evaluation, but would be protected and preserved in situ, on advice from SCC ASCT. Should human remains be discovered and be required to be removed, the coroner will be informed and a licence from the Ministry of Justice sought immediately; both the client and the monitoring officer will also be informed. Any excavation of human remains at the stage of an evaluation would only be carried out following advice from SCC AS-CT. Excavators would be made aware, and comply with, provisions of Section 25 of the Burial Act of 1857 and pay due attention to the requirements of Health and Safety.

ANIMAL BONE

Animal bone is one of the principal indicators of diet. As with pottery the excavators will be alert to the distinction of primary and secondary deposits. It will also be important that the bone assemblages are derived from dateable contexts. All animal bone will be collected.

ENVIRONMENTAL SAMPLING

The sampling will adhere to the guidelines prepared by English Heritage (now Historic England), and the specialist will make his/her results known to the regional science advisor who co-ordinates environmental archaeology in the region on behalf of Historic England. The project will also accord with the guidelines of the English Heritage (now Historic England) document *Environmental Archaeology, a guide to the theory and practice of methods, from sampling and recovery to post-excavation*, Centre for Archaeology Guidelines 2011.

Provision will be made for the sampling of appropriate materials for specialist and/or scientific analysis (e.g. radiocarbon dating, environmental analysis). The location of samples will be 3-dimensionally recorded and they will also be shown on an appropriate plan. AS has its own environmental sampling equipment (including a pump and transformer) and, if practical, provision will be made to process the soil samples during the fieldwork stage of the project.

If waterlogged remains are found advice on sampling will be obtained on site from Dr Rob Scaife/Dr John Summers. Dr Rob Scaife/Dr Summers and AS will seek advice from the HE Regional Scientific Advisor if significant environmental remains are found.

The study of environmental archaeology seeks to understand the local and near-local environment of the site in relation to phases of human activity and as such is an important and integral part of any archaeological study.

Environmental remains, both faunal and botanical, along with pedological and sedimentological analyses may be used to understand the environment and the impact of human activity.

There may be a potential for the recovery of a range of environmental remains (ecofacts) from which data pertaining to past environments, land use and agricultural economy should be forthcoming.

Sampling strategies on evaluations aim to determine the potential of the site for both biological remains (plants, small vertebrates) and small sized artefacts which would otherwise not be collected by hand. The number/range of samples taken will represent the range of feature types encountered, but with an aim of at least three samples from each feature type.

For plant remains, the samples taken at evaluation stage would aim to characterise:

- The range of preservation types (charred, mineral-replaced, waterlogged) and their quality
- Any differences in remains from dated/undated features
- Variation between different feature types/areas

To realise the potential of the environmental material encountered, a range of specialists from different disciplines is likely to be required. The ultimate goal will be the production of an interdisciplinary environmental study which can be of value to an understanding of, and integrated with, the archaeology.

Organic remains may allow study of the contemporary landscape (occupation/industrial/agricultural impact and land use) and also changes after the abandonment of the site.

The nature of the environmental evidence

Aspects of sampling and analysis may be divided into four broad categories; faunal remains, botanical remains, soils/sediments and radiocarbon dating measurements.

- **a) Faunal remains:** These comprise bones of macro and microfauna, birds, molluscs and insects.
- **a.i) Bones:** The study of the animal bone remains, in particular domestic mammals, domestic birds and marine fish will enhance understanding of the development of the settlement in terms of the local economy and also its wider influence through trade. The study of the small animal bones will provide insight into the immediate habitat of any settlement.

The areas of study covered may include all of the domestic mammal and bird species, wild and harvested mammal, birds, marine and fresh water fish in addition to the small mammals, non-harvest birds, reptiles and amphibia.

Domestic mammalian stock, domestic birds and harvest fish

The domestic animal bone will provide insight into the different phases of development of any occupation and how the population dealt with the everyday aspect of managing and utilising all aspects of the animal resource.

Small animal bones

Archaeological excavation has a wide role in understanding humans' effect on the countryside, the modifications to which have in turn affected and continue to affect their own existence. Small animals provide information about changing habitats and thereby about human impact on the local environment.

- **a.ii) Molluscs:** Freshwater and terrestrial molluscs may be present in ditch and pit contexts which are encountered. Sampling and examination of molluscan assemblages if found will provide information on the local site environment including environment of deposition.
- **a.iii) Insects:** If suitable waterlogged contexts (pit, pond and ditch fills) are encountered (which can potentially be expected to be encountered on the project), sampling and assessment will be carried out in conjunction with the analysis of waterlogged plant remains (primarily seeds) and molluscs. Insect data may provide information on local site environment (cleanliness etc.) as well as proxies for climate and vegetation communities.
- **b) Botanical remains:** Sampling for seeds, wood, pollen and seeds are the essential elements which will be considered. The former are most likely to be charred but possibly also waterlogged should any wells/ponds be encountered.
- **b.i) Pollen analysis:** Sampling and analysis of the primary fills and any stabilisation horizons in ditch and pit contexts which may provide information on the immediate vegetation environment including aspects of agriculture, food and subsistence. These data will be integrated with seed analysis.
- **b.ii) Seeds:** It is anticipated that evidence of cultivated crops, crop processing debris and associated weed floras will be present in ditches and pits. If waterlogged features/sediments are encountered (for example, wells/ponds) these will be sampled in relation to other environmental elements where appropriate (particularly pollen, molluscs and possibly insects).
- c) Soils and Sediments: Characterisation of the range of sediments, soils and the archaeological deposits are regarded as crucial to and an integral part of all other aspects of environmental sampling. This is to afford primary information on the nature and possible origins of the material sampled. It is anticipated that a range of 'on-site' descriptions will be made and subsequent detailed description and analysis of the principal monolith and bulk samples obtained for other aspects of the environmental investigation. Where considered necessary, laboratory analyses such as loss on ignition and particle size may also be undertaken. A geoarchaeologist will be invited to visit the site as necessary to advise on sampling.
- **d) Radiocarbon dating:** Archaeological/artifactual dating may be possible for most of the contexts examined, but radiocarbon dating should not be ruled out

Sampling strategies

Provision will be made by the environmental co-ordinator that suitable material for

analysis will be obtained. Samples will be obtained which as far as possible will meet the requirements of the assessment and any subsequent analysis.

- a) Soil and Sediments: Samples taken will be examined in detail in the laboratory. An overall assessment of potential will be carried out. Analysis of particle size and loss on ignition, if required would be undertaken as part of full analysis if assessment demonstrates that such studies would be of value.
- **b) Pollen Analysis:** Contexts which require sampling may include stabilisation horizons and the primary fills of the pits and ditches, and possibly organic well/pond fills. It is anticipated that in some cases this will be carried out in conjunction with sampling for other environmental elements, such as plant macrofossils, where these are also felt to be of potential.
- c) Plant Macrofossils: Principal contexts will be sampled directly from the excavation for seeds and associated plant remains. It is anticipated that primarily charred remains will be recovered, although provision for any waterlogged sequences will also be made (see below). Sampling for the former will, where possible (that is, avoiding contamination) comprise samples of an average of 40-60 litres which will be floated in the AS facilities for extraction of charred plant remains. Both the flot and residues will be kept for assessment of potential and stored for any subsequent detailed analysis. The residues will also be examined for artifactual remains and also for any faunal remains present (cf. molluscs). Where pit, ditch, well or pond sediments are found to contain waterlogged sediments, principal contexts will be sampled for seeds and insect remains. Standard 5 litre+ samples will be taken which may be sub-sampled in the laboratory for seed remains if the material is found to be especially rich. The full sample will provide sufficient material for insect assessment and analysis.
- d) Bones: Predicting exactly how much of what will be yielded by the excavation is clearly very difficult prior to excavation and it is proposed that in order to efficiently target animal bone recovery there should be a system of direct feedback from the archaeozoologist to the site staff during the excavation, allowing fine tuning of the excavation strategy to concentrate on the recovery of animal bones from features which have the highest potential. This will also allow the faunal remains to materially add to the interpretation as the excavation proceeds. Liaison with other environmental specialists will need to take place in order to produce a complete interdisciplinary study during this phase of activity. In addition, this feedback will aid effective targeting of the post-excavation analysis.
- **e) Insects:** If contexts having potential for insect preservation are found, samples will be taken in conjunction with waterlogged plant macrofossils. Samples of 5 litres will suffice for analysis and will be sampled adjacent to waterlogged seed samples and pollen; or where insufficient context material is available provision will be made for exchange of material between specialists.
- f) Molluscs: Terrestrial and freshwater molluscs. Samples will be taken from a column from suitable ditches. Pits may be sampled, based on the advice of the Environmental Consultant and / or Historic England Regional Advisor. Provision will also be made for molluscs obtained from other sampling aspects (seeds) to be

examined and/or kept for future requirements.

g) Archiving: Environmental remains obtained should be stored in conditions appropriate for analysis in the short to medium term, that is giving the ability for full analysis at a later date without any degradation of samples being analysed. The results will be maintained as an archive at AS and supplied to the HE regional coordinator as requested.

Waterlogged Deposits/Remains

Should waterlogged deposits (such as wells/deep ditches) be encountered, provision has been made for controlled hand excavation and sampling. Dr Rob Scaife/Dr John Summers will visit to advise on sampling as required, and AS will take monolith samples as necessary for the recovery of palaeoenvironmental information and dating evidence.

Scientific/Absolute Dating

• Samples will be obtained for potential scientific/absolute dating as appropriate (eg Carbon-14).

Provision will be made for the sampling of appropriate materials for specialist and/or scientific analysis (e.g. radiocarbon dating, environmental analysis). The location of samples will be 3-dimensionally recorded and they will also be shown on an appropriate plan. AS has its own environmental sampling equipment (including a pump and transformer) and, if practical, provision will be made to process the soil samples during the fieldwork stage of the project.

If waterlogged remains are found they will be sampled by Dr Rob Scaife/Dr John Summers. Dr Rob Scaife and AS will seek advice from the HE Regional Scientific Advisor if significant environmental remains are found.

FINDS PROCESSING

The project director will have overall responsibility for the finds and will liaise with AS's own finds personnel and the relevant specialists. A person with particular responsibility for finds on site will be appointed for the excavation. The person will ensure that the finds are properly labelled and packaged on site for transportation to AS's field base. The finds processing will take place in tandem with the excavations and will be under the supervision of AS's Finds Officer.

The finds processing will entail first aid conservation, cleaning (if appropriate), marking (if appropriate), categorising, bagging, labelling, boxing and basic cataloguing (the compilation of a Small Finds Catalogue and quantification of bulk finds) i.e. such that the finds are ready to be made available to the specialists. The Finds Officer, having been advised by the Project Officer and relevant specialists, will select material for conservation. AS's Finds Officer, in conjunction with the Project Officer, will arrange for the specialists to view the finds for the purpose of report writing.

APPENDIX 3 ARCHAEOLOGICAL SOLUTIONS LIMITED: PROFILES OF STAFF and SPECIALISTS

DIRECTOR Claire Halpin BA MCIfA

Qualifications: Archaeology and History BA Hons (1974-77). Oxford University Dept for External Studies In-Service Course (1979-1980). Member of Institute of Archaeologists since 1985: IFA Council member (1989-1993)

Experience: Claire has 25 years' experience in field archaeology, working with the Oxford Archaeological Unit and English Heritage's Central Excavation Unit (now the Centre for Archaeology). She has directed several major excavations (e.g. Barrow Hills, Oxfordshire, and Irthlingborough Barrow Cemetery, Northants), and is the author of many excavation reports e.g. St Ebbe's, Oxford: Oxoniensia 49 (1984) and 54 (1989). Claire moved into the senior management of field archaeological projects with Hertfordshire Archaeological Trust (HAT) in 1990, and she was appointed Manager of HAT in 1996. From the mid 90s HAT has enlarged its staff complement and extended its range of skills. In July 2003 HAT was wound up and Archaeological Solutions was formed. The latter maintains the same staff complement and services as before. AS undertakes the full range of archaeological services nationwide.

DIRECTOR Tom McDonald MCIfA

Qualifications: Member of the CIfA

Experience: Tom has twenty years' experience in field archaeology, working for the North-Eastern Archaeological Unit (1984-1985), Buckinghamshire County Museum (1985), English Heritage (Stanwick Roman villa (1985-87) and Irthlingborough barrow excavations, Northamptonshire (1987)), and the Museum of London on the Royal Mint excavations (1986-7)., and as a Senior Archaeologist with the latter (1987-Dec 1990). Tom joined HAT at the start of 1991, directing several major multi-period excavations, including excavations in advance of the A41 Kings Langley and Berkhamsted bypasses, the A414 Cole Green bypass, and a substantial residential development at Thorley, Bishop's Stortford. He is the author of many excavation reports, exhibitions etc. Tom is AS's Health and Safety Officer and is responsible for site management, IT and CAD. He specialises in prehistoric and urban archaeology, and is a Lithics Specialist.

OFFICE MANAGER Rose Flowers

Experience: Rose has a very wide range of book-keeping skills developed over many years of employment with a range of companies, principally Rosier Distribution Ltd, Harlow (now part of Securicor) where she managed eight accounts staff. She has a good working knowledge of both accounting software and Microsoft Office.

OFFICE ADMINISTRATOR Sarah Powell

Experience: Sarah is an experienced and efficient administrative assistant with more than ten years' experience of working in a variety of office environments. She is IT literate and proficient in the use of Microsoft Word, particularly Microsoft Excel. She has completed NVQ 2 and 3 in Administration and Office Skills. She recently attended and completed a course in Microsoft Excel – Advanced Level.

OFFICE ADMINISTRATOR Jennifer O'Toole

Experience: Jennifer's professional career has included a variety of roles such as Operations Director with The Logistics Network Ltd, Tutor/Trainer and Deputy Manager with Avanta TNG and Training and Assessment Consultant with PDM Training and Consultancy Ltd. Jennifer's career history emphasises her organisational and interpersonal skills, especially her ability to efficiently liaise with and manage individuals on various levels, and provide a range of supportive/ administrative services. Jennifer holds professional qualifications in a number of subjects including recruitment practice, customer service, workplace competence and health and safety. In her role with Archaeological Solutions Ltd, Jennifer has assisted in the delivery of the company's services on a variety of projects as well as co-ordinating recruitment and providing a range of complex administrative support.

SENIOR PROJECTS MANAGER Jon Murray BA MCIfA

Qualifications: History with Landscape Archaeology BA Hons (1985-1988).

Experience: Jon has been employed by HAT (now AS) continually since 1989, attaining the position of Senior Projects Manager. Jon has conducted numerous archaeological investigations in a variety of situations, dealing with remains from all periods, throughout London and the South East, East Anglia, the South and Midlands. He is fluent in the execution of (and now projectmanaes) desk-based assessments/EIAs, historic building surveys (for instance the recording of the Royal Gunpowder Mills at Waltham Abbey prior to its rebirth as a visitor facility), earthwork and landscape surveys, all types of evaluations/excavations (urban and rural) and environmental archaeological investigation (working closely with Dr Rob Scaife), preparing many hundreds of archaeological reports dating back to 1992. Jon has also prepared numerous publications; in particular the nationally-important Saxon site at Gamlingay, Cambridgeshire (Anglo-Saxon Studies in Archaeology and History). Other projects published include Dean's Yard, Westminster (Medieval Archaeology), Brackley (Northamptonshire Archaeology), and a medieval cemetery in Haverhill he excavated in 1997 (Proceedings of the Suffolk Institute of Archaeology). Jon is a member of the senior management team, principally preparing specifications/tenders, co-ordinating and managing the field teams. He also has extensive experience in preparing and supporting applications for Scheduled Monument Consent/Listed Building Consent

PROJECT OFFICER Zbigniew Pozorski MA

Qualifications: University of Wroclaw, Poland, Archaeology (1995-2000, MA 2003) Experience: Zbigniew has archaeological experience dating from 1995 when as a student he joined an academic group of excavators. He was involved in numerous archaeological projects throughout the Lower Silesia region in southwest Poland and a number of projects in old town of Wroclaw. During his university years he specialized in medieval urban archaeology. He had his own research project working on an early/high medieval stronghold in Pietrzykow. He was a member of a University team which located and Excavated an unknown high medieval castle in Wierzbna. Poland. Zbigniew has worked for archaeological contractors in Poland on several projects as a supervisor where he gained experience in all types of evaluations and excavations in urban and rural areas. Recently he worked in Ireland where he completed two large long-term projects for Headland Archaeology Ltd. He joined AS in January 2008 as a Project Officer. Zbigniew is qualified in the Construction Skills Certification Scheme (CSCS) and is a qualified in First Aid at Work (St Johns Ambulance).

PROJECT OFFCICER **Gareth Barlow MSc**

Qualifications: University of Sheffield, MSc Environmental Archaeology and Palaeoeconomy (2002-2003)

King Alfred's College, Winchester, Archaeology BA (Hons) (1999-2002)

Experience: Gareth worked on a number of excavations in Cambridgeshire before pursuing his degree studies, and worked on many archaeological projects across the UK during his university days. Gareth joined AS in 2003 and has worked on numerous archaeological projects throughout the South East and East Anglia with AS. Gareth was promoted to Supervisor in the Summer 2007. Gareth is qualified in the Construction Skills Certification Scheme (CSCS) and is a qualified in First Aid at Work (St Johns Ambulance).

PROJECT OFFCICER Julie Walker BSc MA PCIfA

Qualifications: Queens University Belfast: BSc Archaeology (2007-2010)

University of Southampton: MA Osteoarchaeology (2010-2011)

Julie is a member of the Chartered Institute for Archaeologists (PClfA grade) Experience: and the British Association for Biological Anthropology and Osteoarchaeology. Professionally, Julie has worked for organisations including Albion Archaeology (2014) and Oxford Archaeology East (2014). Julie has a thorough knowledge and experience of archaeological fieldwork and post-excavation practice. Julie's personal research interests include congenital and developmental defects in the Romano-British and Anglo-Saxon periods and she has made several conference presentations on this subject.

PROJECT OFFCICER **Vincent Monahan BA**

Qualifications: University College Dublin: BA Archaeology (2007-2012)

Experience: Professionally, Vincent has worked for various archaeological groups and projects including the Stonehenge Riverside Project (Site Assistant/ Supervisor; 2008), University College Dublin Archaeological Society (Auditor; 2009-2010) and the Castanheiro do Vento Research Project (Site Assistant/ Supervisor; 2009-2010 (seasonal)). Vincent has gained good experience of archaeological fieldwork including excavation, various sampling techniques and on-site recording. He also gained experience of museum-grade curatorial practice during his undergraduate degree.

SUPERVISOR Matthew Baker BA MA

Qualifications: Cardiff University: BA Archaeology (2008-2011)

Cardiff University: MA Archaeology (2012-2013)

Experience: Since concluding his higher education, Matthew has worked for a number of archaeological projects and organisations including GeoArch (Cardiff), the Damerham Archaeology Project and Cambridge University. He has a gained a varied experience of archaeological fieldwork and post-excavation practice including geophysical survey/interpretation and isotopic analysis.

SUPERVISOR Kerrie Bull BSc

Qualifications: University of Reading: BSc Archaeology (2008-2011)

Experience: During her undergraduate degree at the University of Reading Kerrie worked on the Lyminge Archaeological Project (2008), the Silchester 'Town Life' Project (2009) and the Ecology of Crusading Research Programme (2011). Through her academic and professional career, Kerrie has gained good experience of archaeological fieldwork and post-excavation techniques.

SUPERVISOR

Thomas Muir BA MSc

Qualifications: University of Edinburgh: BA Archaeology (2007-2011)

University of Edinburgh: MSc Mediterranean Archaeology (2011-2012)

Experience: Thomas is an affiliate member of the Chartered Institute for Archaeologists. Throughout his higher education, Thomas volunteered on research excavations at sites including Port Sec Sud, Bourges (France; 2008), the Hill of Barra (the Hillforts of Strathdon Project; 2010) and Prastio Mesorotsos, Cyprus (2010-2012). In 2013 Thomas returned to Prastio Mesorotsos – a research project run by the Cyprus American Archaeological Institute – in a supervisory capacity. Professionally, Thomas has worked for CFA Archaeology (2013) and thereafter AS Ltd. Through his academic and professional career, Thomas has gained a broad working knowledge of archaeological fieldwork and post-excavation techniques including environmental sampling, on-site recording and digital archiving.

SUPERVISOR Mark Blagg-Newsome

Qualifications: University of Reading (2007-2010) BSc Archaeology

University of Reading (2010-2011) MA Res Archaeology

Experience: Mark has an excellent academic record in archaeology having received an award for best undergraduate dissertation (Department of Archaeology, University of Reading; 2010) and the prize for the best Roman archaeology dissertation (2014) from the Society for the Promotion of Roman Studies. Mark also chaired and presented in sessions at the 2014 Roman Archaeology Conference and is a contributor on forthcoming archaeozoological publications. Before becoming a supervisor with Archaeological Solutions Ltd, Mark held the position of Site Assistant and has worked on numerous commercial projects. He has also undertaken geophysical and GPS survey.

PROJECT OFFICER (DESK-BASED ASSESSMENTS) Kate Higgs MA (Oxon)

Qualifications: University of Oxford, St Hilda's College Archaeology and Anthropology MA (Oxon) (2001-2004)

Experience: Kate has archaeological experience dating from 1999, having taken part in clearance, surveying and recording of stone circles in the Penwith area of Cornwall. During the same period, she also assisted in compiling a database of archaeological and anthropological artefacts from Papua New Guinea, which were held in Scottish museums. Kate has varied archaeological experience from her years at Oxford University, including participating in excavations at a Roman amphitheatre and an early church at Marcham/Frilford in Oxfordshire, with the Bamburgh Castle Research Project in Northumberland, which also entailed the excavation of human remains at a Saxon cemetery, and also excavating, recording and drawing a Neolithic chambered tomb at Prissé, France. Kate has also worked in the environmental laboratory at the Museum of Natural History in Oxford, and as a finds processor for Oxford's Institute of Archaeology. Since joining AS in November 2004, Kate has researched and authored a variety of reports, concentrating on desk-based assessments in advance of archaeological work and historic building recording.

ASSISTANT PROJECTS MANAGER (POST-EXCAVATION) Andrew Newton MPhil PCIFA

Qualifications: University of Bradford, MPhil (2002-04)

University of Bradford, BSc (Hons) Archaeology (1998-2002)

University of Bradford, Dip Professional Archaeological Studies (2002)

Andrew has carried out geophysical surveys for GeoQuest Associates on sites throughout the UK and has worked as a site assistant with BUFAU. During 2001 he worked as a researcher for the Yorkshire Dales Hunter-Gatherer Research Project, a University of Bradford and Michigan State University joint research programme, and has carried out voluntary work with the curatorial staff at Beamish Museum in County Durham. Andrew is a member of the Society of Antiquaries of Newcastle-upon-Tyne and a Practitioner Member of the Institute for Archaeologists. Since joining AS in early Summer 2005, as a Project Officer writing desk-based assessments, Andrew has gained considerable experience in post-excavation work. His principal role with AS is conducting post-excavation research and authoring site reports for publication. Significant post-excavation projects Andrew has been responsible for include the Ingham Quarry Extension, Fornham St. Genevieve, Suffolk – a site with large Iron Age pit clusters arranged around a possible wetland area; the late Bronze Age to early Iron Age enclosure and early Saxon cremation cemetery at the Chalet Site, Heybridge, Essex; and, Church Street, St Neots, Cambridgeshire, an excavation which identified the continuation of the Saxon settlement previously investigated by Peter Addyman in the 1960s. Andrew also writes and co-ordinates EnvironmentalImpact Assessments and has worked on a variety of such projects across southern and eastern England. In addition to his research responsibilities Andrew undertakes outreach and publicity work and carries out some fieldwork.

PROJECT OFFICER (POST-EXCAVATION) Antony Mustchin BSc MSc DipPAS

Qualifications: University of Bradford BSc (Hons) Bioarchaeology (1999-2003)

University of Bradford MSc Biological Archaeology (2004-2005)

University of Bradford Diploma in Professional Archaeological Studies (2003)

Experience: Antony has over 14 years' experience in field archaeology, gained during his higher education and in the professional sector. Commercially in the UK, Antony has worked

for Archaeology South East (2003), York Archaeological Trust (2004) and Special Archaeological Services (2003). He has also undertaken a six-month professional placement as Assistant SMR Officer/ Development Control Officer with Kent County Council (2001-2002). Antony's academic interests have led to his gaining considerable research excavation experience across the North Atlantic region. He has worked for projects and organisations including the Old Scatness and Jarlshof Environs Project, Shetland (2000-2003), the Viking Unst Project, Shetland (2006-2007), the Heart of the Atlantic Project Føroys Fornminnissavn, Faroe Islands (2006-2008) and City University New York/ National Museum of Denmark/ Greenland National Museum and Archives, Greenland (2006 and 2010). Shortly before Joining Archaeological Solutions in November 2011, Antony spent three years working for the Independent Commission for the Location of Victims Remains, assisting in the search for and forensic recovery of 'the remains of victims of paramilitary violence ("The Disappeared") who were murdered and buried in secret arising from the conflict in Northern Ireland'. Antony has a broad experience of fieldwork and post-excavation practice including specialist (archaeofauna), teaching, supervisory and directing-level posts.

POTTERY, LITHICS AND CBM RESEARCHER Andrew Peachey BA MCIfA

Qualifications: University of Reading BA Hons, Archaeology and History (1998-2001) Experience: Andrew joined AS (formerly HAT) in 2002 as a pottery researcher, and rapidly expanded into researching CBM and lithics. Andrew specialises in prehistoric and Roman pottery and has worked on numerous substantial assemblages, principally from across East Anglia but also from southern England. Recent projects have included a Neolithic site at Coxford, Norfolk, an early Bronze Age domestic site at Shropham, Norfolk, late Bronze Age material from Panshanger, Hertfordshire, middle Iron Age pit clusters at Ingham, Suffolk and an Iron Age and early Roman riverside site at Dernford, Cambridgshire. Andrew has worked on important Roman kiln assemblages, including a Nar Valley ware production site at East Winch Norfolk, a face-pot producing kiln at Hadham, Hertfordshire and is currently researching early Roman Horningsea ware kilns at Waterbeach, Cambridgeshire. Andrew is an enthusiastic member of the Study Group for Roman Pottery, and also undertakes pottery and lithics analysis as an 'external' specialist for a range of archaeological units and local societies in the south of England.

POTTERY RESEARCHER Peter Thompson MA

Qualifications: University of Bristol BA (Hons), Archaeology (1995-1998)

University of Bristol MA; Landscape Archaeology (1998-1999)

Experience: As a student, Peter participated in a number of projects, including the excavation of a Cistercian monastery cemetery in Gascony and surveying an Iron Age promontory hillfort in Somerset. Peter has two years excavation experience with the Bath Archaeological Trust and Bristol and Region Archaeological Services which includes working on a medieval manor house and a post-medieval glass furnace site of national importance. Peter joined HAT (now AS) in 2002 to specialise in Iron Age, Saxon and medieval pottery research and has also produced desk-based assessments. Pottery reports include an early Iron pit assemblage and three complete Early Anglo-Saxon accessory vessels from a cemetery in Dartford, Kent.

PROJECT OFFICER (OSTEOARCHAEOLOGY) Dr Julia Cussans

Qualifications: University of Bradford, PhD (2002-2010)

University of Bradford, BSc (Hons) Bioarchaeology (1997-2001) University of Bradford, Dip. Professional Archaeological Studies (2001)

Experience: Julia has over 14 years of archaeozoological experience. Whilst undertaking her part time PhD she also worked as a specialist on a variety of projects in northern Britain including Old Scatness (Shetland), Broxmouth Iron Age Hillfort and Binchester Roman Fort. Additionally Julia has extensive field experience and has held lead roles in excavations in Shetland and the Faroe Islands including, Old Scatness, a large multi-period settlement centred on an Iron Age Broch; the Viking Unst Project, an examination of Viking and Norse houses on Britain's most northerly isle; the Laggan Tormore Pipeline (Firths Voe), a Neolithic house site in Shetland; the Heart of the Atlantic Project, an examination of Viking settlement in the Faroes and Við Kirkjugarð, an early Viking site on Sanday, Faroe Islands. Early on in her career Julia also excavated at Sedgeford, Norfolk as part of SHARP and in Pompeii, Italy as part of the Anglo-American Project in Pompeii. Since joining AS in October 2011 Julia has worked on animal bone assemblages from Beck Row, a Roman agricultural site at Mildenhall, Suffolk and Sawtry, an Iron Age, fen edge site in Cambridgeshire. Julia is a full and active member of the International Council for Archaeozoology, the Professional Zooarchaeology Group and the Association for Environmental Archaeology.

ENVIRONMENTAL ARCHAEOLOGIST Dr John Summers

Qualifications: 2006-2010: PhD "The Architecture of Food" (University of Bradford)

2005-2006: MSc Biological Archaeology (University of Bradford) 2001-2005: BSc Hons. Bioarchaeology (University of Bradford)

Experience: John is an archaeobotanist with a primary specialism in the analysis of carbonised plant macrofossils and charcoal. Prior to joining Archaeological Solutions, John worked primarily in Atlantic Scotland. His research interests involve using archaeobotanical data in combination with other archaeological and palaeoeconomic information to address cultural and economic research questions. John has made contributions to a number of large research projects in Atlantic Scotland, including the Old Scatness and Jarlshof Environs Project (University of Bradford), the Viking Unst Project (University of Bradford) and publication work for Bornais Mound 1 and Mound 2 (Cardiff University). He has also worked with plant remains from Thruxton Roman Villa, Hampshire, as part of the Danebury Roman Environs Project (Oxford University/ English Heritage). John's role at AS is to analyse and report on assemblages of plant macro-remains from environmental samples and provide support and advice regarding environmental sampling regimes and sample processing. John is a member of the Association for Environmental Archaeology.

SENIOR GRAPHICS OFFICER Kathren Henry

Experience: Kathren has over twenty-five years' experience in archaeology, working as a planning supervisor on sites from prehistoric to late medieval date, including urban sites in London and rural sites in France/ Italy, working for the Greater Manchester Archaeological Unit, Passmore Edwards Museum, DGLA and Central Excavation Unit of English Heritage (at Stanwick and Irthlingborough, Northamptonshire). She has worked with AS (formerly HAT) since 1992, becoming Senior Graphics Officer. Kathren is AS's principal photographer, specializing in historic building survey, and she manages AS's photographic equipment and dark room. She is in charge of AS's Graphics Department, managing computerised artwork

and report production. Kathren is also the principal historic building surveyor/illustrator, producing on-site and off-site plans, elevations and sections.

GRAPHICS OFFICER

Thomas Light

Qualifications: University of Kent (2009-2012)

University of Kent (2012-2013)

BA Classical and Archaeological Studies

MA Roman History and Archaeology

Experience: Since completing his higher education, Thomas has gained good practical experience in the archaeological and heritage sector, working in a voluntary capacity for Guilford Institute Library and Archive, and Surrey County Archaeological Unit. Before becoming a graphics officer, Thomas held the position of Site Assistant and has excavated on a variety of commercial projects. In his current capacity Thomas has produced extensive illustrative material, including figures and plates for nationally and internationally distributed journal publications.

HISTORIC BUILDING RECORDING Tansy Collins BSc

Qualifications: University of Sheffield, Archaeological Sciences BSc (Hons) (1999-2002) Experience: Tansy's archaeological experience has been gained on diverse sites throughout England, Ireland, Scotland and Wales, Tansy joined AS in 2004 where she developed skills in graphics, backed by her grasp of archaeological interpretation and on-site experience, to produce hand drawn illustrations of pottery, and digital illustrations using a variety of packages such as AutoCAD, Corel Draw and Adobe Illustrator. She joined the historic buildings team in 2005 in order to carry out both drawn and photographic surveys of historic buildings before combining these skills with authoring historic building reports in 2006. Since then Tansy has authored numerous such reports for a wide range of building types; from vernacular to domestic architecture, both timber-framed and brick built with date ranges varying from the medieval period to the 20th century. These projects include a number of regionally and nationally significant buildings, for example a previously unrecognised medieval aisled barn belonging to a small group of nationally important agricultural buildings, one of the earliest surviving domestic timber framed houses in Hertfordshire, and a Cambridgeshire house retaining formerly hidden 17th century decorative paint schemes. Larger projects include The King Edward VII Sanatorium in Sussex, RAF Bentley Priory in London as well as the Grade I Listed Balls Park mansion in Hertfordshire.

HISTORIC BUILDING RECORDING Lauren Wilson

Qualifications: University of Chester (2010-2013) BA (Hons) Archaeology

University of York (2013-2014) MA Archaeology of Buildings

Experience: Throughout her higher education, Lauren has gained extensive practical archaeological experience, including small finds processing and cataloguing at Norton Priory, Runcorn and assisting in the excavation of a Roman villa as part of the *Santa Marta Project*, Tuscany. Lauren also participated in a training excavation at Grovesnor Park, Chester, centred on a Roman road and 16th century chapel. As part of her Masters dissertation, Lauren worked with the Historic Property Manager of Middleham Castle, North Yorkshire, gaining a good practical knowledge of public outreach and events planning. Since joining Archaeological Solutions Ltd, Lauren has contributed to complex historic buildings recording projects at Landens Farm, Horley (Surrey) and the Ostrich Inn, Colnbrook (Berkshire). She also conducts background research and contributes to archaeological report writing.

ARCHIVES ADMINISTRATOR Claire Wootton

Experience: Throughout her professional career, Claire has gained extensive administrative experience. Her past roles include Administrative Officer with the Court Service (Royal Courts of Justice; 1988-1997) and Discovery Centre Administrator at St Edmundsbury Cathedral (2012-2015). Claire's Advanced Level qualifications include History, English and Law. Since joining Archaeological Solutions Ltd, Claire has gained a thorough experience of archives administration through a programme of work-based training on numerous projects.

ARCHIVES ADMINISTRATOR Karen Cleary

Experience: Karen started her administrative career as Youth Training Administrator for a training company (TSMA Ltd) in 1993, where she provided administrative support for NVQ Assessors' of trainees and apprentices on the youth training scheme and in work placements they'd helped set up. Amongst her administrative duties she was principally in charge of preparing the Training Credits Claims and sending off for government funding. She gained NVQ's Level's 2 and 3 in Administration whilst working in this role. Karen started out with AS as Office Assistant in February 2009 and within a few months was promoted to Archives Assistant, Principally her role involves the preparation of Archaeological archives for long term deposition with museums. She has developed a good understanding of the preparation process and follows each individual museum's quidelines closely. She has a good working knowledge of Microsoft Office and is competent with FileZilla- Digital File Transfer software and Fastsum-Checksum Creation software.

ARCHAEOLOGICAL SOLUTIONS: PRINCIPAL SPECIALISTS

GEOPHYSICAL SURVEYS David Bescoby

AIR PHOTOGRAPHIC

ASSESSMENTS PHOTOGRAPHIC SURVEYS

PREHISTORIC POTTERY **ROMAN POTTERY**

SAXON and MEDIEVAL POTTERY POST-MEDIEVAL POTTERY

FLINT GLASS COINS

METALWORK and LEATHER **SLAG**

HUMAN BONE: ENVIRONMENTAL CO-ORDINATOR POLLEN AND SEEDS:

CHARCOAL/WOOD SOIL MICROMORPHOLOGY

CONSERVATION

CARBON-14 DATING:

ANIMAL BONE

Dr John Summers

Air Photo Services

Ms K Henry Mr A Peachev Mr A Peachev Mr P Thompson Mr P Thompson Mr A Peachey

H Cool British Museum, Dept of Coins and

Medals

Ms Q Mould, Ms N Crummy

Mr A Newton Dr J Cussans Ms S Anderson Dr J Summers Dr R Scaife Dr J Summers

Dr R MacPhail, Dr C French Historic England Ancient

Monuments Laboratory (for advice).

University of Leicester

APPENDIX 4 OASIS DATA COLLECTION FORM

PHOTOGRAPHIC INDEX



Trench 1 looking south-east



2 Ditch 1058 in Trench 1







Trench 4 looking south-east



Trench 5 looking south-east



7 Ditch 1060 in Trench 5





Trench 6 looking west



Ditch 1066 in Trench 6





Trench 8 looking north



13 Trench 9 looking east



14 Trench 10 looking east



15 Ditches 1049 and 1051 in Trench 10



16 Ditch 1068 and pit 1094 in Trench 10



17 Trench 11 looking south



19 Ditch 1099 in Trench 11



18 Pit 1097 in Trench 11



20 Trench 12 looking north



21 Ditch 1045 in Trench 12



23 Ditch 1075 in Trench 12



25 Trench 13 looking east



22 Ditch 1071 in Trench 12



24 Ditch 1084 in Trench 12



26 Trench 13 looking south



Ditch 1029 in Trench 13



28 Pit 1031 in Trench 13



29 Pit 1035 in Trench 13



30 Ditch 1037 in Trench 13



Ditch 1041 in Trench 13



Ditches 1047 and 1080 in Trench 13



Trench 14 looking north



Trench 15 looking south





Ditch 1043 in Trench 16





39 Pits 1014, 1019 and 1021 in Trench 17



41 Ditches 1025 and 1027 in Trench 17



38 Pit 1010 in Trench 17



40 Ditch 1016 in Trench 17



42 Ditch 1033 in Trench 17



43 Trench 18 looking east



45 Trench 20 looking north-east



44 Trench 19 looking east



46 Trench 21 looking south



47 Pit 1077 in Trench 21



48 Trench 22 looking west



49 Trench 22 looking north-west



50 Ditch 1003 in Trench 22



51 Ditch 1005 in Trench 22



52 Ditch 1008 in Trench 22



53 Worn fragment of lava quern found in Ditch 1051, Trench 10



54 Iron fragment found in Ditch 1029, Trench 13



Copper alloy fragment found in Ditch 1005, Trench 22



56 Iron nails found in Ditch 1005, Trench 22



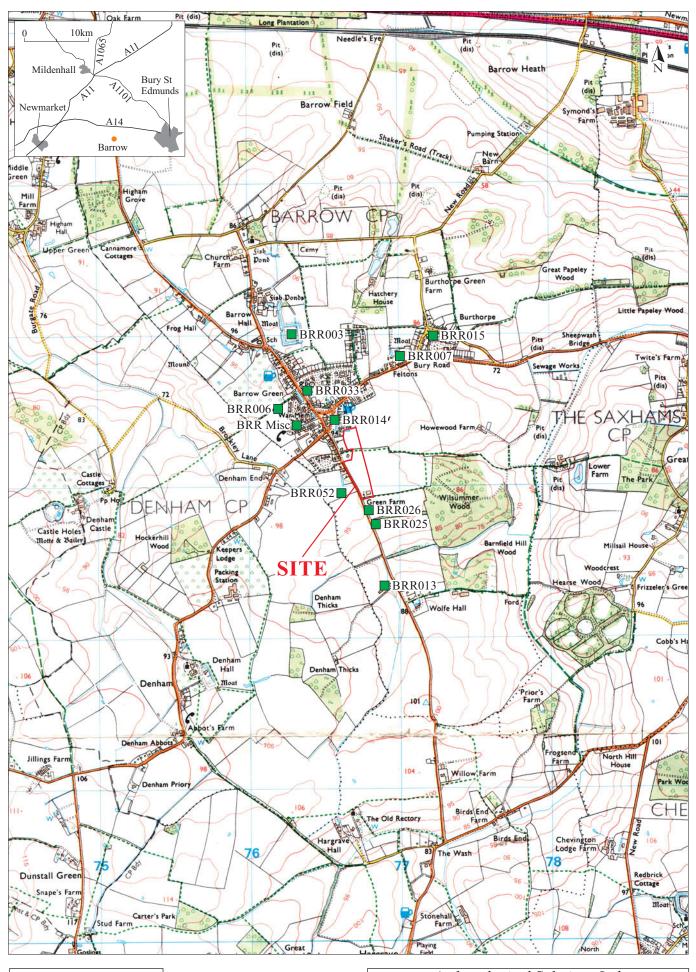
57
Iron nail (Fieldwalking Object 1)



58 Iron handle (Fieldwalking Object 2)



59 Fragment of iron horseshoe (Fieldwalking Object 3)



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Fig. 1 Site location plan

Scale 1:25,000 at A4

Barrow Hill, Barrow, Suffolk (P6667)

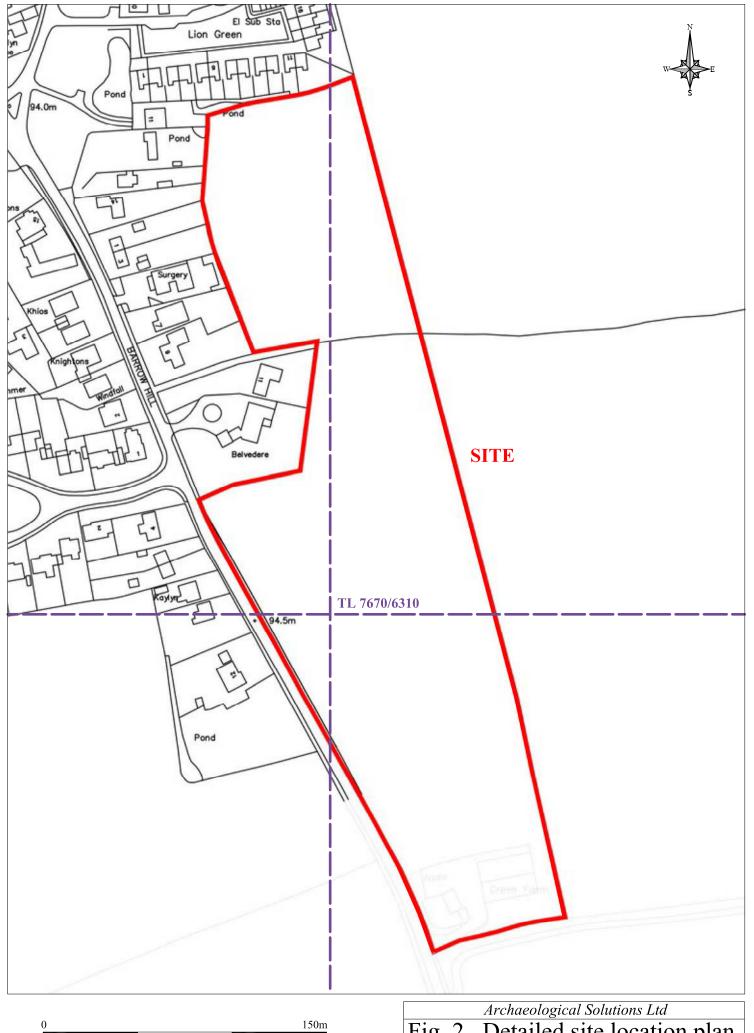
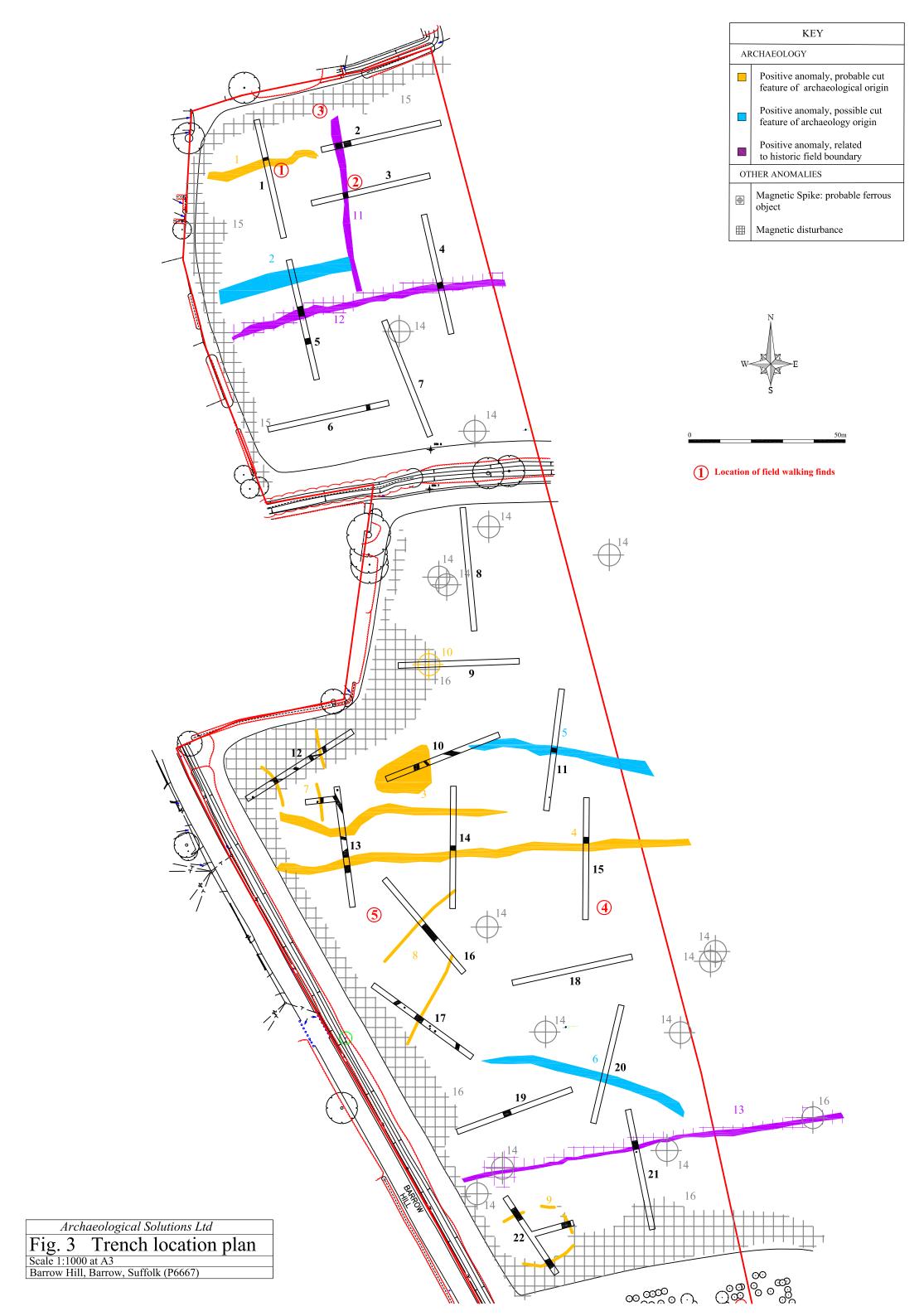
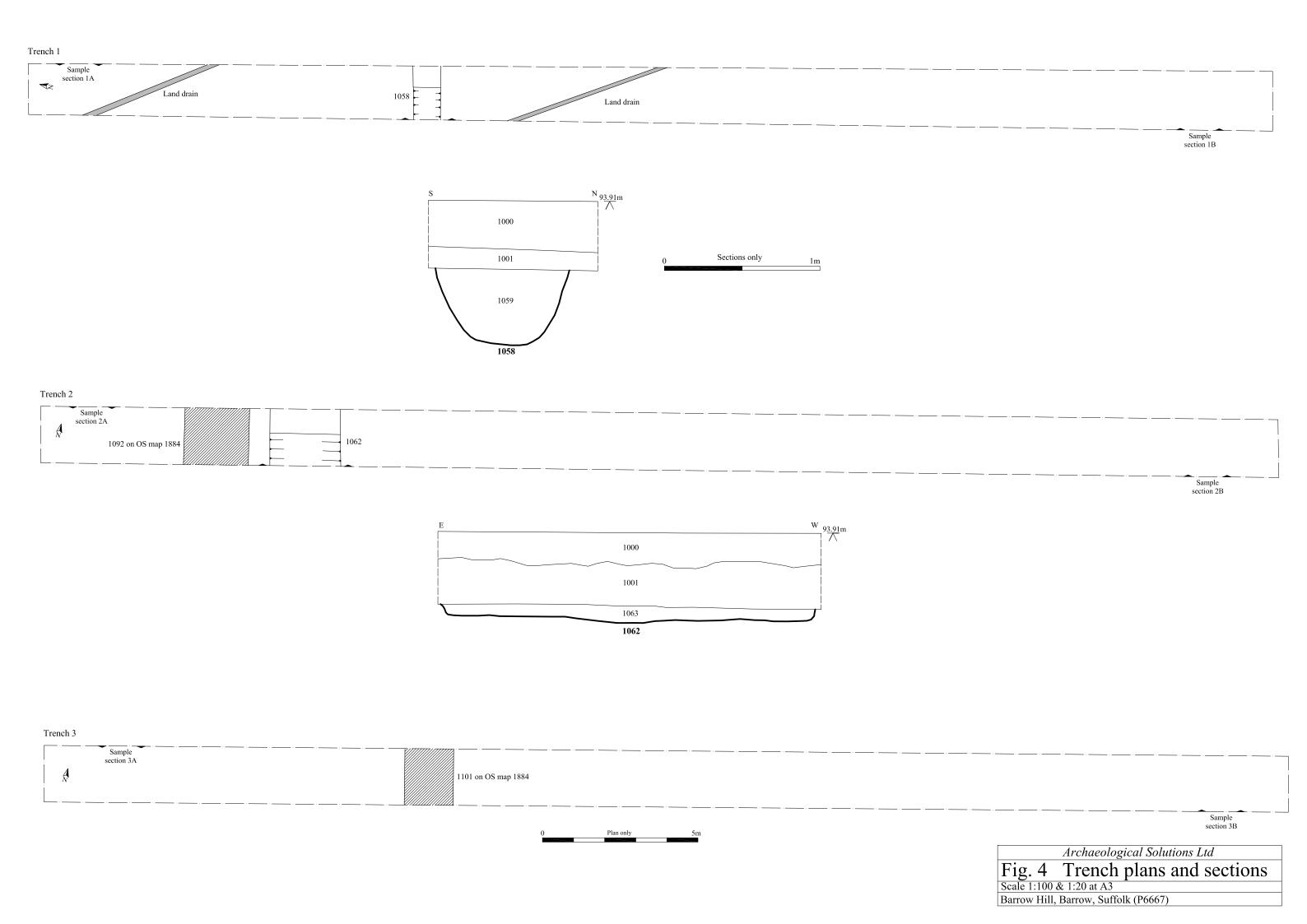
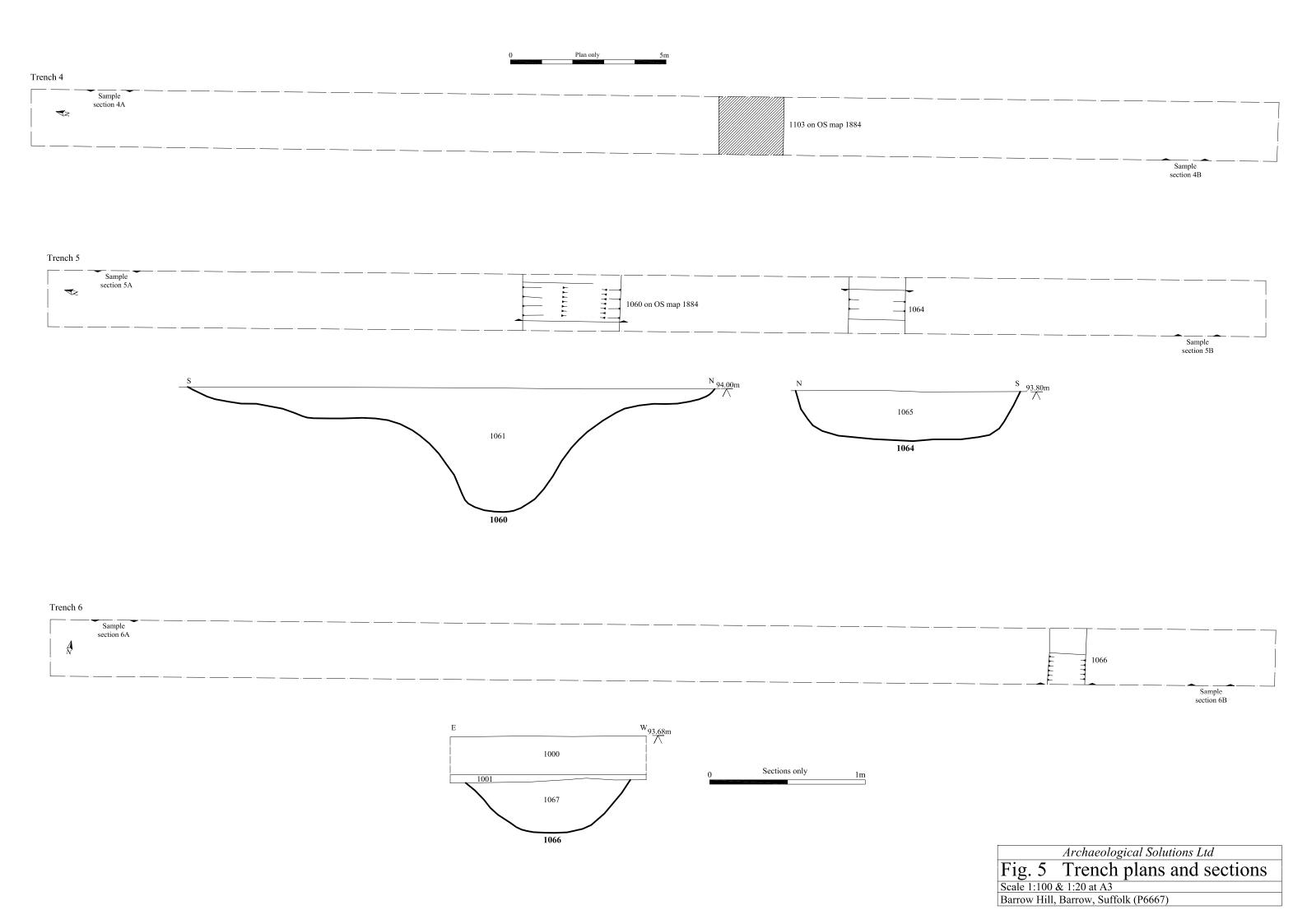
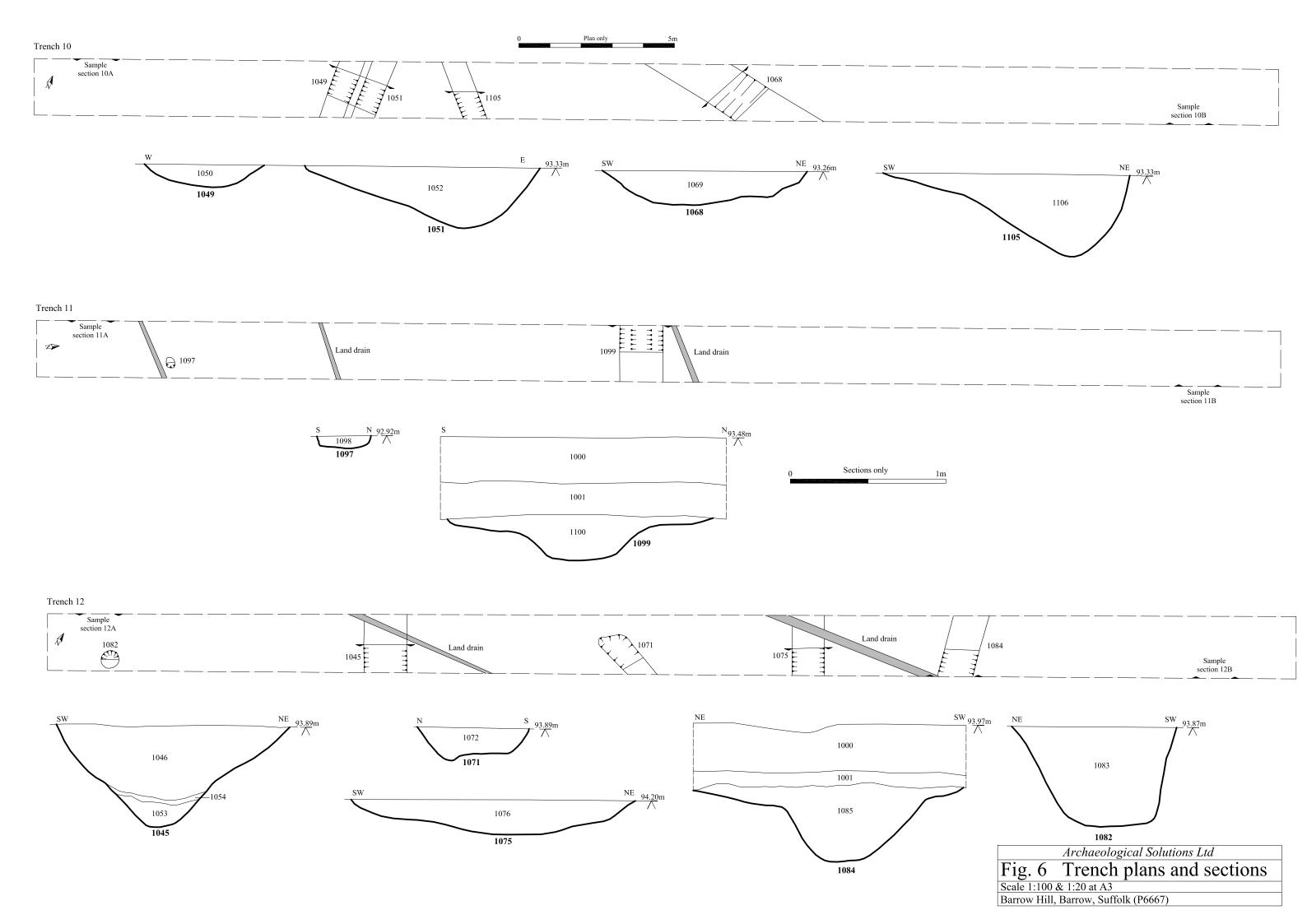


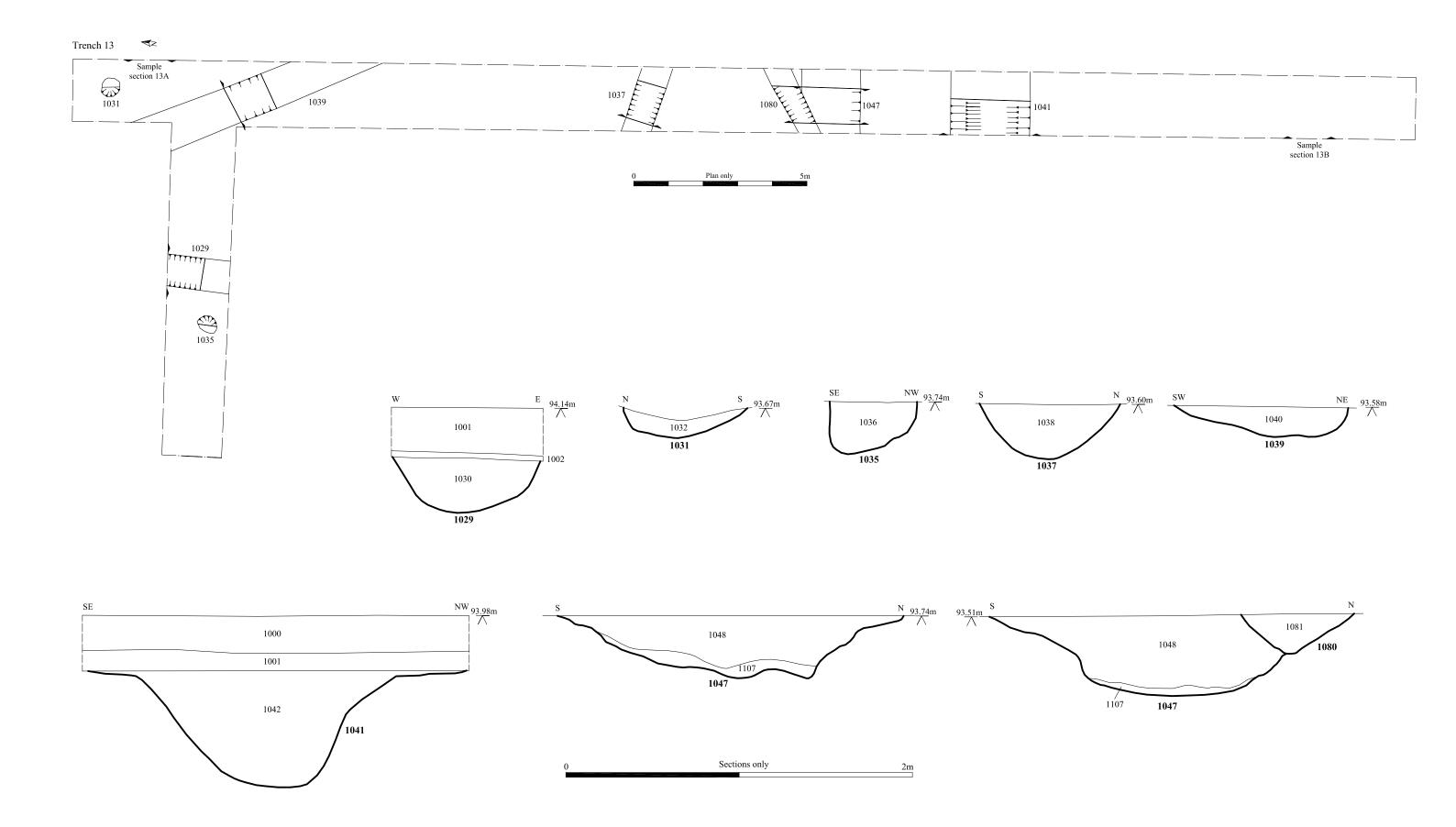
Fig. 2 Detailed site location plan
Scale 1:2000 at A4
Barrow Hill, Barrow, Suffolk (P6667)









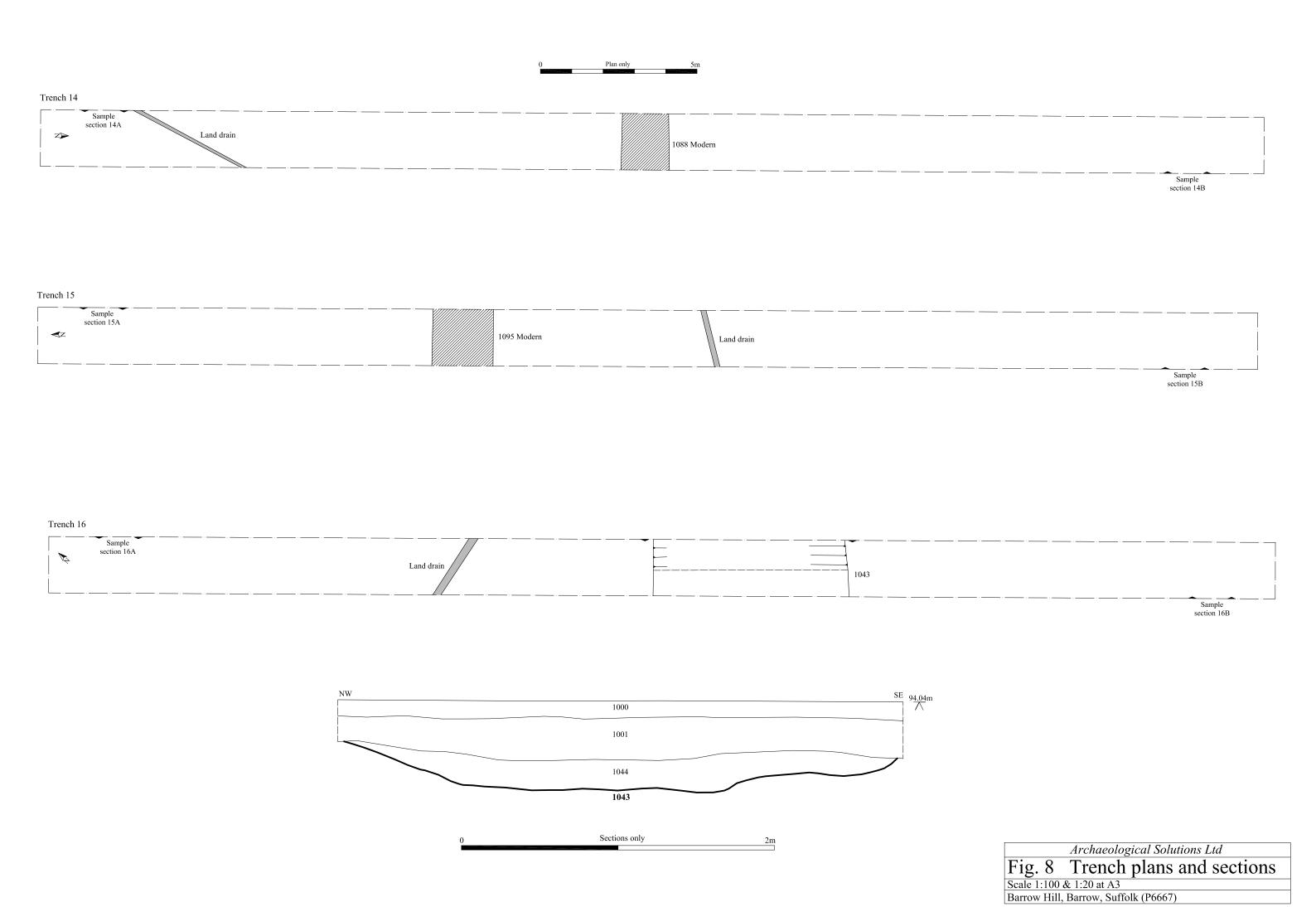


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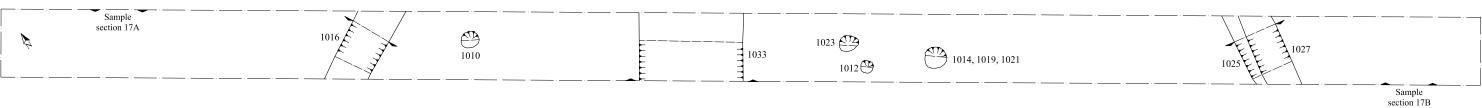
Fig. 7 Trench plan and sections

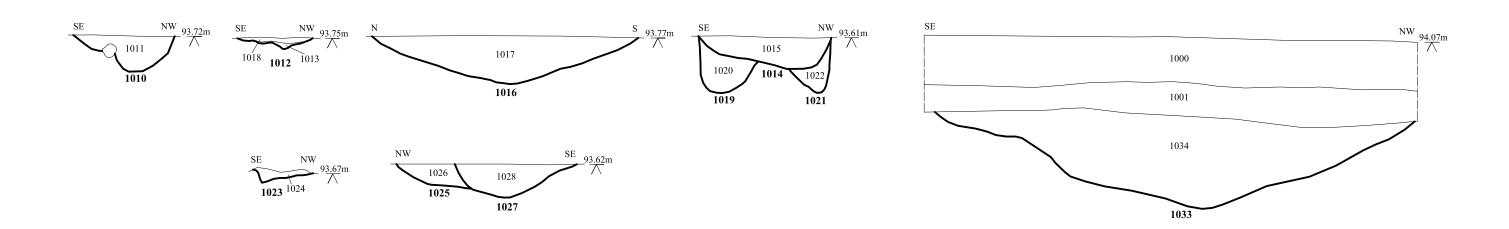
Scale 1:100 & 1:20 at A3

Barrow Hill, Barrow, Suffolk (P6667)









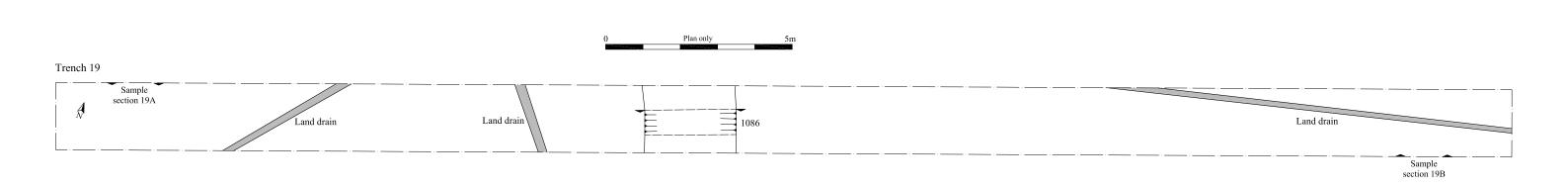
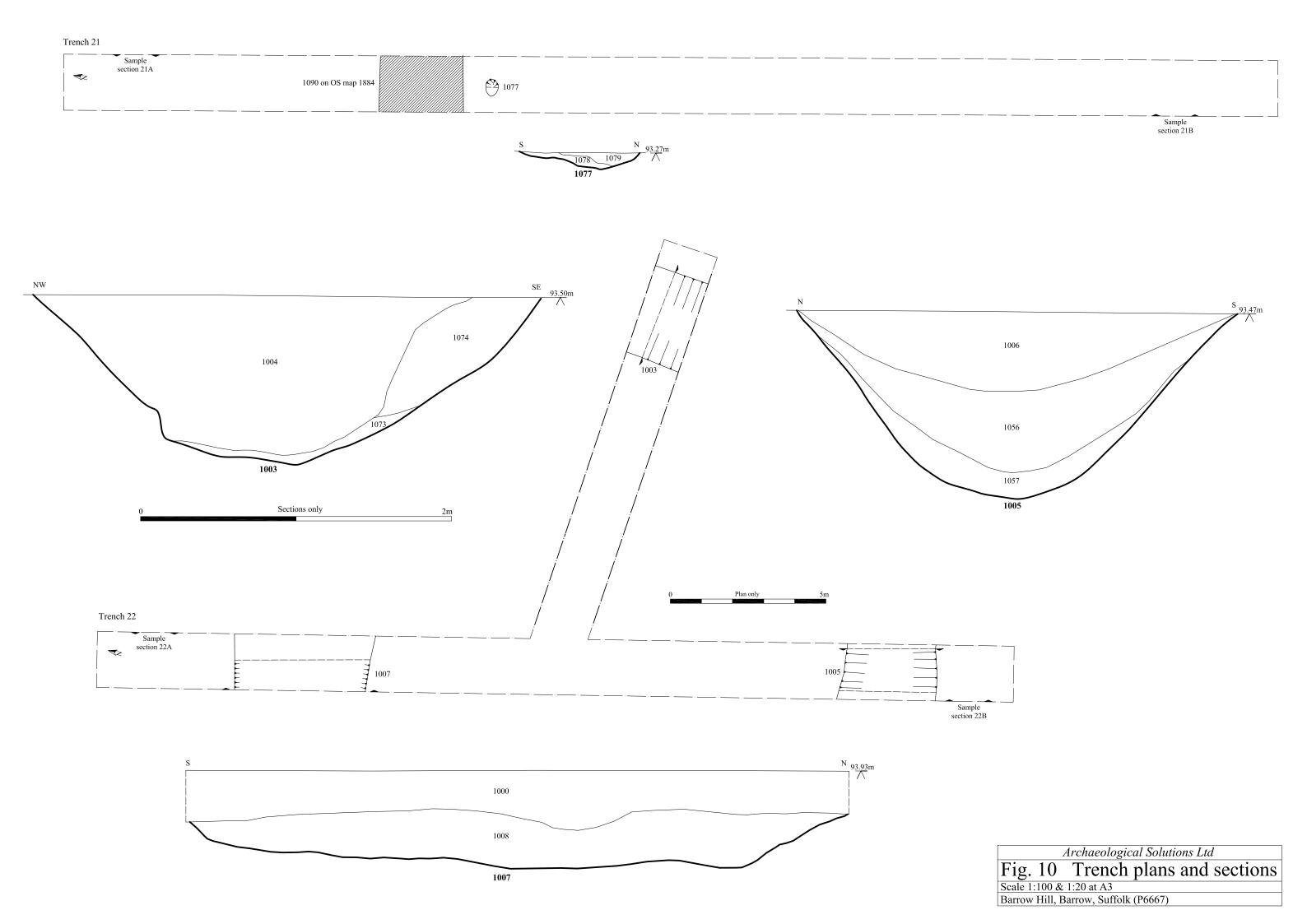
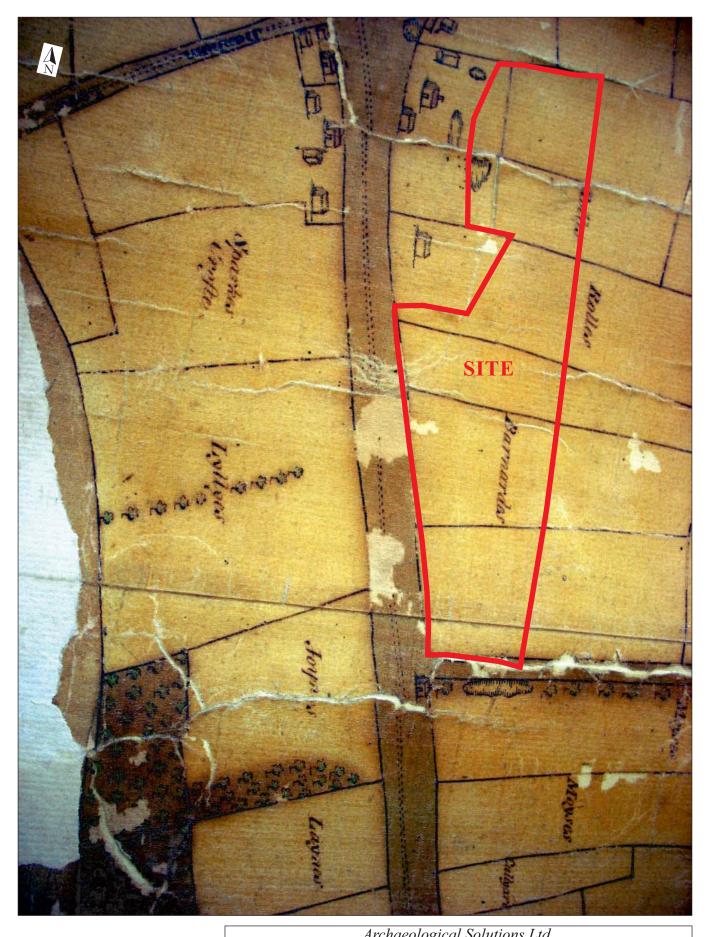




Fig. 9 Trench plans and sections
Scale 1:100 & 1:20 at A3
Barrow Hill, Barrow, Suffolk (P6667)





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Parish map from 1597, copied in 1779 Fig. 11 Parish map f
Not to scale
Barrow Hill, Barrow, Suffolk (P6667)

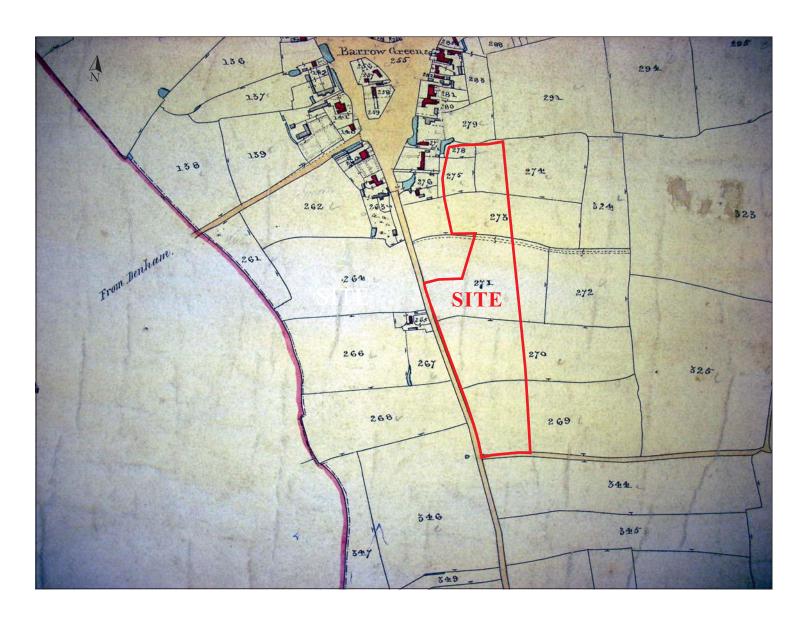


Fig. 12
Not to scale Tithe map, 1841

Barrow Hill, Barrow, Suffolk (P6667)

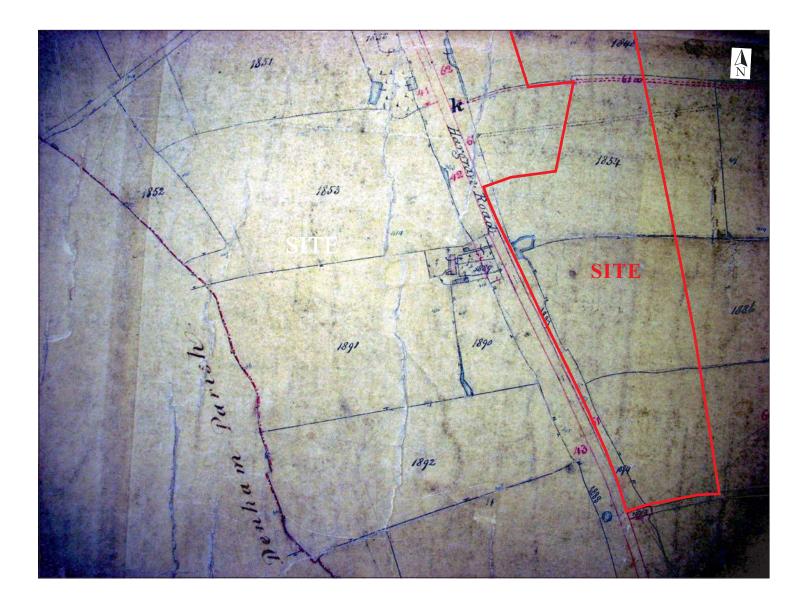
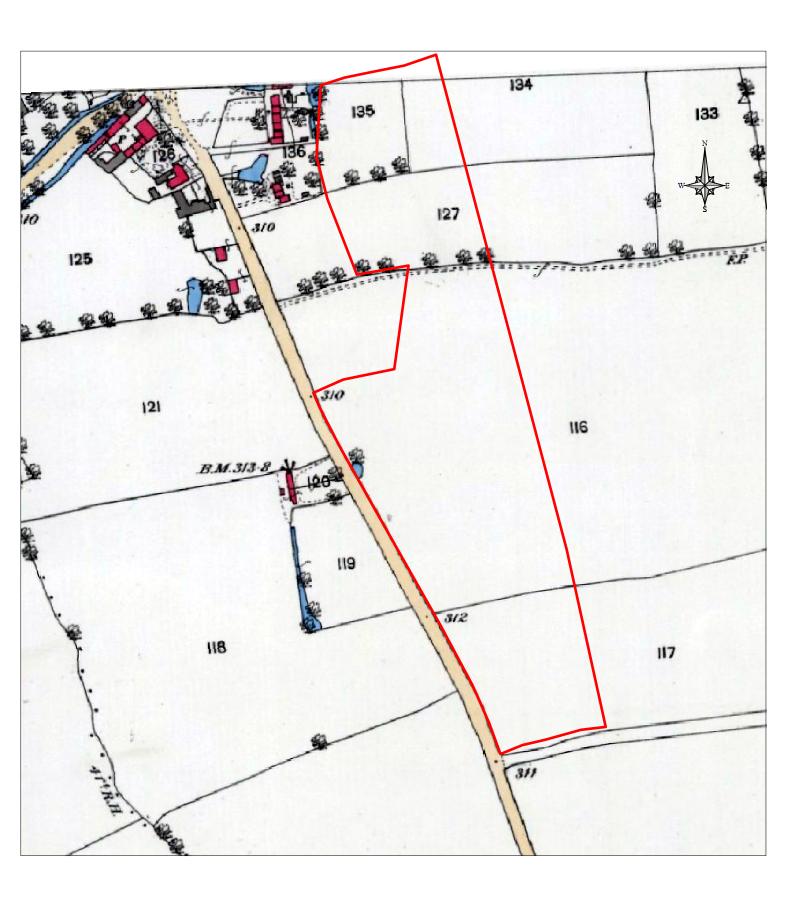


Fig. 13 Inclosure ma Not to scale Barrow Hill, Barrow, Suffolk (P6667) Inclosure map, 1853



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Fig. 14 OS map 1884

Scale 1:2500 at A4

Barrow Hill, Barrow, Suffolk (P6667)

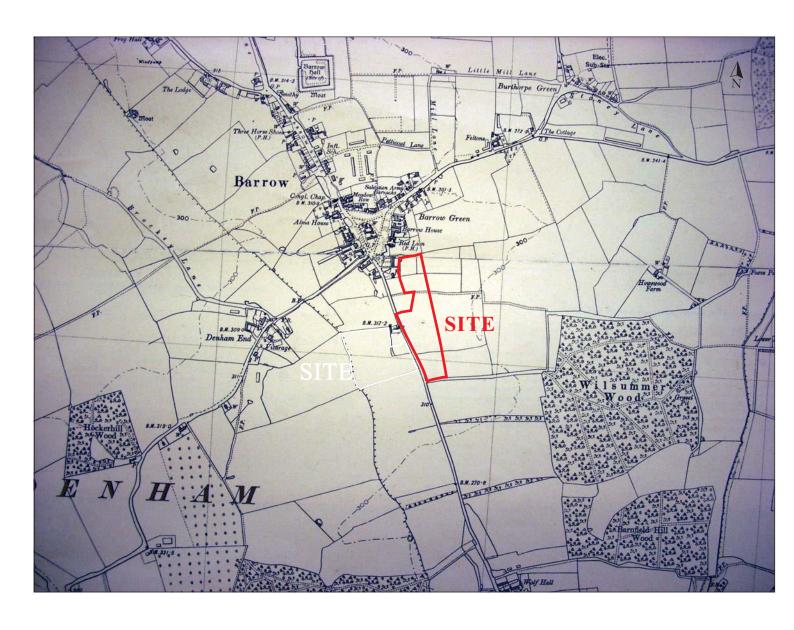


Fig. 15 OS map, 1950
Scale 1:25,000 at A4
Barrow Hill, Barrow, Suffolk (P6667)