## ARCHAEOLOGICAL SOLUTIONS LTD

## LAND WEST OF 36 SMALLHOLDINGS ROAD, CLENCHWARTON, NORFOLK

AN ARCHAEOLOGICAL EVALUATION

Authors: Peter Thompson MA (Desk-based assessment)		
Gareth Barlow BSc	(Fieldwork & report)	
NGR: TF 5886 1993	Report No: 3700	
District: Kings Lynn and	Site Code: ENF125466	
West Norfolk		
Approved:	Project No: P3096	
Claire Halpin MIFA	Date: December 2010	
Signed:		

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### **OASIS SUMMARY SHEET**

Project details	
Project name	Land West of 36 Smallholdings Road, Clenchwarton, Norfolk

In November and December 2010, Archaeological Solutions Ltd (AS) carried out an archaeological evaluation on land west of 36 Smallholdings Road, Clenchwarton, Norfolk (NGR TF 5886 1993). The evaluation was conducted in compliance with a planning condition attached to planning approval for the proposed construction of affordable housing (Borough of Kings Lynn and West Norfolk Council Planning Ref. 07/02132/FM).

The evaluation revealed archaeological features in each of the six trenches. A range of features were present a gully, ditches, large shallow pits or depressions, pits, channels and linears. The ditches in Trenches 1, 3, 4 and 6 were either parallel or perpendicular. The features were consistently dated to the medieval period (principally  $12^{th} - 14^{th}$  century). A large volume of pottery was recovered from the features, and Pit F1045 (Tr.5) contained the latest assemblage (mid  $14^{th} - 15^{th}$  century). The presence of a homogenous group of medieval bricks, notably in Pit F1045, strongly suggests the presence of an early  $14^{th}$  to  $15^{th}$  century building including at least a brick-built component (i.e. chimney stack) in the close vicinity of the site. The archaeological features and finds were consistent with those associated with a medieval settlement. Medieval activity is well attested in the surrounding area. This site may represent outlying occupation to the deserted medieval village (HER 2192) known to the east.

	N D C	2040		
Project dates (fieldwork)	Nov – Dec 2			
Previous work (Y/N/?)	N	Future work		BC
P. number	3096	Site code	E	ENF125466
Type of project	Archaeologi	cal Evaluation		
Site status	-			
Current land use	Agricultural	field		
Planned development	Housing			
Main features (+dates)	Pits, ditches	, gullies		
Significant finds (+dates)	Medieval po	ttery, CBM and	animal boı	ne
Project location				
County/ District/ Parish	Norfolk	King's West N	,	and Clenchwarton
HER/ SMR for area	Norfolk HEF	Norfolk HER (NHER)		
Post code (if known)	-			
Area of site	0.6 ha			
NGR	TF 5886 199	93		
Height AOD (max/ min)	2-3m AOD			
Project creators				
Brief issued by	Norfolk Co Hamilton)	unty Council	Historic I	Environment Service (Ken
Project supervisor/s (PO)	Gareth Barlo	DW .		
Funded by	Flagship Housing Developments			
Full title		of 36 Smallhold cal Evaluation	ings Road	, Clenchwarton, Norfolk. An
Authors	Barlow, G. & Thompson P.			
Report no.	3700	-		
Date (of report)	December 2	0010		

# LAND WEST OF 36 SMALLHOLDINGS ROAD, CLENCHWARTON, NORFOLK

## AN ARCHAEOLOGICAL EVALUATION

## **SUMMARY**

In November and December 2010, Archaeological Solutions Ltd (AS) carried out an archaeological evaluation on land west of 36 Smallholdings Road, Clenchwarton, Norfolk (NGR TF 5886 1993). The evaluation was conducted in compliance with a planning condition attached to planning approval for the proposed construction of affordable housing (Borough of Kings Lynn and West Norfolk Council Planning Ref. 07/02132/FM).

Clenchwarton has significant medieval remains in its immediate environs including the deserted medieval village and port of Maidenhouse on its east side (NHER 2192), and there is a scheduled churchyard cross (NHER 2191) beside St Margaret's church (NHER 2183). The closest remains to the site comprise medieval pottery scatters in the fields immediately to the east across Smallholdings Road (NHER 22485) which also include an undated ring ditch (NHER 27732).

The evaluation revealed archaeological features in each of the six trenches. A range of features were present a gully, ditches, large shallow pits or depressions, pits, channels and linears. The ditches in Trenches 1, 3, 4 and 6 were either parallel or perpendicular. The features were consistently dated to the medieval period (principally  $12^{th} - 14^{th}$  century). A large volume of pottery was recovered from the features, and Pit F1045 (Tr.5) contained the latest assemblage (mid  $14^{th} - 15^{th}$  century). The presence of a homogenous group of medieval bricks, notably in Pit F1045, strongly suggests the presence of an early  $14^{th}$  to  $15^{th}$  century building including at least a brick-built component (i.e. chimney stack) in the close vicinity of the site. The archaeological features and finds were consistent with those associated with a medieval settlement. Medieval activity is well attested in the surrounding area. This site may represent outlying occupation to the deserted medieval village (HER 2192) known to the east.

## 1 INTRODUCTION

- 1.1 In November 2010, Archaeological Solutions Ltd (AS) carried out an archaeological evaluation on land west of 36 Smallholdings Road, Clenchwarton, Norfolk (NGR TF 5886 1993). The evaluation was conducted in compliance with a planning condition attached to planning approval for the proposed construction of affordable housing (Borough of Kings Lynn and West Norfolk Council Planning Ref. 07/02132/FM). It was commissioned by Oxbury and Company on behalf of Flagship Housing Developments.
- 1.2 The evaluation was carried out in accordance with a brief issued by Norfolk Landscape Archaeology (NLA, now Norfolk Historic Environment Service) (Ken Hamilton, dated 14/05/2010), and a specification compiled by AS (dated 13/07/2010) and approved by NLA. The evaluation conformed to the IFA Standard and Guidance for Archaeological Field Evaluation (revised 2008) and Standards for Field Archaeology in the East of England (Gurney 2003).
- 1.3 The evaluation was carried out to determine the presence (or absence) of any archaeological layers or sub soil archaeological features and to ascertain its extent, date, state of preservation and significance.

## Planning policy context

1.4 PPS5 states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The Planning Policy Statement 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. It aims to conserve England's heritage assets in a manner appropriate to their significance. It states that opportunities to capture evidence from the historic environment and to contribute to our knowledge and understanding of our past, and to make this publicly available, should be taken, particularly where a heritage asset is to be lost.

## **2 DESCRIPTION OF THE SITE** (Figs. 1 - 2)

2.1 Clenchwarton is a village and civil parish situated 3km west of Kings Lynn in Norfolk and 1km north of the A17(T). The Lynn Road is the main road running east-west through the village between West Lynn and Terrington St Clement. The site is an agricultural field to the south of the village with more field to the

north, west and south. On the north- east side are houses and gardens forming the southernmost tip of the village, with Smallholdings Road fronting them on their east side. The road curves west to form the south-east boundary of the site. Hoe Farm is situated across Smallholdings Road, on the east side, and slightly south of the site. The site is part of a larger agricultural field.

## 3 METHODOLOGY (Desk-based research)

## 3.1 Archaeological databases

The Norfolk Historic Environment Record (NHER) was consulted in order to identify any local archaeological finds or remains in the area that might be affected by the development. Those sites in closest proximity to the site (approximately 800m) are listed in Appendix 1 and plotted in Fig 3. Sites beyond the 800m radius are described in the text where relevant.

## 4 THE EVIDENCE

## **4.1** Topography, geology and soils (Fig. 1)

4.1.1 The low lying site is between 2-3m AOD in reclaimed land that was probably former marsh. The soil is of the Wisbech series comprising groundwater gley soils that normally develop within or over permeable materials that are affected by periodic waterlogging or fluctuations in the water table. They contain a calcareous subsoil horizon. The underlying geology is Kimmeridge and Ampthill clays sometimes also containing a limestone component.

## **4.2** Archaeological and historical background (Fig. 3)

- 4.2.1 Sparse to moderate scatters of medieval pottery have been recovered from the fields immediately across Smallholdings Road to the east and southeast of the site (NHER 22485). A low rodden was also noted, which was partly flattened by the farmer, and the crop mark of an undated ring ditch some 250m to the south-east (NHER 27732). The listed church of St Margaret's, 300m to the north, is built from carstone, brick and flint and has a 14<sup>th</sup> century west tower and 15<sup>th</sup> century nave (NHER 2193). It is thought to have been constructed on a saltern or old river course. The 14<sup>th</sup> century listed limestone cross in the churchyard is also a Scheduled Monument (NHER 2191). The two remaining listed buildings in the village are on the west side comprising the Porch House, which has a beam dated 1436 (NHER 12385) and the post-medieval Toll House (NHER 17879). This is probably connected with a post-medieval road recorded on the east side of the village (NHER 27221).
- 4.2.2 On the east side of the village is the site of Maidenhouse deserted

medieval village and port (NHER 2192). Scatters of medieval pottery and cropmarks of possible ditches or navigable channels have been identified here. One associated scatter of medieval pottery was found just south of the Lynn Road through field walking (NHER 22308). In the same location, two parallel ditches possibly joined at one end to form an elongated enclosure were undated but believed to be medieval (NHER 27216).

4.2.3 Approximately 250m to the south lies the course of the old Sea Bank probably built in Late Saxon and medieval times (NHER 2187). It probably links with a medieval flood bank at Kenwick Hall to the west (NHER 25328) whilst to the east it curves north after 1km. Beyond are a number of medieval saltern sites mainly located around West Lynn. In the opposite direction around Kenwick Hall some 1.3km west of the site a possible medieval moated manor and trackway is located. Documentary research suggests it was founded in the 12<sup>th</sup> century and belonged to Lewes Priory (NHER 22154). Roman, Late Saxon and medieval pottery was recovered from the fields around and evidence for Late Saxon and medieval settlement has been found to the south-west. Other Late Saxon, medieval or undated features including banks and ditches and salterns have been located in areas over 1.3 km to the north of Clenchwarton.

## 4.3 The site

## Early maps of Norfolk

4.3.1 The Tithe map of c.1840 shows the layout is little changed to its current plan (Fig. 4). The site is in field 256 with the area immediately to the north-east already occupied by houses and gardens and Smallholdings Road, and the remainder comprising open farmland. The First Edition OS map shows no change to the Tithe map but indicates where trees or hedges are present (Fig. 5). The 1946 aerial photograph shows that the site's western field boundary has gone making it part of a larger field whilst the field boundary to the north has been straightened (Fig. 7).

## 5 METHODOLOGY (Trial trenching)

- 5.1 Six trial trenches were excavated (Fig.2). Four were 30.00m x 1.80m, one was 22.50m x 1.80m, and one was 15.00m x 1.80m. Trench 5 was originally to have been 30m in length but was shortened to 22.50m to avoid crossing a known drain and continuing into an area of land subject to an ongoing boundary dispute.
- 5.2 Undifferentiated overburden was removed under close archaeological supervision using a tracked, 360° mechanical excavator fitted with a 1.60m wide toothless ditching bucket. Thereafter, all further investigation was undertaken by hand. Exposed surfaces were cleaned as appropriate and examined for

archaeological features and finds. Deposits were recorded using *pro forma* recording sheets, drawn to scale and photographed.

## 6 DESCRIPTION OF RESULTS

Individual trench descriptions are presented below:

**Trench 1** (Figs. 2 & 8, DPs 3-5)

Sample section: North end, East facing 0.00 = 2.32m AOD		
0.00 - 0.22m	L1000	Topsoil. Firm, mid grey brown clay silt.
0.22 – 0.44m	L1001	Subsoil. Firm, mid orange brown clay silt
0.44m+	L1002	Natural deposits. Firm, mid orange brown sandy clay

Sample section: South end, East facing 0.00 = 2.27m AOD		
0.00 - 0.23m	L1000	Topsoil. As above
0.23 - 0.59m	L1001	Subsoil. As above.
0.59m+	L1002	Natural deposits. As above.

Description: Trench 1 contained a medieval ditch (F1010), which was also recorded in Trench 4, and a medieval gully F1008).

F1010 was a ditch (1.80+ x 1.42 x 0.55m) orientated east/west located near the southern end of the trench. It had moderately steep sides and a narrow flat base. Its fill (L1011) was a compact, mid orangey grey silty clay with occasional charcoal and CBM flecks. It contained medieval pottery (Late  $12^{th} - 14^{th}$  C; 10g) and animal bone (35g). This ditch continued through to Trench 4 (F1010 = F1021).

F1008 was a gully (1.80+ x 0.32 x 0.17m) orientated east/west, parallel to Ditch F1010 but at some distance. It had vertical sides and a flat base. Its fill (L1009) was a firm, mid bluish orange silty clay with occasional charcoal and CBM flecks. It contained medieval pottery (Late  $11^{th} - 13^{th}$  C; 13g), and animal bone (13g).

**Trench 2** (Figs. 2 & 8, DPs 6-8)

Sample section: West end, south facing		
0.00 = 2.29m AOD		
0.00 - 0.40m	L1000	Topsoil. As Trench 1.
0.40 – 0.60m L1001 Subsoil. As Trench 1.		
0.60m+	L1002	Natural deposits. As Trench 1.

Sample section: East end, south facing 0.00 = 2.31m AOD		
0.00 - 0.34m	L1000	Topsoil. As Trench 1.
0.34 - 0.50m	L1001	Subsoil. As Trench 1.
0.50m+	L1002	Natural deposits. As Trench 1.

Description: Trench 2 contained a medieval ditch (F1031), orientated east/west before turning south, and two large shallow medieval pits or depressions (F1027 and F1029).

F1027 (6.00+ x 1.80+ x 0.48m) was a large shallow pit, or depression, that cut a similar shallow pit or depression (F1029). Its sides and base were irregular. Its fill (L1028) was a mid grey brown silty clay, and it contained medieval pottery (Mid  $12^{th}$  – Mid  $13^{th}$  C; 282g), animal bone (242g), and CBM (46g).

F1029 (6.26 x 1.80+ x 0.25m) was a large shallow pit, or depression that was cut by Pit F1027 and Ditch F1031. Its sides and base were irregular. It contained three fills. The lowest (L1066) was a firm, black organic clay possibly formed in stagnant water. It contained no finds. Above this was a firm, mid bluish grey silty clay, L1030. It contained medieval pottery (Mid 12<sup>th</sup> – Mid 13<sup>th</sup> C; 366g), animal bone (277g), CBM (12g), burnt clay (10g) and shell (162g). The uppermost fill (L1065) was a firm, mid orange brown silty clay. It contained medieval pottery (Mid 12<sup>th</sup> – Mid 13<sup>th</sup> C; 176g), animal bone (28g) and burnt clay (54g).

F1031 (11.50 x 1.40+ x 0.75m) was a ditch orientated E/W at the eastern end of the trench. Just before reaching the end of the trench it turned due south. It had steep sides and a shallow concave base. It contained three fills. The lowest was L1032, a firm, dark blue black organic silty clay. It contained medieval pottery ( $12^{th} - 13^{th}$  C; 344g) and animal bone (54g). Above this was L1033, a firm, mid reddish brown silty clay. It contained medieval pottery ( $12^{th} - 13^{th}/14^{th}$  C; 94g), CBM (45g) and animal bone (51g). The uppermost fill (L1034) was a firm, mid brownish grey silty clay. It contained medieval pottery ( $13^{th} - 14^{th}$  C; 617g), animal bone (217g), and CBM (30g).

**Trench 3** (Figs. 2 & 9, DPs 9-11)

Sample section: West end, south facing 0.00 = 2.26m AOD		
0.00 - 0.24m	L1000	Topsoil. As Trench 1.
0.24 - 0.52m	L1001	Subsoil. As Trench 1.
0.52m+	L1002	Natural deposits. As Trench 1.

Sample section: East end, south facing 0.00 = 2.30m AOD		
0.00 - 0.31m	L1000	Topsoil. As Trench 1.
0.31 – 0.58m	L1001	Subsoil. As Trench 1.
0.58m+	L1002	Natural deposits. As Trench 1.

Description: Trench 3 contained two medieval ditches (F1003 and F1012) orientated north/south. F1003 appeared to have been recut (F1006).

F1012 was a ditch (1.80+ x 1.70 x 0.36m) orientated north/south, located in the western half of the trench. Its sides were irregular, and the base was flat. Its lowest fill (L1014) was a firm, blackish grey silty clay. It contained a large quantity of marine bivalve shell, mostly cockle. The upper fill (L1013) was a firm, mid brownish grey, mottled with mid brownish red, clayey silt. It contained medieval pottery (Late  $12^{th} - 13^{th}/14^{th}$  C; 289g) and CBM (99g).

F1003 was a ditch (1.80+ x 2.10 x 0.40m) orientated north/south, and had been re-cut (F1006). It had moderately sloping sides and a flat base. Its lowest fill (L1004) was a firm, mid blackish grey clayey silt. It contained medieval pottery (Late  $11^{th} - 13^{th}/14^{th}$  C; 44g), animal bone (40g), and CBM (282g). Above, L1005 was a firm, pale yellowish grey clay with occasional chalk flecks. It contained no finds.

F1006 (1.80+ x 2.00 x 0.22m) was a re-cut of Ditch F1003. It had irregular sides and a narrow base. Its fill (L1007) was a firm, mid grey brown silty clay with a large quantity of marine bivalve shells, mostly cockle. It also contained medieval pottery (Late  $11^{th} - 13^{th}$  C; 67g).

**Trench 4** (Figs. 2 & 9, DPs 12-13)

Sample section: North end, east facing 0.00 = 2.26m AOD		
0.00 - 0.23m	L1000	Topsoil. As Trench 1.
0.23 – 0.39m L1001 Subsoil. As Trench 1.		
0.39m+	L1002	Natural deposits. As Trench 1.

Sample section: South end, East facing		
0.00 = 2.33m A0	OD	
0.00 – 0.41m	L1000	Topsoil. As Trench 1.
0.41 – 0.54m	L1001	Subsoil. As Trench 1.
0.54m+	L1002	Natural deposits. As Trench 1.

Description: Trench 4 contained F1021, a continuation of Ditch F1010 in Trench 1, and a large shallow pit, or depression, (F1023) that truncated linear feature F1067 at the northern end of the trench. All the features were medieval.

F1021 (1.80+ x 1.00 x 0.43m) was a ditch orientated east/west and appeared to be a continuation of Ditch F1010 in Trench 1. It had steep sides and a narrow flat base. Its fill (L1022) was a firm, mid orangey grey clay silt. It contained medieval pottery ( $11^{th} - 13^{th}$  C; 90g) and an Fe fragment (6g).

F1023 (5.80+ x 1.80+ x 0.42m) was a large shallow medieval pit, located at the northern end of the trench, that truncated medieval linear feature F1067. Only its southern side was contained within the trench and this was gently sloping rounding to a flat base. It contained two fills, the lowest of which (L1025) was a firm, mid orangey brown clay silt. It contained medieval pottery (Mid  $12^{th}$  – Mid  $13^{th}$  C; 88g), animal bone (51g) and an iron fragment (15g). The upper fill (L1024) was a firm, mid orangey grey clay silt, and it contained medieval pottery (Late  $11^{th}$  –  $13^{th}$ / $14^{th}$  C; 197g), CBM (8g) and animal bone (204g).

F1067 (2.00+ x 0.90+ x 0.35m) was a linear feature, truncated by Pit F1023, orientated northwest/southeast. It had moderately sloping sides and a concave base. Its fill (L1068) was a firm, mid brownish grey silty clay. It contained medieval pottery ( $13^{th} - 14^{th}$  C; 56g) and animal bone (18g).

**Trench 5** (Figs.2 & 10, DPs 14-16)

Sample section: 0.00 = 2.33m AC		, north facing
0.00 - 0.32m	L1000	Topsoil. As Trench 1.
0.32 – 0.44m L1001 Subsoil. As Trench 1.		
0.44m+	L1002	Natural deposits. As Trench 1.

Sample section:	West end	d, north facing
0.00 = 2.50m AC	OD .	
0.00 - 0.33m	L1000	Topsoil. As Trench 1.
0.33 - 0.45m	L1001	Subsoil. As Trench 1.
0.45m+	L1002	Natural deposits. As Trench 1.

## Description:

Trench 5 contained a large pit (F1047), a pit (F1045), a linear feature (F1062), a natural channel (F1050 (=F1053), and a large sub-rectangular pit or possibly a natural creek/channel (F1039)

F1047 (4.60 x 1.80+ x 1.01m) was a large possible pit that truncated linear feature F1062. It had steep sides rounding to a flattish base. It contained nine fills tabulated below, from basal to uppermost.

Fill	Description	Above	Below	Finds
L1057 Base	Firm, mid orangey grey silty clay with frequent small angular flints.	L1002	L1056	Med pot (13 <sup>th</sup> – 14 <sup>th</sup> C; 267g), animal bone (15g), daub (20g)
L1056	Firm, pale blue grey very silty clay with occasional charcoal flecks.	L1063	L1064 L1056 L1061 L1060 L1049	Med pot (M12- M13th C; 481g) Animal bone (42g)
L1064	Firm, very dark grey organic silty clay with very frequent, mainly cockle, shell (see environmental sample 8)	L1056	L1059	Med pot (13-14 <sup>th</sup> C; 267g) A bone (10g), burnt clay (197g)
L1059	Firm, mid orangey grey silty clay with occasional charcoal flecks.	L1056 L1064	L1061 L1060	Med pot (13 – 14 <sup>th</sup> C; 61g) Animal bone (19g)
L1061	Firm, very dark grey silty clay with frequent charcoal and burnt clay/CBM flecks.	L1056 L1059	L1060	Med pot (13-14 <sup>th</sup> C; 336g)
L1060	Firm, mid orangey grey silty clay with occasional charcoal flecks.	L1056 L1059 L1061	L1048 L1049	Med pot (13 – 14 <sup>th</sup> C; 8g) animal bone (34g)
L1049	Firm, very dark grey charcoal rich silty clay with frequent, mainly cockle, shell and CBM flecks.	L1057 L1056 L1060	L1048	Spindle whorl (SF3) (17g)  Med pot (13 <sup>th</sup> – 14 <sup>th</sup> C; 700g)  Animal bone (209g)
L1048	Firm, mid brownish grey silty clay with moderate charcoal flecks.	L1060 L1049	L1058	Med pot (13-14 <sup>th</sup> C; 1356g), CBM (44g), a bone (117g), burnt clay (90g)
L1058 Upper	Firm, mid greyish brown silty clay with occasional charcoal CBM flecks.	L1048	L1001	Med pot (13 <sup>th</sup> – M14th C; 539g) Animal bone (13g)

F1062 (1.80m+ x 0.85 x 0.10m+) was a linear feature orientated northwest-southeast truncated by Pit F1047. It had steep sides. The base was not reached due to flooding. Its fill (L1063) was a firm, pale greyish blue silty clay. It contained medieval pottery ( $13^{th} - 14^{th}$  C; 225g) and animal bone (46g).

F1050 (= F1053) (2.00+ x 1.00 x 0.14m) was an irregular linear feature orientated northwest-southeast in the centre of the trench. It had moderately steeply sloping sides and a flattish base. It contained two fills, the lowest of which

(L1055) was a firm, mid orangey brown silty clay. It contained medieval pot  $(13-14^{th} \text{ C}; 120\text{g})$ , animal bone (3g) and shell (11g). Above this was L1054, a firm, mid grey black clay silt. It contained medieval pottery  $(13\text{rh}-14^{th} \text{ C}; 152\text{g})$ , animal bone (8g), and shell (11g). The irregular nature of this feature suggests that it was likely a natural channel.

F1039 (5.00 x 1.80+ x 0.60m) was a large feature at the eastern end of the trench. It may be a large sub-rectangular pit or possibly a natural creek/channel running down to the river to the south. The sides were irregular giving way to a shallow concave base. It was cut by Pit F1045. It contained 5 fills, tabulated below.

Fill	Description	Above	Below	Finds
L1040	Firm, dark brownish grey organic clay	-	L1041	Med pot (12 <sup>th</sup> –
Base	silt			13 <sup>th</sup> C; 227g), a
				bone (25g), Fe
				fragment (84g)
L1041	Firm, mid orange brown, clayey silt	L1040	L1042	Med pot (11 <sup>th</sup> –
				13 <sup>th</sup> C; 53g), a
				bone (6g)
L1042	Firm, mid brownish grey, clayey silt	L1041	L1043	Med pot (L12 <sup>th</sup> –
				13 <sup>th</sup> C; 61g), a
				bone (22g)
L1043	Firm, mid orange brown, clayey silt	L1042	L1044	Med pot (L12 <sup>th</sup> –
				13 <sup>th</sup> C; 81g)
L1044	Firm, mid grey brown, clayey silt	L1043	-	

Pit F1045 was sub square or sub rectangular (4.15m x 0.95+ x 0.20m+), and cut F1039. It had steep sides, and a flat base. Its fill (L1046) was a firm, mid grey brown clayey silt. It contained medieval pottery (Med pot (Mid  $14^{th}-15^{th}$  C; 856g), CBM (6059g), animal bone (217g), an Fe fragment (468g), burnt clay (42g) and shell (68g).

**Trench 6** (Figs. 2 & 11, DPs 17-18)

Sample section: 0.00 = 2.40m AC		d, west facing
0.00 - 0.31m	L1000	Topsoil. As Trench 1.
0.31 – 0.49m	L1001	Subsoil. As Trench 1.
0.49m+	L1002	Natural deposits. As Trench 1.

Sample section: 0.00 = 2.45m AC		d, west facing
0.00 - 0.36m	L1000	Topsoil. As Trench 1.
0.36 - 0.51m	L1001	Subsoil. As Trench 1.
0.51m+	L1002	Natural deposits. As Trench 1.

Description: Trench 6 contained two medieval features, a ditch terminus (F1015) at its southern end and the south eastern corner of a square or rectangular pit (F1018) at its northern end.

F1015 (1.60+ x 1.00 x 0.40m) was the terminus of a ditch orientated east-west, located at the south end of Trench 6. It had moderately steep sides and a narrow flat base, the terminus itself was rounded. The lower fill (L1016) was a, firm, palemid orangey grey brown clay silt that appeared to be the result of natural silting up of the ditch. It contained medieval pottery ( $13^{th} - 14^{th}$  C; 16g). The upper fill (L1017) was a firm, dark brownish grey, clay silt. It contained cockle and mussel shell, medieval pottery ( $13^{th} - 14^{th}$  C; 44g) and daub (31g).

F1018 (1.50+ x 1.30+ x 0.40m) was the south eastern corner of a sub-square, or sub-rectangular, pit located at the northern end of Trench 6. It had a rounded corner and moderately sloping sides rounding to a flat base. Its lower fill (L1019) was a firm, mid orangey grey brown clay silt. It contained medieval pottery (12<sup>th</sup> – 14<sup>th</sup> C; 163g). The upper fill (L1020) was a firm, mid grey brown clay silt. It contained medieval pottery (12<sup>th</sup> – 14<sup>th</sup> C; 57g) and animal bone (29g).

## 7 CONFIDENCE RATING

7.1 Though the weather was poor, with periodic heavy snow during the latter stages of the project, it is not felt that any factors inhibited the recognition of archaeological features or finds. Only Linear Feature F1062 (Tr.5) was not bottomed due to flooding.

## 8 DEPOSIT MODEL

8.1 The stratigraphy is consistent across the site comprising Topsoil L1000, overlying Subsoil L1001, which in turn overlies the natural, L1002. Topsoil L1000 is a firm, mid grey brown clay silt (0.22-0.34 m) thick. Subsoil L1001 is a firm, mid grey brown clay silt (0.12-0.28 m) thick). The natural, L1002, is a firm, mid orange brown sandy clay (0.44-0.52 m) below the present day ground surface.

## 9 DISCUSSION

Summary of the archaeology

9.1 Numerous archaeological features were recorded and are tabulated:

Trench	Context	Description	Date
1	1010 (=F1021 Tr.4)	Ditch	L12th – 14 <sup>th</sup>
	1008	Gully	L11th – 13 <sup>th</sup>
2	1031	Ditch	13 <sup>th</sup> – 14 <sup>th</sup>
	1027	Large shallow pit or depression	Mid 12 <sup>th</sup> – Mid 13 <sup>th</sup>
	1029	Large shallow pit or depression	Mid 12 <sup>th</sup> – Mid 13 <sup>th</sup>
3	1003	Ditch	Late 11 <sup>th</sup> – 13/14 <sup>th</sup>
	1006	Re-cut of Ditch F1003	Late 11 <sup>th</sup> – 13/14 <sup>th</sup>
	1012	Ditch	Late 12 <sup>th</sup> – 13/14 <sup>th</sup>
4	1021 (=F1010 Tr.1)	Ditch	11 <sup>th</sup> – 13 <sup>th</sup>
	1023	Large shallow pit or depression	Late 11 <sup>th</sup> – 13/14 <sup>th</sup>
	1067	Linear	13 <sup>th</sup> – 14 <sup>th</sup>
5	1039	Pit or channel	12 <sup>th</sup> – 13 <sup>th</sup>
	1045	Pit	Mid 14 <sup>th</sup> – 15 <sup>th</sup>
	1047	Large pit	13 <sup>th</sup> – 14 <sup>th</sup>
	F1050 (=F1053)	Channel	Late 12 <sup>th</sup> – 14 <sup>th</sup>
	1062	Linear	13 <sup>th</sup> – 14 <sup>th</sup>
6	1015	Ditch terminus	13 <sup>th</sup> – 14 <sup>th</sup>
	1018	Pit	12 <sup>th</sup> – 14 <sup>th</sup>

- 9.2 Archaeological features were recorded in each trench. They were most dense in Trench 5. A range of features were present a gully (F1008 Tr.1), ditches (F1010 (Tr.1), F1031 (Tr.2), F1003 & F1012 (Tr.3), F1021 (Tr.4) and F1015 (Tr.6), large shallow pits or depressions (F1027 & F1029 (Tr.2), F1023 (Tr.4), pits (F1045 & F1047 (Tr.5), and F1018 (Tr.6), channels (F1039 (Tr.5) and F1050 (F1053) (Tr.6) and linears (F1067 (Tr.4) and F1062 (Tr.5). The profiles of some of the features were irregular suggesting that they were quarry pits or channels. This was especially true of the features in Trenches 2 and 5, and the northern end of Trench 4. The ditches in Trenches 1 (F1010 & F1008), 3 (F1012 & F1031), 4 (F1021) and 6 (F1015) were either parallel or perpendicular (Fig.2)
- The features were consistently dated to the medieval period (principally 9.3 12<sup>th</sup> – 14<sup>th</sup> century). A large volume of pottery was recovered, with the features commonly containing more than five (F1012 (Tr.1), F1015 (Tr.6), and F1035 & F1050 (Tr.5), ten (F1018 (Tr.6), F1067 (Tr.4) or 15 sherds (F1023 (Tr.4), F1027, F1029 & F1031 (Tr.2), and F1039, F1045, F1047, F1053 & F1062 (Tr.5). The larger assemblages were contained within Trenches 2 and 5. Pit F1047 (Tr.5) contained the largest assemblage, and Pit F1045 (Tr.5) contained the latest assemblage (mid 14<sup>th</sup> – 15<sup>th</sup> century) (Pottery report below). Pit F1045 (L1046) contained 13 fragments (5844g) of locally-produced bricks and two fragments (215g) of Flemish-type brick (CBM report below). It is also noted that the presence of a homogenous group of medieval bricks, notably in Pit F1045, strongly suggests the presence of an early 14<sup>th</sup> to 15<sup>th</sup> century building including at least a brick-built component (i.e. chimney stack) in the close vicinity of the site. Animal bone and CBM were also found. Miscellaneous items comprise a spindle whorl from Pit F1047 (Tr.5)

9.4 The archaeological features and finds were consistent with those associated with a medieval settlement. Medieval activity is well attested in the surrounding area. This site may represent outlying occupation to the deserted medieval village (HER 2192) known to the east. It certainly adds to the available information regarding the medieval origins of Clenchwarton and the development of the village from this time. Medieval rural settlement, including such issues as settlement dynamics, the origin and development of settlements and settlement patterns and diversity, is identified as an important area of research for the medieval period in eastern England (Medlycott and Brown 2008). The current site has the potential to yield information that will contribute to a greater understanding of these issues. It may also have the potential to provide information regarding related research subjects, such as demography, landscapes and infrastructure (see Medlycott and Brown 2008, 96-97).

## 10 DEPOSITION OF THE ARCHIVE

Archive records, with an inventory, will be deposited with any donated finds from the site with Norwich Castle Museum. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency.

## **ACKNOWLEDGEMENTS**

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## **BIBLIOGRAPHY**

British Geological Survey 1991 *East Anglia Sheet* 52°*N-00*° 1:250,000 *Series Quaternary Geology.* Ordnance Survey, Southampton

Gurney, D. 2003 Standards for Field Archaeology in the East of England. East Anglian Archaeology Occasional Paper no. 14

Institute of Field Archaeologists 1994 (revised 2008) Standard and Guidance for Archaeological Desk-based Assessment

Institute of Field Archaeologists 1994 (revised 2008) Standard and Guidance for Archaeological Evaluation

SSEW 1983 Soil Survey of England and Wales: Soils of South East England (sheet 4). Harpenden, Rothamsted Experimental Station/Lawes Agricultural Trust

SSEW 1983 Soil Survey of England and Wales: Legend for the 1:250,000 Soil Map of England and Wales Harpenden, Rothamsted Experimental Station/Lawes Agricultural Trust

## **WEB SITES**

Norfolk Heritage Explorer Norfolk County Council Historic Maps

## **APPENDIX 1: HER Information**

NHER Number	Grid Reference	Name
2187	53640 17045	Late Saxon or medieval Sea Bank
2191	5892 2019	Churchyard Cross, Scheduled
		Monument and listed building
2192	5968 1990	Maidenhouse medieval village and port
2193	5893 2020	St Margaret's Church listed building
		dating from the 14 <sup>th</sup> century
12385	5835 2042	Porch House, medieval listed building
17879	5800 2028	Toll House, post-medieval listed
		building
22154	5759 1947	Medieval manor and scatters of
		Roman, Late Saxon and medieval pot
22308	5949 2015	Scatter of medieval pot
22485	5910 1985	Scatter of medieval pottery and a
		rodden
25328	57851 19693	Medieval flood bank
27216	5953 2016	Undated ditches
27221	5993 2006	Post-medieval road
27732	5907 1981	Undated ring ditch

## **APPENDIX 2: Historic Cartographic and Photographic Information**

Map Description	Date	Scale
Site location (OS Explorer)	Modern	1:25,000
Detailed site location	Modern	1:200
HER information	Modern	
Tithe map	c.1840	
First Edition OS map	c.1888	1:2,500
Aerial photograph	1946	1:10,000

ENF 125466: Land West of 36 Smallholdings Road, Clenchwarton, Norfolk Concordance of finds by feature

			-						
								A.Bone	
Feature	Context	Segment	Trench	Description	Spot Date	Pottery	CBM (g)	(g)	Other
1003	1004		3	Ditch	L11-13/14 <sup>th</sup>	(1) 44g	282	40	
1006	1007		3	Re-cut of 1003	L11 – 13 <sup>th</sup>	(5) 67g			
1008	1009		1	Gully	$L11 - 13^{th}$	(5) 13g		13	
1010	1011		1	Ditch	$L12 - 14^{th}$	(5) 10g		35	
1012	1013		3	Ditch	L12-13/14 <sup>th</sup>	(8) 289g	66		
1015	1016		9	Ditch terminus	$13 - 14^{th}$	(5) 16g			
	1017				$13 - 14^{th}$	(5) 44g			Daub 31g
1018	1019		9	Pit	$12 - 14^{th}$	(6) 163g			
	1020				$12 - 14^{th}$	(11) 57g		29	
1021	1022		4	Ditch	$11 - 13^{th}$	(3) 90g			Fe Frag 6g
1023	1024		4	Pit / depression	$13 - 14^{th}$	(9) 48g		120	
		В			$13 - 14^{th}$	(3) 7g		4	
		C			L11-13/14 <sup>th</sup>	(15) 142g	8	80	
1025			4	Fill of 1023	M12-M13 <sup>th</sup>	(16) 88g		51	Fe Fragment 15g
1027	1028	Α	2	Pit / depression	M12–M13 <sup>th</sup>	(10) 1479	23	13	
		В			M12-M13 <sup>th</sup>	(17) 135g	23	229	Shell 11g
1029	1065			Pit / depression	M12-M13 <sup>th</sup>	(21) 176g		28	B.Clay 54g
	1030	4	2	Fill of 1029	M12-M13 <sup>th</sup>	(19) 223g	8	269	Shell 91g
									B.Clay 10g
		В				(23) 143g	4	8	Shell 71g
1031	1032	4	2	Ditch	12-13 <sup>th</sup>	(15) 344g		54	
	1033	⋖			12-13/14 <sup>th</sup>	(6) 94g	45	51	
		В			12-13 <sup>th</sup>	(10) 162g			
	1034	A			13–14 <sup>th</sup>	(15) 63g		7	Pb Frag 10g
		α			13-14 <sup>th</sup>	(58) 5540	30	217	Brooch 12g
		1				6.00(00)	2		

Shell 3g Fe Fragment 6g	Fe Fragment 84g						Fe Frag 468g	B.Clay 42g	Shell 68g		B.Clay 90g	Daub 9g		Shell 10g	B.Clay 19g	SF 3Spindle Whorl 17g		Daub 20g		Daub 49g			B.Clay 197g	Shell 12g		Shell 11g		B.Clay 44g	B.Bone 6g	
72	15		10	9	22		217				117	116			93		42	15	13	19	34		10	23	92	∞	3	46		18
313							6909				44														124					
g67 (7)	(12) 95g	(17) 93g	(5) 39g	(8) 53g	(14) 61g	(6) 81g	(65) 856g			(138)	1356g	(33) 477g	SF 4 (1)	111g	(10) 112g		(25) 481g	(18) 267g	(52) 539g	(8) 61g	(1) 8g	(18) 336g	(22) 267g	(10) 111g		(7) 152g	(14) 120g	(15) 225g		(11) 56g
13–14 <sup>th</sup>	L11-13 <sup>th</sup>	12-13 <sup>th</sup>	12-13 <sup>th</sup>	L11-13 <sup>th</sup>	L12-13 <sup>th</sup>	L12-13 <sup>th</sup>	$M14 - 15^{\text{th}}$			:	13 – 14 <sup>th</sup>	13 – 14 <sup>th</sup>	:	13 – 14 <sup>th</sup>	13 – 14 <sup>th</sup>		M12-M13 <sup>th</sup>	13 – 14 <sup>th</sup>	13 – M14 <sup>th</sup>	13 – 14 <sup>th</sup>	$L12 - 14^{th}$		13 – 14 <sup>th</sup>	13 – 14 <sup>th</sup>	13 – 14 <sup>th</sup>		13 – 14 <sup>th</sup>			
Spread	Pit						Pit				Pit													?Channel		?Channel		Linear		Linear
2	5						2				2													5		5		5		4
		4	В	A											В					∀										
1036	1040			1041	1042	1043	1046				1048	1049					1056	1057	1058	1059	1060	1061	1064	1051	1052	1054	1055	1063		1068
1035	1039						1045				1047													1050		1053		1062		1067

ENF 125466: Land West of 36 Smallholdings Road, Clenchwarton, Norfolk Concordance of Samples

	Size						Flot	Pot	A. Bone		
Sample	€	Feature	Context	Trench	Description	Spot Date	(m)	(g)	(g)	Shell (g)	Misc.
											B.Clay
_	20	1003	1004	က	Ditch	late 11th-mid 13th/14th	30	2	18	Cockle 4	44g
					_					Mussel 191	
2	20	1006	1001	3	Gully	late 11th-13th	30	2	1	Mussel 76	
											B. Clay 57g
3	20	1012	1013	3	Ditch	late 11th-mid 13th/14th	15			Cockle 27	
										Mussel 176	
4	40	1015	1017	9	Pit	13th-14th	25		15	Mussel 22	Coke 32g
										Cockle 69	CBM 18g
5	40	1021	1022	4	Ditch	11th-13th	2	4			
9	40	1031	1034	2	Ditch	12th-13th/14th	10	99	44	Cockle 2	
										Mussel 51	
7	20	1039	1040	9	Pit	late 11th- 13th	2	4		Cockle 241	
											B.Clay
œ	40	1047	1064	2	Pit	13th-14th	15	20	2	Mussel 12	48g
										Cockle 984	
6	40		1025	4	Alluvium	mid 12th-mid 13th	30				

The flots are with Lisa Gray for analysis

## The Pottery

by Peter Thompson

The evaluation recovered 808 sherds weighing 8.736 kg. The pottery is in mixed condition but is mainly moderately to heavily abraded, although in some cases there is little or virtually no abrasion. The assemblage is entirely of medieval date with approximately 115 sherds (14.2%) glazed. A further 12 sherds are early imported stonewares with glossy surfaces probably from ash glazing. The wares are quantified in Table 1 and discussed below.

Ware	Date Range	Sherd	Fabric	Sherd %
	46	Count	Weight	
Stamford-type ware	Mid 9 <sup>th</sup> - mid 12 <sup>th</sup>	5	16	0.6
Grimston-Thetford type	Mid 11 <sup>th</sup> -mid 12 <sup>th</sup>	26	154	3.2
ware				
Castle Acre-type ware	Mid 11 <sup>th</sup> -mid13 <sup>th</sup>	14	225	1.7
Grimston-type ware	Late 11 <sup>th</sup> -mid	169	2,898	20.9
	13 <sup>th</sup> /14 <sup>th</sup>			
Medieval shelly ware	12 <sup>th</sup> -14 <sup>th</sup>	34	695	4.2
Medieval sandy wares	11 <sup>th</sup> -13 <sup>th</sup> /14 <sup>th</sup>	423	2,918	52.4
Other coarsewares	12 <sup>th</sup> -14 <sup>th</sup>	3	42	0.4
Glazed Grimston ware	Late 12 <sup>th</sup> -14 <sup>th</sup>	59	1,057	7.3
Developed Stamford	Mid 12 <sup>th</sup> -mid 13 <sup>th</sup>	8	78	1
ware				
Lyveden 'B' ware	Early 13 <sup>th</sup> -14 <sup>th</sup>	1	109	0.1
Unsourced Glazed	Late 12 <sup>th</sup> -14 <sup>th</sup> /15 <sup>th</sup>	44	238	5.5
wares				
Late Medieval	Mid 14 <sup>th</sup> -15 <sup>th</sup>	10	86	1.2
Coarsewares				
Siegburgh Stoneware	14 <sup>th</sup> /mid 14 <sup>th</sup> – mid	8	87	1
	16 <sup>th</sup>			
Langerwehe/Raeren	Mid 14 <sup>th</sup> -16 <sup>th</sup>	4	33	0.5
stoneware				
		808	8,636	

Table 1: Quantification of wares by sherd number and fabric weight

## The Coarsewares

The commonest coarseware is Grimston-type ware (20.9% of the assemblage total), which is believed to have been manufactured at Pott Row, east of Kings Lynn, where a large quantity has been recovered. It was also present in quite large quantities at Kings Lynn. It was in production by the late 11<sup>th</sup> century and continued until the mid 13<sup>th</sup> when production either ceased or was at least greatly reduced in favour of Glazed Grimston ware (Little with Lentowicz 1994, 91). Bowl rims are the most prevalent forms possibly surviving well because their thickened or expanded ends may survive better during their post-deposition period. Grimston-Thetford ware (3.2%), which is the Saxo-Norman predecessor of Grimston ware, may also be present, mainly from Pit F1047, and has been identified primarily on its coarser fabric and flaky

surfaces. However, the two fabrics are very similar and it may actually be a variant of Grimston ware. Castle Acre-type ware is present (1.7%), with most examples identified by their frilled cooking pot rims and so in reality the number could be a little higher (Milligan 1982, 224-5). The largest group are the Early Medieval Sandy wares (52.4%), which is a miscellaneous category of mainly small unsourced sherds, which almost certainly includes examples of Grimston-type and Castle Acre-type wares. Medieval Shelly wares make up 4.2% of the assemblage these were most common at Kings Lynn in the 12<sup>th</sup> and 13<sup>th</sup> century deposits (Clarke and Carter 1977, 211-2). Like Grimston-type ware it is thick bowl rims that have survived best, unless it was deep bowls that were predominantly made in that fabric/industry.

## The Glazed Wares

Glazed Grimston ware forms the majority of the finer wares as might be expected (7.3% of the assemblage total). Five sherds in pale pink or off white fabric with abraded yellow glaze are probably Saxo-Norman Stamford wares, and eight yellow and green glazed whitewares are almost certainly Developed Stamford ware rather than foreign imports. Several similar unsourced glazed sherds may also be Stamford products but could be continental imports related to the Andenne or Saintonge industries. The unsourced glazed sherds account for 5.5% of the total and also include four small red wares with clear or brown glaze which may be Essex wares, possibly Hedingham products. Seven sherds have the appearance of Brill ware, but are probably either Scarborough-type ware which can be similar to Brill and was present at Kings Lynn from the mid 13<sup>th</sup> century (Clarke and Carter 1977, 213), or else are untypical Glazed Grimston wares.

## The Features

Pit F1047 contained the largest quantity of pottery from any feature comprising 237 sherds (29.3% of the sherd total) weighing 3.846 kg (44%). This includes 29 glazed sherds including Developed Stamford and Grimston ware, and a Lyveden 'B' jug neck with grid stamped and yellow slipped clay pads. A large fragment of a handled Grimston-type coarseware storage jar was also present. Ditch F1031 contained 120 sherds (14.8% of the sherd total) weighing 1.324 kg (15.1%). The bulk of the assemblage is Grimston-type ware and early Medieval Sandy ware, whilst Castle Acre-type cooking pot rims and Medieval Shelly ware were also present. A 'Brill/Scarborough-type' sherd came from here, along with three Glazed Grimston wares including a 'highly decorated' sherd with trailed iron slip. A date of 13<sup>th</sup>-14<sup>th</sup> centuries is indicated for the two ditches; the period where all or most of the wares are most likely to have been contemporary dates to the early to middle 13<sup>th</sup> century.

Other features or layers containing 20 sherds or over are, F1029 L1030 and Pit or Depression F1027 and ?Channel F1053. L1030 contained 42 sherds weighing 351g which contained medieval sandy wares including a Grimston-type Type 7 handled storage jar rim. A late 11<sup>th</sup> to mid 13<sup>th</sup> century date would suit this group. F1027 yielded 28 sherds weighing 273g, among them were two Castle Acre-type cooking pot rims and a glazed sherd of Developed Stamford ware providing a date of mid 12<sup>th</sup>-mid 13<sup>th</sup> century. F1053 contained

20 mainly glazed sherds weighing 262g. Five Glazed Grimston sherds were present along with ten unidentified sherds in an oxidised fabric containing abundant quartz and occasional voids and burnt organics. These had an overlying white slip and partial clear glaze giving a yellow appearance. The assemblage indicates a 13<sup>th</sup>-14<sup>th</sup> century date. Pit F1045 contained the latest sherds from the site comprising 12 sherds of imported Rhenish stoneware. These include eight sherds of Siegburg stoneware including a frilled mug base, and four Raeren or Langerwehe sherds with iron wash and a slight glossy finish probably from ash glazing (museum of London ceramics). These stonewares were imported in small amounts from the mid 14<sup>th</sup> century, but were not common in Britain until the late 15<sup>th</sup> century. The accompanying sherds include a Glazed Grimston jug rim with strap handle, and an internally glazed bowl rim with internally pulled down rim which was a form that was rare at Grimston (Little with Lentowicz 1994, 97, Fig. 68.44).

## **Bibliography**

Clarke, H. 1970, Excavations on a Kiln Site at Grimston, Pott Row, Norfolk. *Norfolk Archaeology* **Vol XXXV** pp. 79-95

Clarke, H. and Carter, A. 1977, The Pottery in Excavations in Kings Lynn 1963-70. Society for Medieval Archaeology Monograph Series 7

Little, A. with Lentowicz, I. 1994, 'The Pottery' in Leah M. (ed) The Late Saxon and Medieval Pottery Industry of Grimston, Norfolk: Excavations 1962-92.

East Anglian Archaeology Report 64, 84-100

Milligan, B. 1982, 'Pottery' in Coad, J.G. and Streeten, A.D.F. (eds.) Excavations at Castle Acre Castle, Norfolk, 1972-1977. *Archaeology Journal* **139**, pp.138-301

### Web Site

Museumoflondon.org.uk/ceramics

## The Ceramic Building Materials

By Andrew Peachey

The trial trench evaluation recovered a total of 44 fragments (7062g) of medieval (early 14<sup>th</sup> to 15<sup>th</sup> century) brick. The brick is in a moderately abraded and fragmented condition, with 85.80% of the brick by weight contained in Pit F1045.

Two types of similarly-sized brick are present in the assemblage: the first a locally-produced type that accounts for the bulk of the assemblage, and the second a Flemish-type estuarine silt brick represented only by sparse fragments. The former type has partial dimensions of ?x120x50mm with irregular creased faces, irregular rounded arrises and common grass/straw impressions on all faces. This type occurs in a fabric with dark red to redbrown surfaces that fade to a very dark grey core, with inclusions of commonabundant fine quartz and sparse mica (<0.1mm) with sparse calcareous grains (0.1-0.5mm) and iron ore/slag (1-25mm). The latter type is 50mm thick with irregular arrises and occurs in a very hard-fired off-white to pale-brown

fabric with inclusions of common small estuarine shells and casts of shells (1-5mm), sparse quartz and red iron rich grains (0.1-0.5mm). This type of medieval Flemish-type estuarine silt brick was probably produced and imported in the early 14<sup>th</sup> to 15<sup>th</sup> centuries, although such bricks may have been available since the 13<sup>th</sup> century. The locally-produced bricks are characteristic of types produced in the early 14<sup>th</sup> to 15<sup>th</sup> centuries, by or after the methods of migrant brick-makers from Flanders or Germany.

Pit F1045 (L1046) contained 13 fragments (5844g) of locally-produced bricks and two fragments (215g) of Flemish-type brick, including several fragments that accounted for c.33-50% of individual bricks, but no complete examples. A single fragment (313g) of Flemish type brick was also contained in F1035 (L1036), while the remainder of the assemblage comprised sparsely distributed, relatively small fragments of locally-produced brick contained in Ditches F1003 (L1004), F1012 (L1013), F1031 (L1033 Seg.A and L1034 Seg.B), F1047 (L1048), Shallow Pits or Depresssions F1023 (L1024 Seg.C), F1027 (L1028 Segs.A&B), F1050 (L1052) and F1029 L1030 (Seg.A&B).

The presence of this homogenous group of medieval bricks, notably in Pit F1045, strongly suggests the presence of an early 14<sup>th</sup> to 15<sup>th</sup> century building including at least a brick-built component (i.e. chimney stack) in the close vicinity of the site. Clenchwarton is located close to Kings Lynn, which as a port in the Hanseatic League, received large quantities of bricks from Flanders and Germany (Drury 1981, 127), and as a result was also quick to adopt the techniques of brick-making in the medieval period. Therefore the presence of a building constructed, at least partially of brick at Clechwarton in the early 14<sup>th</sup> to 15<sup>th</sup> centuries should not be viewed as an anomaly.

## Bibliography

Drury, P. 1981 'The production of brick and tile in medieval England' in Crossley, D. (ed) *Medieval Industry*. Council of British Archaeology Research report 40, 126-142

## **The Animal Bone**

By Julie Curl

## Introduction

A total of 2.212Kg of faunal remains was recovered from excavations at Clenchwarton. The assemblage produced a range of domestic stock with some indications of wild species as well as a range of butchering.

## Methodology

This report was carried out following a modified version of guidelines by English Heritage (Davis, 1992). All of the bone was scanned to determine range of species and elements present. A note was also made of butchering and any indications of skinning, hornworking and other modifications. When possible a record was made of ages and any other relevant information, such as pathologies. Counts and weights were noted for each context with additional counts for each species identified, counts were also taken of bone classed as 'countable' (Davis, 1992) and measureable bone. All information was recorded directly into Excel for quantification and assessment. A basic catalogue is included in the written report and the full database is available in the digital archive.

## The faunal assemblage

Quantification, provenance and preservation

A total of 33 contexts from 17 features produced faunal remains. Quantification of the assemblage by weight, feature and trench is presented in Table 1.

			Total				
Feature	1	2	3	rench 4	5	Other	Feature Weight (Kg)
1003			40				40
1008	13						13
1010	35						35
1023				204			204
1025				51			51
1027		242					242
1029						28	28
1030		277					277
1031		329					329
1035					72		72
1039					53		53
1045					217		217
1047					505		505
1050					88		88
1053					11		11
1067				18			18
Other						29	29
Total Trench Weight (Kg)	48	848	40	273	946	57	2212

Table 1. Quantification (weight) of the faunal assemblage by feature number and trench.

The 33 features included ditches, spreads, a layer and a pit. Just over 41% of the remains were retrieved from ditch fills, a little over 29% of the bone was produced from layers. Full quantification by weight feature number and feature type can be seen in Table 2.

Feature			Total					
	Alluvial	Ditch	Gully	ture Typ Layer	Pit	Spread	Other	Weight (Kg
1003		40						40
1008			13					13
1010		35						35
1023						204		204
1025	51							51
1027						242		242
1029						28		28
1030				277				277
1031		329						329
1035						72		72
1039					53			53
1045					217			217
1047		505						505
1050						88		88
1053						11		11
1067			18					18
Other							29	29
Totals	51	909	31	277	270	645	29	2212

Table 2. Quantification (weight) of the faunal assemblage by feature number and type.

Generally the assemblage is in good condition, although many fills produced quite heavily fragmented bone. Butchering was frequently noted throughout the faunal remains. Many whole elements were recovered and these can provide measurable data that could allow estimation of stature, age and breeds.

Burnt remains were yielded from two fills. Pieces of rib from (1063) had been burnt to a very high temperature or for a long period, resulting in bone of a white colouring. Some gnawing was noted in several fills, suggesting scavenger activity.

## Species range and modifications and other observations

Most contexts produced remains of small to medium domestic mammals, primarily sheep/goat. Less than half the fills produced remains of the larger domestic stock (cattle and equid). Pig/Boar were seen in at least four fills. Five contexts produced bones of bird. Small mammal (fox or small dog) was seen in one fill and one feature produced fish.

Much of the cattle, ovicaprid and porcine bone in particular showed some butchering.

## Industrial and craft evidence

One cattle phalange from 1056 Seg.A showed some unusual butchering and what appears to be an attempt to make a whole in the distal end. Cattle phalanges have been found with one or more drilled/cut holes and therefore this may be an attempt at working.

A chopped horncore was recorded from the Ditch Fill (1034), suggesting waste from hornworking.

## Conclusions

The remains in this assemblage appear to be primarily from domestic food and butchering waste. Some hunting and probable working waste is also included.

## **Bibliography**

Davis, S. 1992. A rapid method for recording information about mammal bones from archaeological sites. English Heritage AML report 71/92

Hilson, S. 1992. *Mammal bones and teeth.* The Institute of Archaeology, University College, London.

Von Den Driesch, A. 1976. A guide to the measurements of animal bones from archaeological sites. Peabody Museum Bulletin 1, Cambridge Mass., Harvard University.

# **Appendix**

Catalogue of the faunal remains. Listed in context order. A full catalogue is available as an Excel file.

LDM = Large domestic mammal

SMDM = Small/medium domestic mammal

DWM = Domestic/wild mammal

Bird = Bird remains

Fish = Fish bone

Element range = LL=lower limb, UL=Upper Limb, ML=Mid-limb, P=Pelvis, jaw = Mandible, T=Teeth, V = Vertebrae, R = Ribs, F = Footbones, hc = horncore

Measure = Measurable bone following Von Den Driesch, 1976

Count = Countable bone following Davis, 1992

Work = Probable worked material/working waste.

Burnt = Burnt remains - number or percentage of fragments - Burnt colour = w = white, b = black

Butchering = c = cut, ch = chopped

Comments																inc sheep horncore, ?working	inc lower limbs of bird	including small femur from small dog/fox							inc equid pph		
Burnt Colour																											q
Burnt																											2
Working																_											
Butchering	c, ch		c, ch	c, ch		c, ch	c, ch	c, ch	c, ch	ch	c, ch		С	c, ch		c, ch	c, ch		c, ch	c, ch	c, ch	c, ch	c, ch	c, ch	c, ch	ch	ch
JunoO			7	1		1	2		7	1	1.5	2	2	7	0.5	3	2	1				_		1	2		7
Measure			1	_		1	2		1	1	1	2	က	_		2	4	1						1	7		~
Flement range	jaw, t, ul	fragments	f, ul	f, fragments	ul (shaft frag)	lu	f, jaws	jaw, t	pel, ul	II	ul, f	II, ul, frags		ul, jaw, v	f, fragment	hc, ul, v,	ul, II	ul, f	L	II, r	ul, r	jaw, v, r, t, ul	fragment	t, jaw, ul	f, ul, t		ul, t
o9N/vn¢								Á		λ		λ	>														
Fish																											
bria												Λ				>	>										
ws																		<b>\</b>									
DWM														У				У									
SMDM	Λ	λ	>	^	^	λ	У			У	У	У	>	λ	λ	>	>			λ	λ	>	У	У	>	λ	λ
грм			>			λ	У	λ	λ		У								У		λ	>			>		Y
(g) <b>1W</b>	40	13	35	29	4	80	120	51	13	229	569	8	54	51	7	217	72	15	10	9	22	217	117	116	93	23	65
Context	1004	1009	1011	1020	1024	1024	1024	1025	1028	1028	1030	1030	1032	1033	1034	1034	1036	1040	1040	1041	1042	1046	1048	1049	1049	1051	1052

				inc large fish vertebrae						
							<b>M</b>			
							2			
		ċ								
c, ch	c, ch	0.5 c, ?drilled	ch	c, ch	ch	c, ch	2 c, ch		c, ch	c, ch
		0.5		1		1	2	3	1	
		_				_	_	2	_	
r	-	f (pph), ul	nl	ul, v	II, skull frag	nl	ul, II, r	II, ul	nl	ľ
							λ	λ		
				У						
				À					ý	
		λ				λ				
У	Y		>	>	>		Y	λ	Y	
		λ								>
8	3	42	15	13	19	34	46	10	28	18
1054	1055	1056	1057	1058	1059	1060	1063	1064	1065	1068

## ENF125466 (P3096)

Land West of 36, Small holdings Road, Clenchwarton, Norfolk
The faunal remains catalogue and assessment
by Julie Curl –Sylvanus – Archaeological, Natural History & Illustration
Services for Archaeological Solutions. December 2010

## Introduction

A total of 2.212Kg of faunal remains was recovered from excavations at Clenchwarton. The assemblage produced a range of domestic stock with some indications of wild species as well as a range of butchering.

## Methodology

The assessment was carried out following a modified version of guidelines by English Heritage (Davis, 1992). All of the bone was scanned to determine range of species and elements present. A note was also made of butchering and any indications of skinning, hornworking and other modifications. When possible a record was made of ages and any other relevant information, such as pathologies. Counts and weights were noted for each context with additional counts for each species identified, counts were also taken of bone classed as 'countable' (Davis, 1992) and measureable bone. All information was recorded directly into Excel for quantification and assessment. A basic catalogue is included in the written report and the full assessment database is available in the digital archive.

## The faunal assemblage

Quantification, provenance and preservation

A total of thirty-three contexts from seventeen features produced faunal remains. Quantification of the assemblage by weight, feature and trench is presented in Table 1.

			Tı	ench			Total		
Feature	1	2	3	4	5	Other	Feature Weight (Kg)		
1003			40				40		
1008	13						13		
1010	35						35		
1023				204			204		
1025				51			51		
1027		242					242		
1029						28	28		
1030		277					277		
1031		329					329		
1035					72		72		
1039					53		53		
1045					217		217		
1047					505		505		
1050					88		88		
1053					11		11		
1067				18			18		

Other						29	29
Total Trench Weight (Kg)	48	848	40	273	946	57	2212

Table 1. Quantification (weight) of the faunal assemblage by feature number and trench.

The thirty-three features included ditches, spreads, a layer and a pit. Just over 41% of the remains were retrieved from ditch fills, a little over 29% of the bone was produced from spreads. Full quantification by weight feature number and feature type can be seen in Table 2. Dating is uncertain at the time of the faunal assessment.

Feature		Feature Type										
	Alluvial	Ditch	Gully	Layer	Pit	Spread	Other	Total Weight (Kg				
1003		40						40				
1008			13					13				
1010		35						35				
1023						204		204				
1025	51							51				
1027						242		242				
1029						28		28				
1030				277				277				
1031		329						329				
1035						72		72				
1039					53			53				
1045					217			217				
1047		505						505				
1050						88		88				
1053						11		11				
1067			18					18				
Other							29	29				
Totals	51	909	31	277	270	645	29	2212				

Table 2. Quantification (weight) of the faunal assemblage by feature number and type.

Generally the assemblage is in good condition, although many fills produced quite heavily fragmented bone. Butchering was frequently noted throughout the faunal remains. Many whole elements were recovered and these can provide measurable data that could allow estimation of stature, age and breeds.

Burnt remains were yielded from two fills. Pieces of rib from (1063) had been burnt to a very high temperature or for a long period, resulting in bone of a white colouring. Some gnawing was noted in several fills, suggesting scavenger activity.

Species range and modifications and other observations

Most contexts produced remains of small to medium domestic mammals, primarily sheep/goat. Less than half the fills produced remains of the larger domestic stock (cattle and equid). Pig/Boar were seen in at least four fills. Five contexts produced bones of bird. Small mammal (fox or small dog) was seen in one fill and one feature produced fish.

Much of the cattle, ovicaprid and porcine bone in particular showed some butchering.

## Industrial and craft evidence

One cattle phalange from (1056)A showed some unusual butchering and what appears to be an attempt to make a whole in the distal end. Cattle phalanges have been found with one or more drilled/cut holes and therefore this may be an attempt at working.

A chopped horncore was recorded from the Ditch Fill (1034), suggesting waste from hornworking.

## Conclusions and recommendations for further work

The remains in this assemblage appear to be primarily from domestic food and butchering waste. Some hunting and probable working waste is also included.

The remains should be identified further and quantified to species, with appropriate measurements and tooth records taken where possible. Although final analysis is only recommended if the remains are reasonably well dated and not from post-medieval or modern features.

Analysis on this assemblage, including updating the catalogue and the written report would take 0.75 days.

## **Bibliography**

Davis, S. 1992. A rapid method for recording information about mammal bones from archaeological sites. English Heritage AML report 71/92

Hilson, S. 1992. *Mammal bones and teeth*. The Institute of Archaeology, University College, London.

Von Den Driesch, A. 1976. A guide to the measurements of animal bones from archaeological sites. Peabody Museum Bulletin 1, Cambridge Mass., Harvard University.

# **Appendix**

Catalogue of the faunal remains recovered from ENF125466 (P3096), Land West of 36, Small holdings Road, Clenchwarton,

Listed in context order.

A full catalogue is available as an Excel file.

## Kev:

LDM = Large domestic mammal

SMDM = Small/medium domestic mammal

DWM = Domestic/wild mammal

Bird = Bird remains

Fish = Fish bone

Element range = LL=lower limb, UL=Upper Limb, ML=Mid-limb, P=Pelvis, jaw = Mandible, T=Teeth, V = Vertebrae, R = Ribs, F =

Footbones, hc = horncore

Measure = Measurable bone following Von Den Driesch, 1976

Count = Countable bone following Davis, 1992

Work = Probable worked material/working waste.

Burnt = Burnt remains - number or percentage of fragments - Burnt colour = w = white, b = black

Butchering = c = cut, ch = chopped

Comments				
Burnt Colour				
Burnt				
Working				
Butchering	c, ch		c, ch	c, ch
funoO			1	1
Measure			_	_
Element range	jaw, t, ul	fragments	f, ul	f, fragments
o9N/vnc				
Fish				
bria				
WS				
DWM				
SMDM	>	>	Λ	Λ
грм		~	ک ک	6
(g) 1W	40	13	35	29
Context	1004	1009	1011	1020

											inc sheep horncore, ?working	inc lower limbs of bird	including small femur from small dog/fox							inc equid pph							inc large fish vertebrae						
																						2 b								2			
											1											7								.,			
	c, ch	c, ch	c, ch	c, ch	ch	c, ch		С	c, ch		c, ch	c, ch		c, ch	c, ch	c, ch	c, ch	c, ch	c, ch	c, ch	ch	ch	c, ch		c, ?drilled ?	ch	c, ch	ch	c, ch	c, ch		c, ch	
	1	2		2	1	1.5	7	7	l	0.5	3	2	_				1		_	2		1			0.5		1		1	2	3	_	
	1	2		1	1	1	2	3	1		2	4	_						_	2		1			_				1	_	2	_	
ul (shaft frag)	ln	f, jaws	jaw, t	pel, ul	II	ul, f	II, uI, frags	II	ul, jaw, v	f, fragment	hc, ul, v,	ul, II	ul, f	_	II, r	ul, r	jaw, v, r, t, ul	fragment	t, jaw, ul	f, ul, t		ul, t	r	_	f (pph), ul	nl	ul, v	II, skull frag	nl	ul, II, r	II, ul	n	
			У		У		У	У																						>	>		
																											>						
							У				У	У															У					>	
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y	y	У			У	У	У	У	уу	y	У	y			ý	У	У	У	>	>	y	y	y	>	>		ý	>	У	>	>	>	
	Χ	У	У	У		У								>		У	λ			>		y			>								
4	80	120	51	13	229	269	8	54	51	7	217	72	15	10	9	22	217	117	116	93	23	65	8	လ	42	15	13	19	34	46	10	28	
1024	024	024	1025	1028	1028	1030	1030	1032	033	034	034	036	040	1040	1041	1042	1046	1048	1049	1049	1051	1052	1054	1055	1056	1057	1058	1059	1060	1063	1064	1065	

c, ch 1068 18 y

### **Archeobotanical Assessment**

By Lisa Gray MSc MA AlfA

#### **INTRODUCTION – AIMS AND OBJECTIVES**

The evaluation revealed Medieval activity (12<sup>th</sup>-13<sup>th</sup> century) possibly associated with a deserted medieval village. The samples assessed came from features dating from the 11<sup>th</sup> to 14<sup>th</sup> centuries (Table 1). This report will assess the type and quality of preservation of organic (mainly botanical) remains and any inorganic materials in these samples.

# **SAMPLING AND PROCESSING METHODS (table 1)**

Sampling, flotation and residue sorting was carried out by AS. The sampling strategy was based on a combination of pre-planning and judgement sampling with advice sought from the English Heritage Regional Science Advisors. Processing was carried out by using a flotation tank with a 500 micron mesh sieve for the coarse residue and 250 micron mesh used to collect the flot.

Once with the author the flots were sieved through a stack of geological sieves and scanned under a low powered stereo-microscope with a magnification range of 10 to 40x. The abundance, diversity and state of preservation of eco- and artefacts in each sample were recorded. A magnet was passed across each flot to record the presence or absence of magnetised material or hammerscale. All data was recorded onto paper record sheets for tabulation.

Preliminary identifications were only made of the plant remains. These do not form a full species list. For the purposes of assessment most identifications were made to genus. Where identifications have been made here those for seeds are made from modern reference material and manuals (such as such as Beijerinck 1947 and Cappers *et al.* 2006). Nomenclature and habitat information is taken from Stace (Stace 1997). Latin names are given once and the common names used thereafter.

#### **RESULTS**

# **Quality and Type of Preservation of the Plant Macrofossils**

Plant remains consisted of those preserved by charring and to a smaller extent, silicification. Uncharred seeds were also recorded but the presence of uncharred rootlet fragments and mollusca means that bioturbation and aeration of the soil is likely to have taken place and that these uncharred seeds are intrusive and modern. For this reason only the charred plant remains will be commented on but all sample contents have been recorded and noted in the tables (Table 2). Charcoal 'flecks' refer to fragments of charcoal <4mm³ that are too small to provide reliable identifications.

Charring of plant macrofossils occurs when plant material is heated under reducing conditions where oxygen is largely excluded (Boardman and Jones 1990, 2; English

Heritage 2002, 12). These conditions can occur in a charcoal clamp, the centre of a bonfire or pit or in an oven or when a building burns down with the roof excluding the oxygen from the fire (Reynolds, 1979, 57). Charring leaves a carbon skeleton resistant to biological and chemical decay (English Heritage 2002, 12). When in an oxidising conditions occur, such as in a slow-burning aerated fire, plant remains can to burn to ash leaving silicified material (Robinson and Straker, 1990, 4). Silicified awn fragments were observed in sample 2.

# **The Plant Remains (Table 2)**

Charred cereal grains were present in each sample. They were abundant (>100 grains) in Ditch 1003 (Sample 1), Ditch 1031 (Sample 6) and Pit 1015 (Sample 4). Grains of wheat (*Triticum* sp.) were recorded in Sample 1, wheat and barley (*Hordeum* sp.) in Sample 6 and grains of wheat, barley and oat (*Avena* sp.) in Sample 4.

Charred legume and grass seeds were recorded in low numbers in Samples 1, 2, 4, 6 and 7. Charred grass stem fragments were founding Sample 1, 2, 4 and 8. Silicified wheat awn fragments were abundant in Sample 2.

# Faunal Material in the flots (Table 3)

Faunal remains were present in low numbers in the flots. Terrestrial mollusca were the most frequent faunal remain in these samples. A fragment of burnt bone was noted in Ditch 1031, Sample 6. Marine mollusc shell was rare in the flots but frequent in the coarse fractions.

#### **Inorganic Material**

Each flot had a magnet passed across it and no magnetic material was observed.

## Biases in Recovery, Residuality, Contamination

The author has been advised of no possible contamination or residuality within the sampled contexts.

# SIGNIFICANCE AND POTENTIAL OF THE SAMPLES

The nearby deserted medieval settlement (Norfolk Heritage Explorer 2011) seems to have had no archaeobotanical analysis carried out on any samples. This means that the samples from Clenchwarton are significant because they seem to be the only samples archaeobotanically studied in the vicinity of the deserted settlement. It is possible that these samples contain waste from activities carried out at the village. The type of activities that could have produced these charred assemblages would include corn drying, sterilisation of storage pits or cereal waste used as fuel.

A search of Environmental Archaeology Database (EAB 2008) revealed archaeobotanical work on Medieval samples at 'Holly tree Farm' Grimston (fryer and Murphy 1994) and in King's Lynn (Franks 1977; Murphy 1982; Rackham *et al.* 2000).

Nine samples, associated with a deserted medieval village were presented for assessment. All samples contained cereal grains. Ditch 1003 (Sample 1), Ditch 1031 (Sample 6) and Pit 1015 (Sample 4) contained abundant cereal grains.

#### REFERENCES

Beijerinck, W, 1947. Zadenatlas der Nederlandsche Flora. Veenman and Zonen, Wageningen

Boardman, S., and Jones, G, 1990. Experiments on the Effect of Charring on Cereal plant Components. in *Journal of Archaeological Science* 17, 1-11.

Cappers, R.J.T., Bekker, R.M. and Jans, J.E.A. 2006 *Digital Zadenatlas Van Nederlands - Digital Seeds Atlas of the Netherlands.* Groningen Archaeological Studies Volume 4, Barkhius Publishing, Groningen.

English Heritage 2002. Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation. Swindon: English Heritage.

Franks J. 1977. Plant remains. 409-10. In: Clarke H and Carter A. Excavations in King's Lynn 1963-1970

Soc. Medieval Archaeol. Monogr. Ser. 7

Fryer V and Murphy P. 1994. Plant macrofossils and molluscs. 107-8. In: Leah M. The late Saxon and medieval pottery industry of Grimston, Norfolk: excavations 1962-92. E. Anglian Archaeol. Rep. 64

Jones, G., Straker V. and Davis A. 1990. 'Early Medieval Plant Use and Ecology', In Vince, A. ed. *Aspects of Saxo-Norman London, II: Finds and Environmental Evidence* London and Middlesex Archaeology Society Special Paper 12., 347-385.

Murphy P. 1982. Biological remains. 116-6. InRichmond H, Taylor R and Wade-Martins P. 1982. Nos 28-34 Queen Street, King's Lynn. E. Anglian Archaeol. Rep. 14.

Norfolk Heritage Explorer, 2011. 'Maidenhouse Deserted Medieval port.' Retrieved on 8<sup>th</sup> March 2011 from World Wide Web:

http://www.heritage.norfolk.gov.uk/SingleResult.aspx?uid=MNF2192

Reynolds, P. 1979. *The Iron Age Farm: The Butser Experiment* London: British Museum Press.

Rackham D J, Giorgi J A and Locker A. 2000. Austin Street, King's Lynn. The environmental archaeology report. Unpublished report for Archaeological Project Services, Heckington, Lincolnshire.

Stace, C. 1997 New Flora of the British Isles, 2<sup>nd</sup> Edition, Cambridge University Press, Cambridge

# **APPENDIX**

Table 1: Stratigraphic and Processing Details for Samples

					Bulk		
Sample	Context	Feature number	Feature description	Trench	sample size (L)	Flot Size (ml)	Spot Date
1	1004	1003	ditch	3	20	75	late 12th - mid 13/14th C AD
2	1007	1006	gully	3	20	95	late 11th - 13th C AD
3	1013	1012	ditch	3	20	10	late 11th - mid 13th/14th C AD
4	1017	1015	pit	9	40	25	13th-14th C AD
5	1022	1021	ditch	4	40		11th -13th C AD
9	1034	1031	ditch	2	40	20	12th-13th/14th C AD
7	1039	1040	pit	5	20	10	late 11th-13th C AD
8	1047	1064	pit	5	40	10	13th-14th C AD
6	1025	NA	alluvium	4	40	22	mid 12th-mid 13th C
		0 0 0	0 000	1 1	00		

Key: ab. = abundance, 1= low 1-10, 2= moderate 11-100, 3 = abundant >100
div. = diversity, 1= low 1-4 taxa types, 2= moderate 5-10, 3= very diverse >11
pres. = quality of preservation, 1= poor (Family level or indeterminate, 2 = moderate (Genus level),
3 = good (Species level)

Table 2 . Plant Remains in the Samples

_														
	silicified	awns		2			1							
	wood flecks	ab	2	3	2	2	1	2	1	-	2			
	oldafitiabli wood	ap				-	-	-		-	-			
		pres		1	1	1	1	1						
	chaff	div	-	1	1	1	1	1		1				
		ap	1	1	1	1	-	1		-				
nains		bres	_	3	3	2	3	2	3	3	3			
Charred remains	grains	div	1	1	1	1	1	1	1	1	1			
Char		ap	3	2	2	3	2	3	1	2	1			
		pres	3	1	-	1	-	2	2	_	-			
	spees	div	_	1	-	1	-	2	1	-	-			
		ap	_	1		1	1	1	1	1				
	chaff fragment	ap	1	-	-	-	-	1	1	1	-			
	stem fragment	ab		1	1	-	1	2	-	-	-			
ins	omozirhizome sinəmgari	ap		1	1	3	2	-	2	2	3			
d rema		pres	ж	2	3	3	-	1			3	UU		
Uncharred remains	seeds	div	1	1	1	1	-	-	-	-	1	1		
ľ		ap	1	1	1	1	1	1			2	- ahim		
		Trench	3	3	3	9	4	2	5	5	4	1.100 3 = abundant > 100		
	Feature	description	ditch	gully	ditch	pit	ditch	ditch	pit	pit	alluvium	$V_{\text{ext}}$ : $a\mathbf{h} = a\mathbf{h}$ independent $1 = 1$ out $1 - 1$ $0 = maderate$		
	Feature	number	1003	1006	1012	1015	1021	1031	1040	1064	NA	$1 = 1_{\text{Ory}} \cdot 1_{-1} \cdot 1_{-1}$		
		Context	1004	1007	1013	1017	1022	1034	1039	1047	1025	ahindanda		
		Sample	1	2	3	4	5	9	7	8	6	Vav. oh =		

Key: ab. = abundance, 1= low 1-10, 2= moderate 11-100, 3 = abundant >100 div. = diversity, 1= low 1-4 taxa types, 2= moderate 5-10, 3= very diverse >11 pres. = quality of preservation, 1= poor (Family level or indeterminate, 2 = moderate (Genus level), 3 = good (Species level)

Table 3: Faunal Remains in the Samples

Sample         Context         Feature         Feature         Feature         Feature         Context         Image: Context number description         Trench ab											
Feature   Feature   Feature   Feature   Trench   ab   ab   ab   ab   ab   ab   ab   a											enus level),
Feature   Feature   Feature   Feature   Feature   Feature   Trench   ab   ab   ab   ab   ab   ab   ab   a		ab	_				_		]		oderate (Go
Feature   Feature   Feature   Feature   Feature   Trench   ab   ab   ab   ab   ab   ab   ab   a	slisns	ap	1	1	1	1	1	2	00	erse >1]	s, 2 = mo
Sample         Context         number         Feature description         Trench ab           1         1004         1003         ditch         3         -           4         1017         1015         pit         6         -           5         1022         1021         ditch         4         -           6         1034         1031         ditch         4         -           8         1047         1064         pit         5         -           9         1025         NA         alluvium         4         -           6         1025         NA         alluvium         4         -           9         1025         NA         alluvium         4         -           9         1025         NA         alluvium         3         -           1025	freshwater	ab	1	,	,	ı	1	,	ant >1(	ery div	rminate
Sample         Context         number         description         Trench           1         1004         1003         ditch         3           4         1017         1015         pit         6           5         1022         1021         ditch         4           6         1034         1031         ditch         2           8         1047         1064         pit         5           9         1025         NA         alluvium         4           Key: ab. = abundance, 1= low 1-10, 2= moderate 11-100, 3 = div. = diversity, 1= low 1-4 taxa types, 2= moderate 5-10 poor (Family level or preservation, 1= poor (Family level or preservation, 1= poor (Family level or preservation, 1= poor (Family level or preservation), 1= poor (Family level or preservation)	burnt bone	ab	'	-	-	1	1	'	abund	$0, 3 = v_1$	ındeteı
Sample         Context         number         Feature           1         1004         1003         ditch           4         1017         1015         pit           5         1022         1021         ditch           6         1034         1031         ditch           8         1047         1064         pit           9         1025         NA         alluvium           4         1025         NA         alluvium           4         1025         NA         alluvium           6         1025         NA         alluvium           9         1025         NA         alluvium           1007         1004         pit         pit           9         1025         NA         alluvium           1007         1004         pit         pit           1007         1004         pit         pit           9         1025         NA         alluvium           1007         1004         pit         pit           1007         1004         pit         pit           1007         1004         pit         pit           200	Ė		3	9	4	2	5	4	1-100, 3 =	derate 5-1	ly level or es level)
Sample         Context         number           1         1004         1003           4         1017         1015           5         1022         1021           6         1034         1034           8         1047         1064           9         1025         NA           4         1025         NA           6         1025         NA           1025         1047         1064           9         1025         NA           4         1025         NA	Feature	nescribnon	ditch	pit	ditch	ditch	pit	alluvium	, 2= moderate 1	ka types, 2= moo	I= poor (Famil 3 = good (Speciv
Sample Context  1 1004 4 1017 5 1022 6 1034 8 1047 9 1025 Key: ab. = abundance, div. = diversity, 1= pres. = quality of p	Feature	150 IIII	1003	1015	1021	1031	1064	NA	1 = low 1 - 10	= low 1-4 tax	reservation,
Sample  1 1 4 5 6 6 8 8 9 9 Key: ab. = div. = pres. =		Context	1004	1017	1022	1034	1047	1025	abundance,	diversity, 1	= quality of p
	o d	Sample	1	4	5	9	8	6	Key: ab. =	div. =	pres. =

## **PHOTOGRAPHIC INDEX**



General view of the site. Looking east.



General view of the site. Looking north.



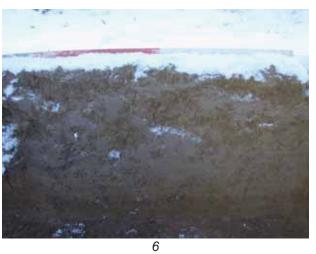
Trench 1, post exc. Looking south.



Sample section 3. Trench 1, south end. Looking north.



Ditch F1010, Trench 1. Looking west.



Sample Section 9. Trench 2, west end. Looking south.



F1029 and Ditch F1031, Trench 2. Looking west.



Trial Trench 3, post exc. Looking west.



Ditch F1012, Trench 3. Looking north.



8 Ditch F1031, Trench 2. Looking east.



10 Ditch F1003 and Gully F1006, Trench 3. Looking South.



12
Sample section 8, Trench 4, south end. Looking
west.



13 Ditch F1021, Trench 4. Looking east.



15 Test pit east end of F1039, Trench 5. Looking south.



17 Trench 6, post exc. Looking north.



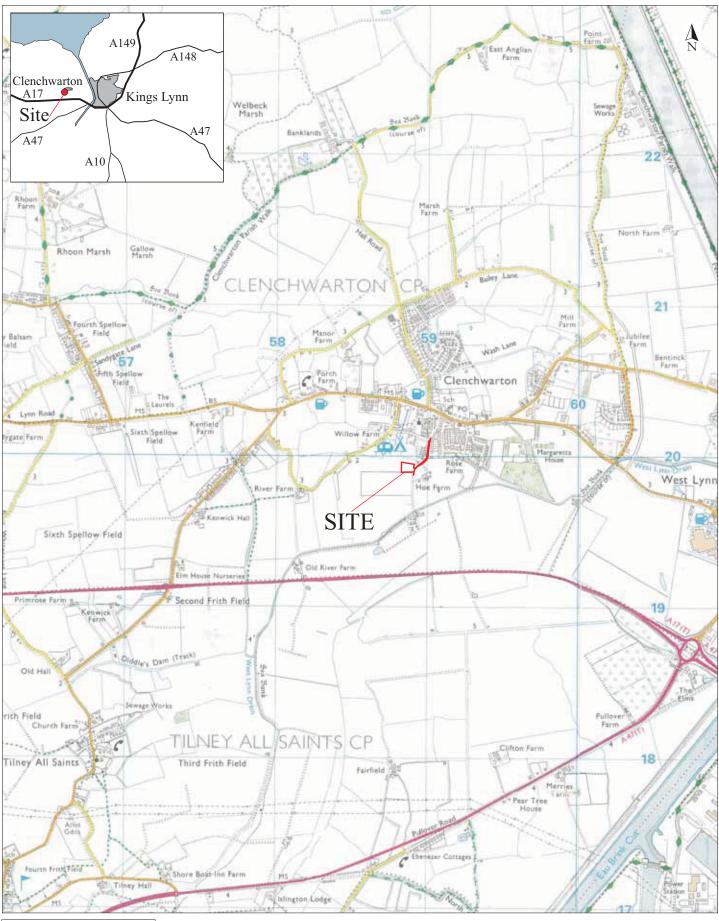
14 Trench 5, post exc. Looking west.



16 Pit F1047 and F1062, Trench 5. Looking north.

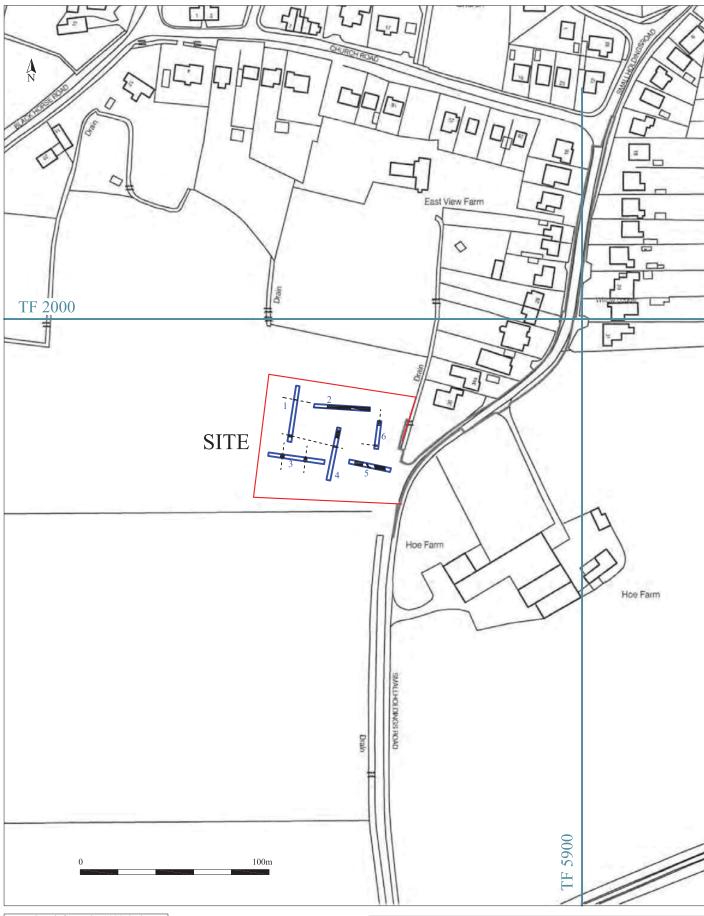


18
Ditch terminus F1015, Trench 6. Looking west.



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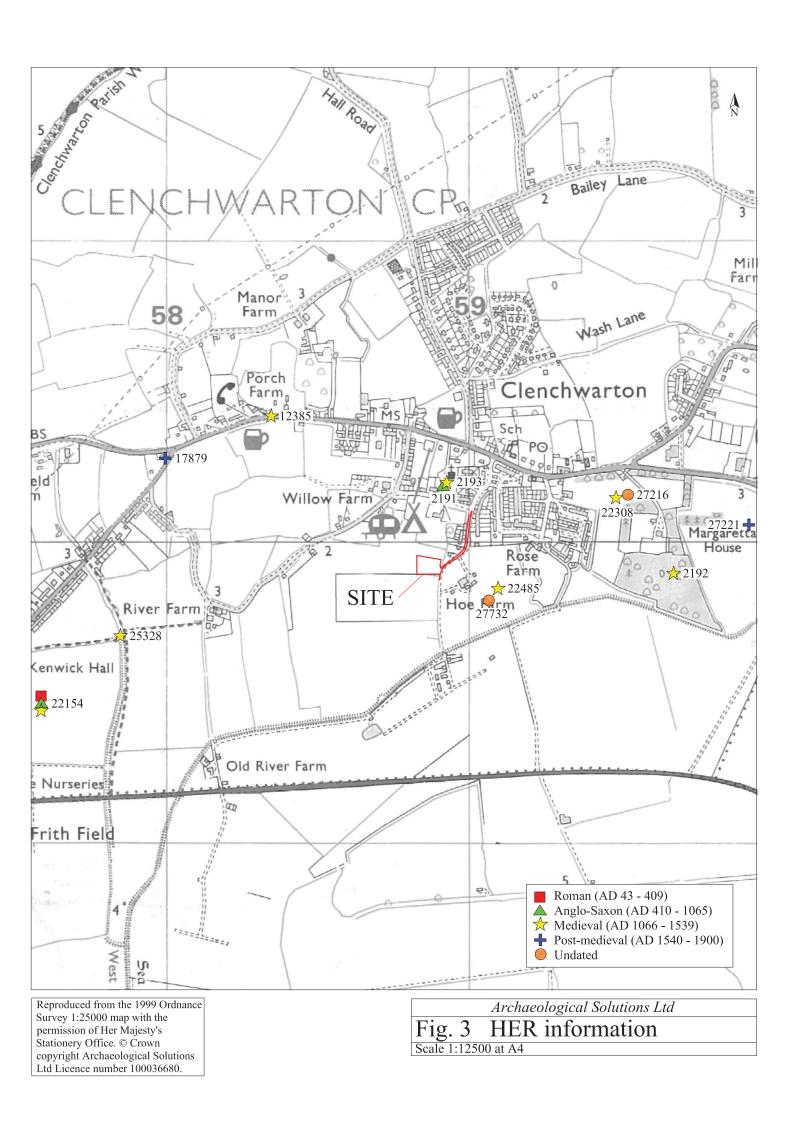
Fig. 1 Site location plan
Scale 1:25,000 at A4

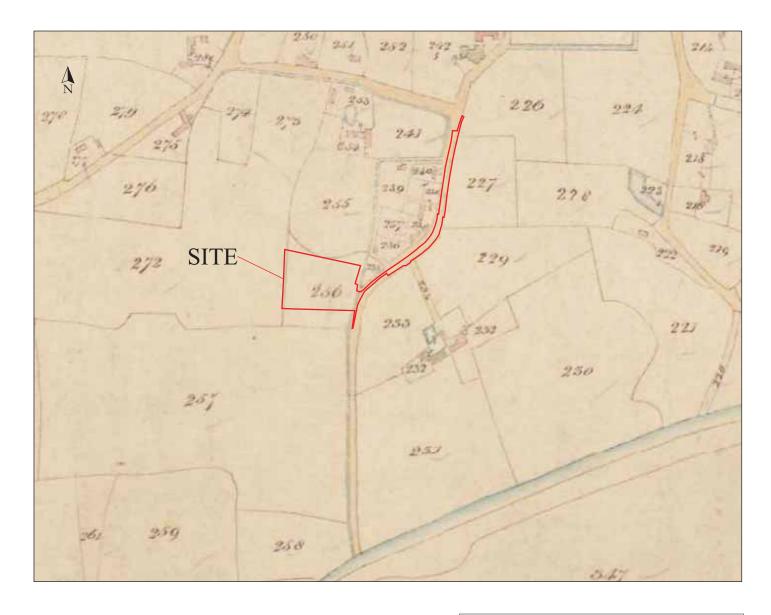


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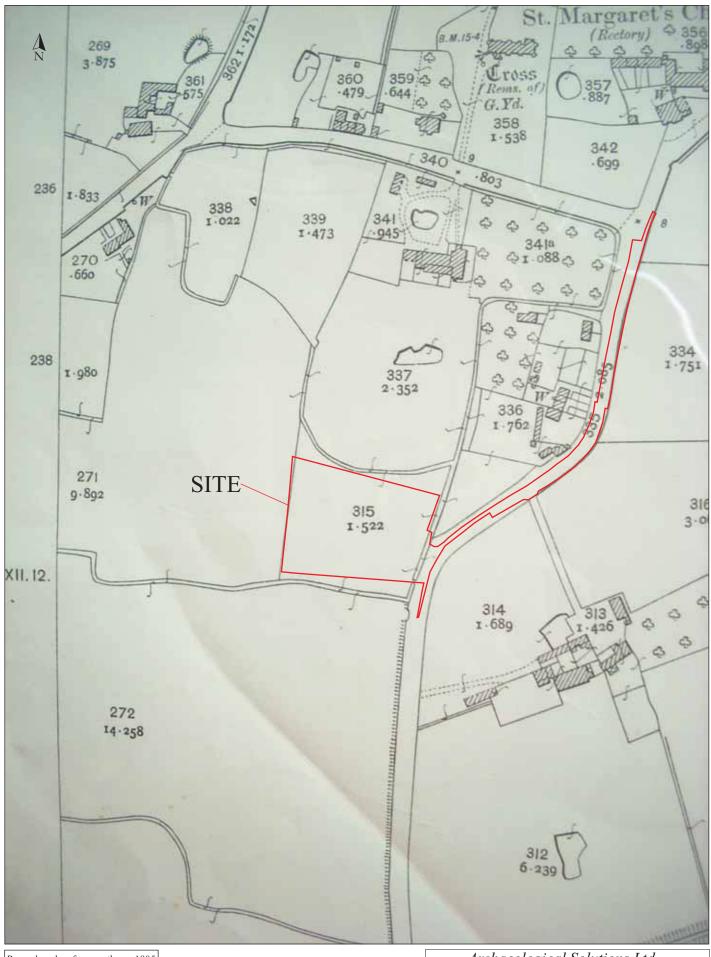
Detailed site location plan Fig. 2 De



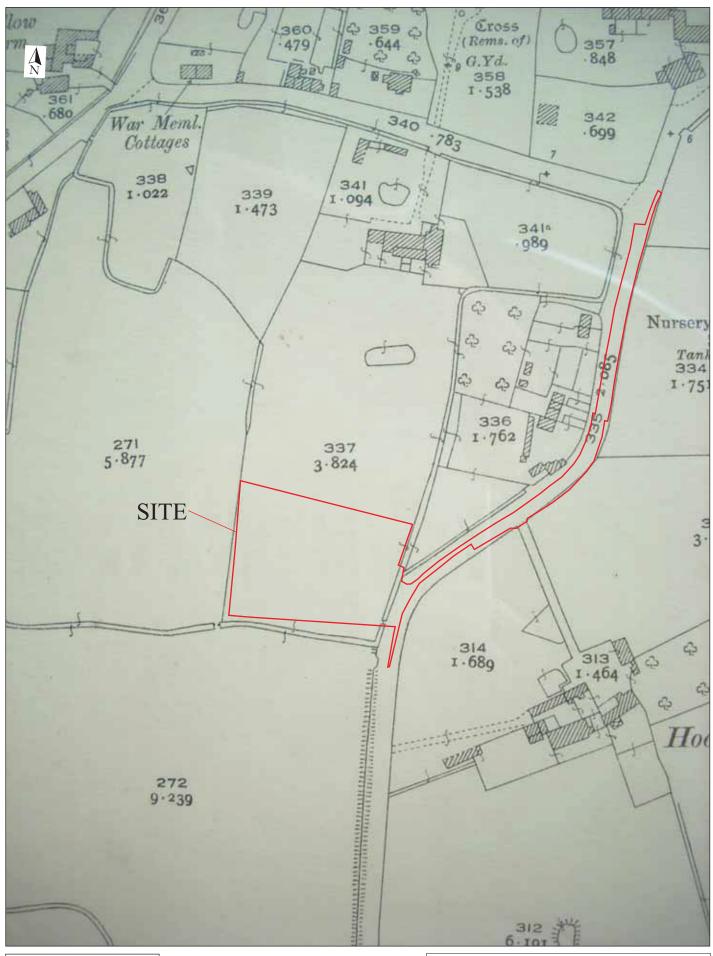


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Fig. 4
Not to scale Tithe map, *c*.1840



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Fig. 5 OS map, c.1905
Not to scale

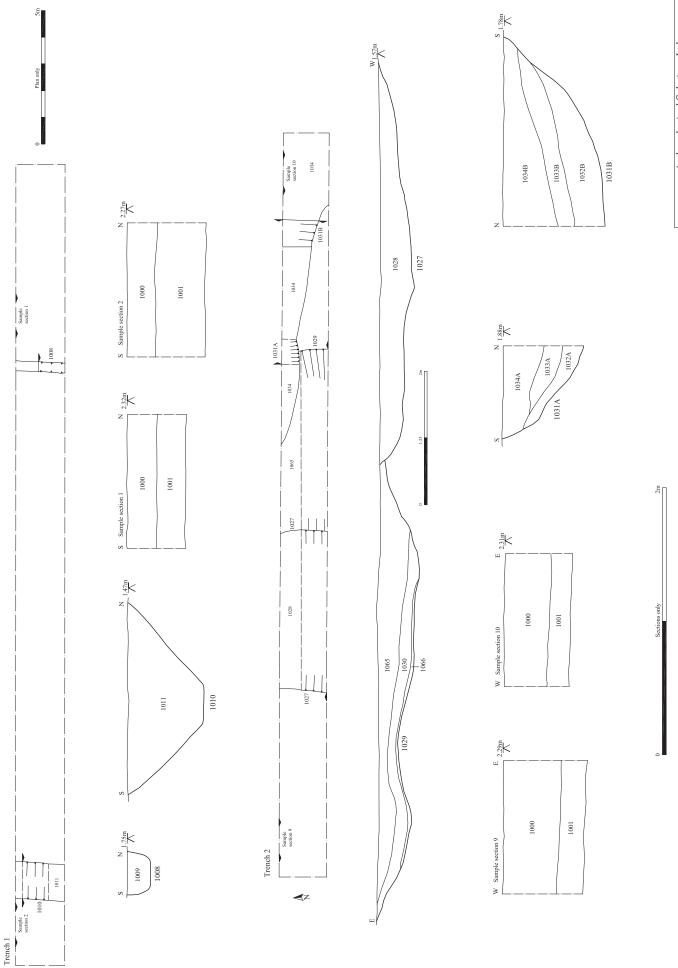


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Archaeological Solutions Ltd Fig. 6
Not to scale OS map, 1929



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7 Aerial photograph, 1946 Fig. 7
Not to scale



N

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Fig. 8 Trench plans & sections
Scale Plans 1:100, sections 1:50 at A3

