

Northamptonshire Archaeology

Archaeological trial excavation of land south-east of Lancaster Way Business Park (Unit D) Ely, Cambridgeshire ECB 3017 September 2008



Carol Simmonds and Paul Mason September 2008 Report 08/151 Accession Code: ECB 3017 Planning Ref: 06/01422/FUM/08/00048/FUM

Northamptonshire Archaeology 2 Bolton House Wootton Hall Park Northampton NN4 8BE t. 01604 700493 f. 01604 702822 e. sparry@northamptonshire.gov.uk w. www.northantsarchaeology.co.uk



STAFF

Project Manager	Mark Holmes MA
Fieldwork supervision and text	Carol Simmonds BA
Fieldwork	Nathan Flavell BA PGDip
	Adam Kostrzon BA
	Yvonne Wolfram-Murray PhD
Pottery analysis	Ed McSloy BA MIFA (Cotswold Archaeology)
Worked flint and metal working debris	Andy Chapman BSc MIFA
Ceramic building material	Pat Chapman BA CMS AIFA
Animal bone	Karen Deighton MSc
Illustrations	Carol Simmonds

QUALITY CONTROL

	Print name	Signed	Date
Checked by	Tony Walsh		25/09/08
Verified by	Adam Yates		25/09/08
Approved by	Steve Parry		26/09/08

OASIS REPORT FORM (OASIS Reference ID: 50920)

PROJECT DETAILS							
Project title	Ely Lancaster Way U	Jnit D					
Short description	evaluation of land so Cambridgeshire, in Waldeck Associates evaluation comprised development of indu presence of occupat and characterised by features such as pit ridge and furrow cult	Northamptonshire Archaeology undertook an archaeological evaluation of land south-east of Lancaster Way Business Park, Ely, Cambridgeshire, in August 2008. The work was undertaken for Waldeck Associates acting on behalf of York Construction. The evaluation comprised trial trenching on c 0.35ha of land proposed for development of industrial warehousing The excavations recorded the presence of occupation dating principally to the mid-late Iron Age and characterised by ditches, gullies and a few discrete domestic features such as pits. Later activity comprised extensive medieval ridge and furrow cultivation.					
Project type	Trial trench evaluati	on					
Site status	None						
Previous work	Geophysical survey a	and trial trenching to the south					
Current Land use	Arable	Arable					
Future work	Unknown						
Monument type/period	Iron Age						
Significant finds	Bone comb, pottery						
PROJECT LOCATION							
County	Cambridgeshire						
Site address		Land south-east of Lancaster Business Park, Wellington Road, Ely,					
Study area	0.35 ha						
OS Easting & Northing	TL 51940 09450						
Height OD	15m						
PROJECT CREATORS							
Organisation	Northamptonshire A	rchaeology					
Project brief originator	Cambridgeshire Cou						
Project Design originator	Northamptonshire A	rchaeology					
Director/Supervisor	Carol Simmonds						
Project Manager	Mark Holmes						
Sponsor or funding body	Waldeck Associates						
PROJECT DATE	4 4 2000						
Start date	August 2008						
End date	September 2008	Contort					
ARCHIVES	Location	Content					
Physical	ECB3017	2 archive boxes 1 archive box including site records and 2					
Paper	ECB3017	permatrace sheets					
Digital	ECB3017	Photographs and illustrations					
BIBLIOGRAPHY							
Title	Archaeological trial excavation of land south-east of Lancaster Way Business Park (Unit D) Ely, Cambridgeshire						
Serial title & volume	08/151						
Author(s)	C Simmonds and P M	Aason					
Page numbers	26pp						
Date	September 2008						

Contents

1	INTRODUCTION	1
2	BACKGROUND	2
3	METHODOLOGY	2
4	EVALUATION RESULTS	3
5	ARTEFACTUAL AND ENVIRONMENTAL EVIDENCE	6
6	DISCUSSION	14
	BIBLIOGRAPHY	15
	APPENDIX 1: CONTEXT INVENTORY	17

Tables

Table 1:	Concordance of pottery	8
Table 2:	Animal bone taxa by context	.11
Table 3:	Animal bone ageing and metrical data available	.11
Table 4:	Ecofacts by sample and context	.12

Figures

Figure 1:	Site location
Figure 2:	Overall plan trenches 1, 2 and 3
Figure 3:	Detailed plans trenches 1, 2 and 3
Figure 4	Sections 1-4

Plates

Plate 1: General post-excavation view of trench	1 with pit [110] in the centre, looking north-east
---	--

- Plate 2: Pit [110] showing silting fills overlain by disuse fills, looking south-west
- Plate 3: General post-excavation view of trench 2 with gully [204] in the foreground, truncated by a furrow, looking north-west
- Plate 4: Overview of features in trench 3, gully [307] in the foreground and pit [305] in the centre, looking south-east
- Plate 5: Worked bone (SF1) from the last fill of Pit [110]

ARCHAEOLOGICAL EVALUATION OF LAND SOUTH-EAST OF LANCASTER WAY BUSINESS PARK (UNIT D) ELY CAMBRIDGESHIRE ECB 3017 AUGUST 2008

ABSTRACT

Northamptonshire Archaeology undertook an archaeological evaluation of land south-east of Lancaster Way Business Park, Ely, Cambridgeshire, in August 2008. The work was undertaken for Waldeck Associates acting on behalf of York Construction. The evaluation comprised trial trenching on c 0.35ha of land proposed for development of industrial warehousing The excavations recorded the presence of settlement remains dating principally to the mid-late Iron Age and characterised by ditches, gullies and a few discrete features such as pits. Later activity comprised extensive medieval ridge and furrow cultivation and a modern pipe trench.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by Waldeck Associates, acting on behalf of York Construction, to carry out an archaeological evaluation in August 2008 on land to the south-east of the Lancaster Way Business Park. Ely, Cambridgeshire (NGR: TL 51940 09450; Fig 1).

The work was undertaken in order to inform a revised planning application with regard to developing the land for industrial warehousing (Planning Application No: 06/01422/FUM/08/00048/FUM). The total development area (4.3ha) was subdivided into four distinct plots with Unit D to the south-east being the subject of this investigation (0.35ha). The evaluation comprised the excavation of three trial trenches in this latter area and was carried out to a Specification (NA 2008) approved by the office of Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA) (NA 2008a). The specification was based upon a brief prepared by CAPCA (2008).

The objective of the archaeological evaluation was to determine the location, extent, date, character, condition, significance and quality of surviving archaeological remains liable to be affected by the proposed development.

2 -BACKGROUND

2.1 Topography and Geology

The Lancaster Way Business Park is situated 2km south-west of Ely, Cambridgeshire and south of the A142 road. The proposed extension is located immediately east of the current Business Park, and formed part of a former Second World War RAF airfield (RAF Witchford). The site of the airfield comprised a triangular piece of land with concrete tracks flanking its sides, to the north-west lies Wellington Road. The development area is located in the northern apex of a triangular piece of arable farmland.

The site is a continuation of the 'Isle' of Ely, an area of higher ground rising above the southern Cambridgeshire Fens at *c*. 15mOD. The underlying bedrock of the site and surrounding area comprises Jurassic period Kimmeridge Clay, capped by glacial till and Boulder Clay deposits. The soils are calcareous loams of the Milton series, overlying river terrace gravels and Gault Clay (CgMs 2008; British Geological Survey 2003).

2.2 Archaeological background

This area of the 'Isle' of Ely has been subject to intense archaeological investigation largely as a result of development. Evidence for Iron Age, Roman and Anglo-Saxon activity as well as medieval and later open fields has been encountered.

Along the line of Wellington Road excavations for the construction of a water pipeline indicated the presence of Iron Age occupation. To the west, under the present extent of the Lancaster Way Business Park, excavations revealed related Iron Age and Roman activity.

More recently, geophysical surveys, fieldwalking and trial trenching undertaken by Northamptonshire Archaeology immediately at the south of the proposed development area revealed further Iron Age and Roman enclosures and occupation (Fisher 2008, Morris 2008, Holmes 2008).

3 METHODOLOGY

Three trial trenches each measuring 25m long by 2m wide were excavated using a mechanical digger under continuous archaeological supervision (Fig 2). In all trenches mechanical excavation proceeded as far as the uppermost archaeological horizon or, where there were no archaeological features, the natural substrate.

The trenches were related to the Ordnance Survey National Grid by Global Positioning System (GPS) survey using a Leica 1200 series model. Archaeological information was recorded on pro-forma sheets, with a unique context number being allocated to each distinct deposit and feature. A photographic record comprising both 35mm monochrome negatives, with associated prints, and colour transparencies was maintained, with additional digital photographs. All records were compiled during fieldwork into a comprehensive and fully cross-referenced site archive. Where appropriate bulk soil samples of features were taken in 10 litre buckets.

The event code allocated by Cambridgeshire Historic Environment Record (CHER) was ECB3017.

All works were carried out according to the IFA Code of Conduct and Standards and Guidelines for Archaeological Evaluation (IFA 1994 revised 2001), and all procedures complied with the Northamptonshire County Council Health and Safety provisions and Northamptonshire Archaeology Health and Safety at Work Guidelines (NA 2003).

4 EVALUATION RESULTS

The natural substrate encountered in all three trenches comprised an orange sandy-clay with medium sized flint and chalk nodules, typically encountered at a depth of 0.2-0.4m. This was overlain by dark brown sandy clay ploughsoil; there was no developed subsoil apparent across the site. All three trenches contained archaeological features comprising pits, gullies and ditches. Other activity included post-medieval furrows and a modern pipe trench (Fig 2).

4.1 Trench 1

Trench 1 was aligned north-east to south-west and measured 25m long and up to 0.36m deep (Fig 2, Plate 1). It contained a pit of probable late Bronze Age/early Iron Age date, four medieval or post-medieval furrows and a modern pipe trench.

Pit [110]

A single sub-ovoid pit [110] was cut in to the natural substrate and was aligned north-east to south-west along its long axis (Fig 3, Fig 4 section 1, Plate 2). It was 4.10m long, 1.15m deep and was exposed to a width of 1.40m but extended further eastwards beyond the edge of excavation. The pit was filled with seven distinct soils interpreted as episodes of silting (106 -109) and later disuse or deliberate dumping (103 – 105). The silting fills were orange-grey or brow clay sands. Fragments of animal bone were recovered from fills (108) and (107) but no pottery or other datable material was retrieved from them. The earliest of the probable deliberate backfilling episodes, fill (105), was firm dark brownish grey clayey sand with frequent charcoal flecks. Animal bone and three sherds

of pottery dating from the Late Bronze Age-early Iron Age were retrieved from it. Overlying (105) was an orangey brown sandy clay (104) which contained two sherds of similarly dated pottery. The latest surviving fill (103) comprised a dark brownish-grey sandy-clay with frequent charcoal flecks. Fifteen sherds of late Bronze Age/early Iron Age pottery were recovered along with a fragment of a decorated bone weaving comb (SF1, Plate 5).

Furrows [111] [112] [114] [115]

Four east to west aligned linear furrows were present (111, 112, 114 and 115). These measured approximately 2m wide and were regularly spaced at roughly 5m to 7m intervals. Typically the furrows were filled by compact light yellowish brown clay with charcoal flecking. The furrows contained fragments of coal, tile/brick and pieces of iron nails as well as a copper alloy button (SF 4). Furrows [115] and [120] were truncated by a modern pipe trench [113] located in the north-eastern end of the trench.

4.2 Trench 2

Trench 2 was aligned north-west to south-east and measured 26m long (Figs 2 and 3). It contained a number of inter-cutting ditches and gullies dating to the mid-late Iron Age. Those at the south-eastern end of the trench were partially truncated by an east to west aligned furrow.

Ditch [210]

Ditch [210] was the stratigraphically earliest feature. It was aligned north-east to southwest and may represent a boundary or enclosure ditch. It survived to 1.40m wide and was 0.79m deep (Fig 4 section 2). It contained two fills: a primary fill of greyish brown silt (209) and a secondary fill of very dark brownish grey silty clay, with frequent charcoal flecking and occasional small rounded pebbles (208). Fourteen sherds of pottery from the latter suggest a middle Iron Age date for the feature. It was cut through by ditch [207] which probably represents a later re-cutting of the feature.

Ditch [207]

Ditch [207] was on the same alignment as [210]. It was 2.51m wide and 0.83m deep and contained two fills (Fig 4 section 2). The earliest fill (206) was brownish grey silty clay, with charcoal flecking and produced fifteen sherds of late Iron Age/early Roman pottery, animal bone and a small iron nail (SF5). The latest fill (205) was greyish black silty clay with charcoal flecks. This also produced a quantity of late Iron Age/early Roman pottery and some animal bone.

Gully [214]

Gully [214] was only partially visible to the south-west of a later re-cut (Gully [212]). It cut ditch [207] and was filled with brownish grey silty clay with occasional coarse poor sorted gravel (213), which produced no dating material.

Gully [212]

Gully [212], a probable re-cut of gully [214], was a curvilinear feature aligned south-east to north-west. It was steep sided with a rounded base and was 0.56m wide and 0.33m deep. It contained dark brownish silty clay with occasional charcoal flecking and occasional coarse poorly sorted gravel (211). Sherds of mid Iron Age pottery were recovered from this fill.

Gully [218]

Gully [218] was located to the east of gully [212] and was aligned north north-east by south south-west with a 'v' shaped profile. It was filled with hard dark greyish brown silty clay with moderate chalk flecking (217) which contained sherds of mid Iron Age pottery. This feature was cut by gully [204/206].

Gully [204]/[216]

Gully [204]/[216] was aligned north-east to south-west and cut gullies [212] and [218]. It was filled with a charcoal and chalk flecked dark brown sandy-clay (211) containing mid Iron Age pottery (Plate 3).

4.3 Trench 3

Trench 3 was 24m long and aligned north-east to south-west (Figs 2 and 3). It contained three gullies and a pit. Four east to west aligned furrows were also recorded in the trench and truncated earlier features.

Pit [305]

Pit [305] was a circular steep sided feature with a diameter of 1.1m and a depth of 0.31m. It was filled with firm dark brownish yellow silty sandy clay (306) that produced no datable material (Fig 4 section 3, Plate 4).

Gully [307]

Gully [307] cut pit [305]. It was aligned north-east to south-west and measured 0.75m wide and 0.25m deep (Fig 4 section 3, Plate 4). Its primary fill was a dark brownish yellow silty clay (308) containing burnt and fragmented flint nodules. The secondary fill (309) was charcoal-flecked dark blackish brown clay containing mid Iron Age pottery,

animal bone, an iron nail and a small amount of iron working debris.

Gullies [313] and [317]

Gully [317] was aligned east to west at the south-western end of the trench (Fig 4 section 4). It was 0.7m wide, 0.15m deep and filled with a dark brown sandy clay (316) containing pottery dating from the middle Iron Age. Gully [313] re-cut the earlier feature along its eastern edge. Its sandy clay fill (312) did not contain dating evidence.

The furrow [304]which truncated gully [307] was on the same line as that recorded in Trench 2.

5 ARTEFACTUAL AND ENVIRONMENTAL EVIDENCE

5.1 The worked flint by Andy Chapman

Two worked flints were recovered.

From context (104), there is an end scraper. This is worked on a large flake, 49mm long by c40mm wide, but one edge has been broken. The dorsal surface retains some light brown cortex, and the distal end has been retouched, at a relatively shallow angle, to form the end scraper. The flint was probably dark grey and vitreous, but the entire piece, including most of the broken edge, has a pale grey patina. It can be broadly dated to the Neolithic/early Bronze Age.

From context (208) there is a large, 70mm long by 20mm wide, piece of flint, grey brown and vitreous with a light brown cortex, which appears to be a product of fortuitous shattering.

5.2 The pottery by Ed McSloy

Pottery amounting to 117 sherds (1807g) was examined. The pottery was recovered from 13 separate contexts, consisting of the fills of linear features and two pits. Most material relates to Evaluation Trench 2 (Table 1). The condition of the pottery is in general good, with surfaces and calcareous inclusions well-preserved and some large and joining sherds present. Mean sherd weight (over 15g) is moderately high for group of this date.

All recovered material is of Late Prehistoric type. The earliest recovered diagnostic material derived from disuse fills of Pit 110 (103–5), located in Trench 1. Sherds from at least four vessels were recovered in coarse calcined-flint tempered and quartz-tempered fabrics. Two vessels from Pit 110 (fills 103 and 104) were identifiable to form: both are round-shouldered jars with upright, squared rims. The vessel from deposit 103 features fingernail decoration to its shoulder. A number of sherds from contexts 103 and 105 are

burnished. The use of flint-tempering is a feature of pottery from the eastern region dating between the late Bronze and early Iron Age periods (Hill and Horne 2003, 166). The round-shouldered forms and shoulder decoration would be most consistent with transitional Late Bronze Age to Early Iron Age dating (LBA-EIA), probably between the 8th/7th and 5th/4th centuries BC.

A small rim sherd in a quartz-tempered fabric from (Trench 2) gully fill 203 which exhibits fingernail slashing may also be of late Bronze Age to early Iron Age dating. Rim decoration of this type can also occur with Middle Iron Age pottery and in isolation such a date cannot be ruled out. Other material of possible LBA–EIA dating is restricted to a round-shouldered jar with upright rim from gully fill 316. This vessel, which was burnished, occurred with material more typically middle Iron Age in style and is probably residual.

Pottery considered of middle Iron Age date (4th/3rd to 1st centuries BC) was recovered from six deposits from Trenches 2 and 3 (ditch fill 208; and gully fills 211, 215, 217, 309 and 316). Further material of middle Iron Age type was recovered from ditch fill 206 together with quantities of wheel-thrown late Iron Age material (below) and would appear to be residual and probably re-deposited from earlier ditch 210 (fill 208). Most pottery of this type occurs in a hand-made quartz-tempered fabric, with fewer sherds in hand-made shell-tempered and sand/organic-tempered fabrics. Identifiable forms comprise globular jars (ditch fills 206 and 208 and gully fill 215) with short everted rims and two examples of barrel-shaped jars with undifferentiated rims (ditch fills 206 and 208). Bodysherds from deposits 316 and 205 exhibit simple scored decoration of the type characterising East Midlands scored wares (Elsdon 1992).

Pottery of late Iron Age type, comprising wheel-thrown forms in quartz-tempered and grog/quartz-tempered fabrics, was recovered from the two fills (205 and 206) of Ditch 207. As noted above the pottery from fill 206 comprised a mix of handmade and wheel-thrown vessels. Material from the upper fill, 205 is more homogeneous and comprises large sherds, almost all in wheel-thrown quartz-tempered fabrics. Identifiable forms consist of necked jars/bowls, two of which feature cordons. This style of pottery spans the Late Iron Age/Early Roman transition, between the 1st century BC and early to mid 1st century AD. The absence of 'Romanising' grey or oxidised wares may in this instance suggest the earlier part of the given range.

Summary

The Unit D assemblage, although small, provides evidence for activity, probably extending between the late Bronze Age/early Iron Age transition and late Iron Age or 1st

century AD. There are parallels between this and the larger group excavated from Lancaster Way, Ely (Holmes 2008), although significantly, the latter produced no evidence for activity pre-dating the middle Iron Age. The middle and late Iron Age components also compare in terms of fabrics and forms with material from Wardy Hill, Coveney, Ely (Hill and Horne 2003, 145–84), where it was suggested that most material (termed Later Iron Age) dated between the 3rd/2nd century BC to the mid-1st century AD.

Table 1: Concordance of pottery

Trench	Context	Count	Weight	Comments	Date
1	103	15	86	Hand-made coarse calcined flint/quartz	LBA–EIA
				and quartz-tempered fabrics; round-	
				shouldered jar with scored decoration	
	104	2	35	Hand-made quartz-tempered; shouldered	LBA–EIA
				jar, burnished	
	105	3	53	Hand-made calcined flint/quartz-	LBA-EIA
				tempered; burnished	
2	201	3	24	Hand-made quartz-tempered (IA)	-
	203	4	13	Hand-made quartz-tempered; 1 x rim	LBA- EIA/MIA
	sherd with fingernail slashing				
	205	15	738	Wheel-thrown quartz-tempered wares	LIA-C1
				including cordoned necked jars/bowls;	
				(fewer) hand-made quartz-tempered	
including scored ware type					
	206	15	229	Wheel-thrown quartz-tempered wares and	LIA-C1
				1 x quartz/grog-tempered; (?residual)	
				hand-made quartz-tempered fabrics	
	208	14	227	Hand-made quartz-tempered, shell-	MIA
				tempered and quartz/organic-tempered	
				fabrics; globular and barrel-shaped jars	
	211	7	26	Hand-made quartz-tempered	MIA
	215	5	94	Hand-made quartz-tempered, shell-	MIA
				tempered and quartz/organic-tempered	
				fabrics; globular jars	
	217	19	194	Hand-made quartz-tempered and shell-	MIA
		10		tempered fabrics	
3	309	12	62	Hand-made quartz-tempered, shell-	MIA
				tempered and quartz/organic-tempered	
				fabrics; (?residual) shouldered-jar,	
	216	2	0.6	burnished	
	316	3	26	Hand-made quartz-tempered fabrics; 1 x	MIA+
			1005	scored decoration. All abraded	
Total		117	1807		

5.3 **The ceramic building material** by Pat Chapman

This is an assemblage comprising eleven small fragments of fired clay, weighing 64g, and a sherd of probable roof tile, weighing 9g. Three pale orange fragments, from contexts (103), (203) and (206), are sub-rounded, very hard and gritty to the touch. The remaining eight fragments are from context (206) and are hard, smooth, irregular but flattish and black in colour. The fragment of tile, from context (211), is 11mm thick with one smooth surface and the remnant of a sanded surface. It is made from fine clay, hard and orange with a red and grey core. These are tiny scattered fragments, possibly from an oven or similar.

5.4 **The metal working debris** by Andy Chapman

From context (309) there are two small fragments, weighing 16g: one of probable miscellaneous ironworking slag and the other a light and vesicular fuel ash slag. They provide very limited evidence for ironworking.

5.5 Individual finds by Tora Hylton

Four individually recorded small finds were recovered from Trenches 1 (x 2), 2 (x1) and 3 (x1).

Of particular interest is the presence of a bone weaving comb [SF1] recovered from Pit [110] in Trench 1 which dates to the Iron Age period. Soil conditions have caused the surface of the handle to become pitted, making it difficult to determine the extent of wear. Weaving combs of this type are common finds on sites of Iron Age date, they are generally thought to have been used as beaters in the weaving process, for a discussion on style and usage, see Sellwood 1984 (371-78).

The other finds recovered include 2 ferrous metal rod fragments (possibly nail shanks) from Ditch 207 and Gully 307 and a copper alloy Post-medieval button from Furrow 112.

Finds Catalogue

SF 1 Weaving comb, bone. Incomplete, only the shaft/handle survives, it is possible to determine that stylistically the handle represents a tapered long handled comb, which has been manufactured from the long bone shaft of a large ungulate (pers.com. Karen Deighton). The handle has a concavo-convex cross-section and the exterior surface is decorated with a linear cross-hatched panel (cf. Sellwood 1984, fig 7.27, 3.1), which is separated from the teeth by two transverse grooves. The presence of two notches adjacent to the transverse grooves, indicate the position of three rectangular/square-sectioned tooth bases. Cancellous tissue is visible on the underside of the handle. Dimensions (incomplete): 82 x 25mm, fill (103) of pit [110]

SF 2 Flint scraper (see Section 5.1)

SF 3 Rod fragment, iron. Tapered square-sectioned rod fragment, possibly part of nail shank. Length: 24mm, fill (309) of gully [307]

SF 4 Button, copper alloy. Two piece hollow button, loop cast *in situ*, upper surface decorated. Post-medieval, fill (117) of furrow [112]

SF5 Rod fragment, iron. Square-sectioned rod fragment with pointed terminal. Nature of object difficult to determine, possibly a nail shank. Length: 72mm, fill (206) of [ditch 207]

5.6 The animal bone by Karen Deighton

Introduction

A total of 0.98kgs of animal bone were collected by hand during the course of excavation. This material was assessed to ascertain the condition of the bone, the species present and potential contribution to the understanding of the site and to inform on future collection strategies.

Method

The animal bone was scanned and identifiable elements were noted (following Halstead 1985 after Watson 1979). Preservation and modification (after Binford 1981) were also noted. Any available biometrical data (after von den Driesch 1976) was noted as was any available ageing data. Ageing data included state of fusion (after Silver 1969), neonatal bone (after Amorosi 1989) and tooth eruption and wear (after Payne 1973 for Ovicaprids and Halstead 1985 after Payne 1973 for Bos).

Results

Preservation

Fragmentation was heavy and was largely the result of old breaks. Canid gnawing was noted in five contexts. No evidence of burning was noted. Possible evidence of butchery was restricted to an ovicaprid bone from context (208).

Taxa present

Cut/fill	Feature	Phase	Bos	Ovicaprid	Equus	L ungulate
110/105	Pit	LBA/EIA				1
110/107	Pit	LBA/EIA	1			
110/108	Pit	LBA/EIA		1		
207/205	Ditch				1	
207/206	Ditch		1	3		
207/208	Ditch		3	1		
212/211	Gully	LIA		1		1
216/215	Gully		1			
218/217	Gully	LIA			2	
307/309	Gully					1
317/316	Gully			1		2
Total			6	7	3	5

 Table 2: Animal bone taxa by Context

Table 3: Animal bone ageing and metrical data available

Bos			Ov	icaprid	Equus		
Fusion	Toothwear measurements		Fusion	toothwear	Fusion	Measurements	
1	1	4	1	2	2	4	

No neonatal bones were observed

Discussion

Little can be said of the animal economy of the site due to the paucity of material other than that a small range of common domesticates was associated with the site.

A larger range of taxa (i.e. Equus (horse), Bos (cow), Ovicaprid (sheep/goat), Sus (pig), Canid (dog), Gallus (chicken), large ungulate and small ungulate) was noted at an adjacent site (Deighton 2008a); however this could merely be the result of a larger number of features excavated.

Potential

The condition of the bone and range of species identified suggests if more bone was to be collected during the course of any subsequent excavations; some idea of the animal economy of the site could be gained. This will add to the existing corpus of work and provide comparisons for any future work.

Conclusion

The small assemblage shows the range of animals exploited at the site included common domesticates and suggests further work could be valuable.

5.7 The environmental samples by Karen Deighton

Introduction

Thirteen samples were collected during the course of trial trenching. These were assessed to determine the presence, nature and preservation of ecofacts, as well as informing on any future sampling strategies. Samples 7, 8, 10 and 11 all from pit 110 were sterile.

Method

All samples were processed using a modified siraf tank fitted with a 250 micron mesh and flot sieve. The resulting flots were dried and sorted using a microscope (10x magnification).

Any ecofacts were identified where possible which the aid of atlases (see references). The author's small reference collection was also used to aid with seed identification. Any bone or pottery recovered was dealt with elsewhere.

Results

Preservation

Preservation was entirely by charring for plant remains. Seeds and grains exhibited a moderate level of fragmentation and abrasion as did molluscan remains. Charcoal was heavily fragmented which precludes any further analysis or discussion. Results are presented in Table 4.

Taxonomic distribution

Table 4: Ecofacts by sample and context

Sample	1	2	3	4	5	6	9	12	13
Cut/fill	105	307/309	308/206	210/208	212/211	110/103	110/107	204/203	218/217
Feature	Ditch	Gully	Ditch	Ditch	Gully	Pit	pit	Gully	Gully
Phase	LIA	LIA	MIA	LIA	LIA	LBA/EIA?	LBA/EIA?	LIA	LIA
Volume	20	20	20	20	20	20	10	10	10
Charcoal*	8	9	2	1	7	9	2	6	7
Cereal	1		4	8	7	2		10	
Chaff	1								4
Wild/weed	1	10	1	3	9	1		12	
Mollusc	1	5	111	49	16		7	29	10
Amphibian					1				
Ostracod*				4					

Key for charcoal and ostracods

* +=present, 1=2-10, 2=10-20, 3=20-30, 4=30-50, 5=50-100, 6=100-200, 7=200-300,

 $8{=}300{-}500,\,9{=}500{-}1{,}000,\,1{=}1{,}000{+}$

The molluscs present included the land species *Cochilopa lubrica/lubricella*, *Pupilla muscorum*, *Discus rotundatus*, and *Trichia* sp. The water taxa *Bithynia* were present in two samples. The cereal grain types present included hulled barley (*Hordeum vulgare*) and glume wheat chaff was noted in one sample. Wild/weed taxa include fat hen (*Chenopodium album*), dock (*rumex* sp), grass (*poa* sp), cleavers (*Galium aparine*) and chickweed (*Stellaria media*) and members of the carrot family (*Umbelliferae*). Amphibian remains are those of either frog or toad.

Discussion

The presence of small concentrations of charcoal (as in samples 2 and 6) with occasional seeds and/or grains suggests the burning of refuse. The smaller quantities of charcoal, seeds/grains in the remaining samples suggest "background", i.e. material washed or blown in to features from activities taking place elsewhere.

The snail assemblage suggests moist conditions and possibly the presence of fresh water.

Very basic comparisons can be made with earlier work at another site in the area of the business park although these are extremely tentative given the size of the assemblages. The range of wild/weed species present was broadly similar to the adjacent site (Deighton 2008b) with the exception of the presence of chickweed and *Umbelliferae* and the absence of *Cruciferae* (cabbage family). Again the snail assemblage was similar to that from the adjacent site, although a smaller range of water taxa was seen at the present site. These differences could be the result of temporal change as earlier features have been relieved at the current site, although this suggestion is tentative.

Potential

Nine of the thirteen samples collected produced ecofacts. If further samples were collected from suitable phaseable/datable contexts during the course of any further excavation analysis of these would provide an idea of the economy and environment of the site.

Conclusion

Assessment has shown the presence of three well preserved classes of ecofacts and that further work in the event of future excavation would be viable.

6 **DISCUSSION**

The trial trenching revealed the presence of archaeological features to the north of the enclosures identified by the geophysical survey and by evaluation (Holmes 2008). Initial processing of finds suggests an area close to occupation dating from the late Bronze Age/early Iron Age to the late Iron Age. Feature survival was generally good, with significant depths of deposits surviving, despite the truncation of the uppermost deposits in places by post-medieval furrows.

The date range of the features encountered at Unit D overlap with those encountered to the south, which ranged from the middle Iron Age into the Roman period. These Unit D remains can be seen as forming part of the same settlement or pattern of settlement encountered to the south, but perhaps also incorporating earlier elements or phases of activity.

The site is likely to be mostly domestic in nature, although the weaving comb from pit (110) and the metal working debris provide evidence for industrial and craft activity. There was also limited evidence for agricultural activity, both cereal processing and animal husbandry.

BIBLIOGRAPHY

Amorosi, T, 1989 *A postcranial Guide to Domestic Neo-natal and Juvenile Mammals*, BAR International Series **533** Oxford:

Binford, L, 1981 Bones: ancient myths and modern man, Chicago University Press

British Geological Survey, 2003 GeoIndex mapping http://www.bgs.ac.uk

- CAPCA, 2008 Brief for Archaeological Evaluation, Land SW (LPA error) of Wellington Road, Lancaster Business Park, Ely, Cambridgeshire, Cambridgeshire Archaeology Planning and Countryside Advice
- CgMs, 2008 A specification for Archaeological Survey and Trial Trenching: Lancaster Way Business Park extension, Ely
- Cunliffe, B, 1984 Danbury: An Iron Age Hill Fortin Hampshire, Vol 2 The Excavations 1969-1978 : The Finds
- Deighton, K, 2008a 'The animal bone' in Holmes 2008

Deighton, K, 2008b 'The environmental evidence' in Holmes 2008

- Elsdon, S, M, 1992 'East Midlands Scored Ware', *Transactions of the. Leicestershire.* Archaeoogical and Historical Society, **66** 83–91
- Fisher, I, 2008 Archaeological Geophysical Survey On Land East of Lancaster Way Business Park, Ely, Cambridgeshire, Northamptonshire Archaeology Report, 08/48
- Halstead, P, L, 1985 'A study of mandibular teeth from Romano-British contexts at Maxey' *East Anglian Archaeology* **27**, 219-24
- Hill, J D and Horne, L, 2003 'Iron Age and Early Roman pottery', in C Evans (ed) 2003,
 'Power and Island Communities: Excavations at Wardy Hill Ringwork, Coveney, Ely' *East Anglian Archaeology* 103, 145–84
- Holmes, M, 2008 Archaeological trial excavation of land south-east of Lancaster Way Business Park, Ely, Cambridgeshire, Northamptonshire Archaeology Report, **08/121**
- IFA, 1994 revised 2001 *Standard and Guidance for Archaeological Field Evaluation*, Institute of Field Archaeologists
- Kerney, M P, and Cameron, R A D, 1994 Land Snails, Harper Collins, London
- Morris, S, 2008 Archaeological fieldwalking and metal-detector survey, Lancaster Way Business Park, Ely, Cambridgeshire, Northamptonshire Archaeology Report, 08/40
- NA, 2003 Health and Safety provisions and Northamptonshire Archaeology Health and

Safety at Work Guidelines, Northamptonshire Archaeology

- NA, 2008 Specification for Archaeological Evaluation (Trial Trenching) at Unit D Land off Wellington Road Lancaster Way Business Park, Ely, Cambridgeshire, Northamptonshire Archaeology
- Payne, S, 1973 'Kill-off patterns in Sheep and goats: the mandibles from Asvan Kale', *Anatolian Studies* **23**, 281-303
- Schoch, W H, Pawlik B and Schweingruber F H, 1988 *Botanical Macro-remains*, Paul Haupt, Berne
- Silver, I, 1969 ,The ageing of domestic mammals, in D. Brothwell and E. Higgs (eds) *Science in Archaeology*, 283-302, Thames and Hudson, London
- Sellwood, L, 1984 Objects of Bone and Antler in Cunliffe 1984, 371-396
- Von den Driesch, A, 1976 Guide to the Measurement of Animal bones from Archaeological Sites, Harvard University Press
- Watson, J P N, 1979 'The estimation of the relative frequencies of mammalian species: Khiriokitia' *Journal of Archaeological Science* **6**,127-137

Northamptonshire Archaeology Northamptonshire County Council

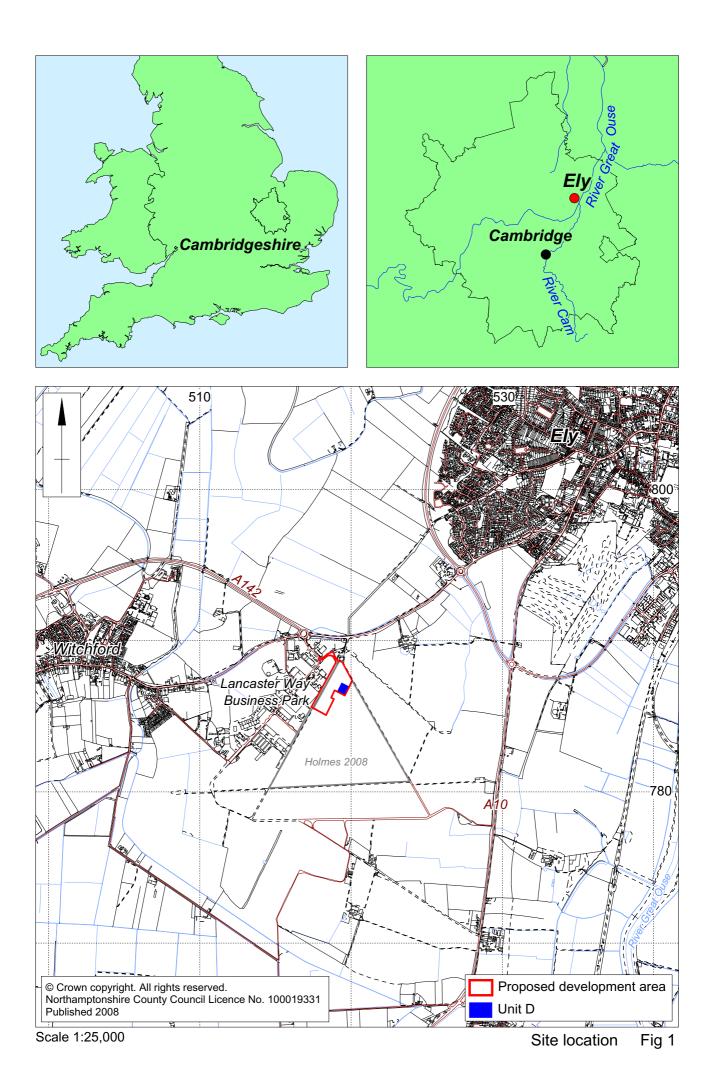
26th September 2008

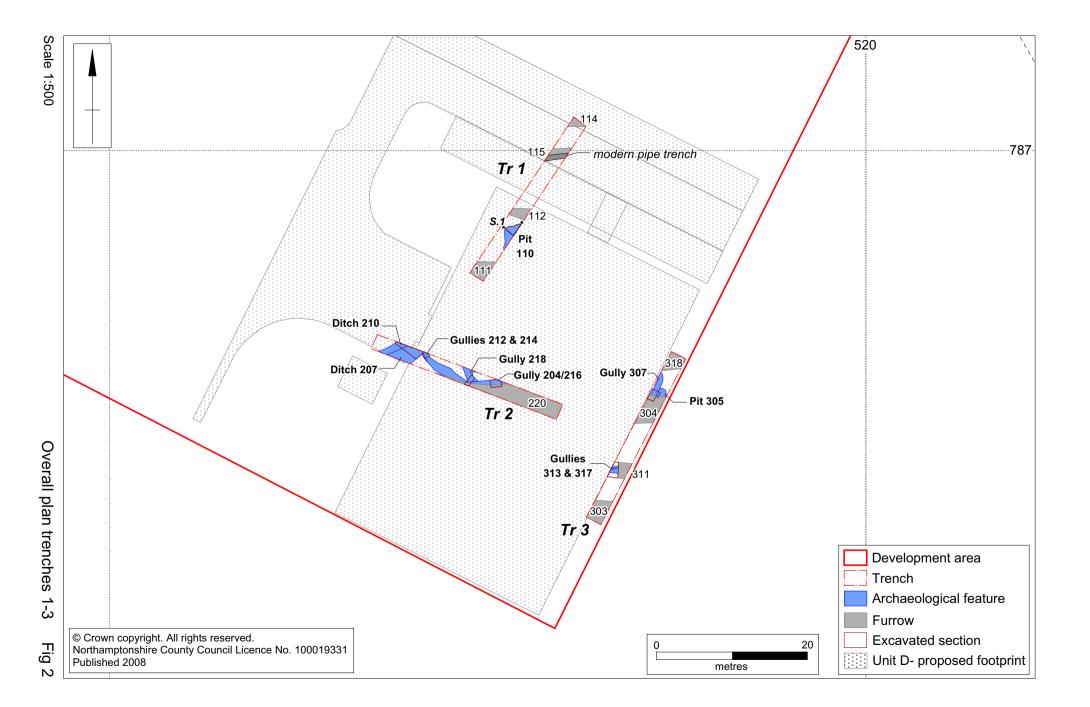
APPENDIX 1: CONTEXT INVENTORY

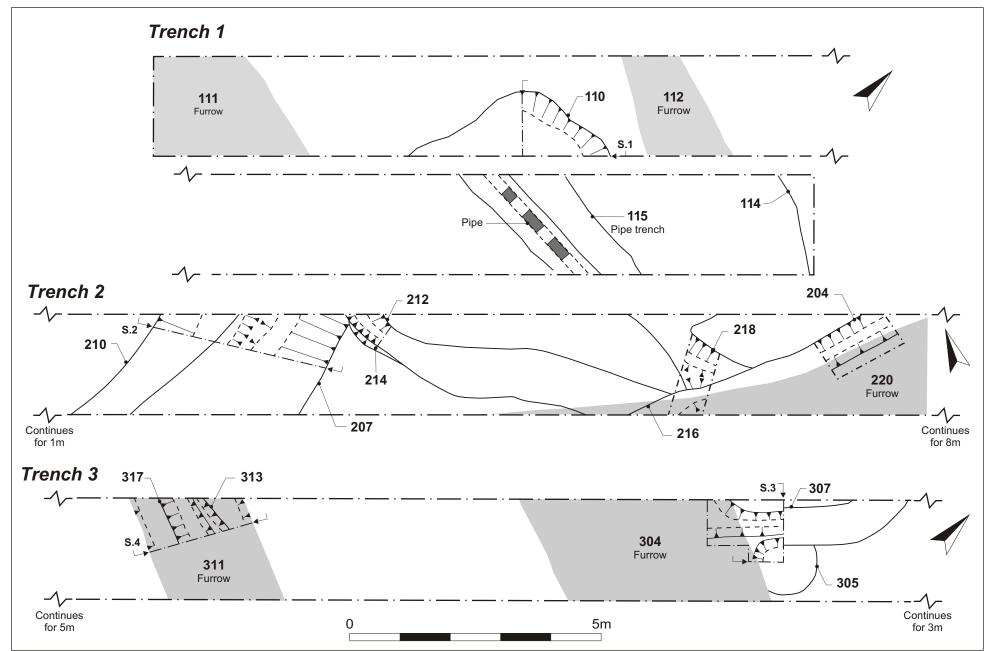
Trench	Context No	Туре	Description	Length in M	Width in M	Depth in M
Trench 1	101	Topsoil	Dark brown sandy-clay loam, with frequent			0.3
			chalk flecking and sub-rounded pebbles			0.5
	102	Natural	Orange sandy-clay with occasional chalk flecking and flint			
	103	Final Disuse full of Pit	Firm dark brownish-grey sandy-clay with frequent charcoal flecking. Pottery, bone and	4.0		0.28
	104	110 Disuse fill of Pit 110	a fragment of a worked bone comb. Firm orange-brown sandy-clay, occasional stones. Pottery and bone.			0.24
	105	Disuse fill of Pit 110	Firm dark brownish-grey clayey sand, frequent charcoal flecks, pottery and bone			0.05
	106	Silting fill of Pit 110	Firm mid brown clayey sand, occasional stones.			0.14
	107	Silting fill of Pit 110	Firm mid brownish-grey clayey sand. Bone			0.26
	108	Secondary silting fill of Pit 110	Firm orangey-grey sandy clay. Bone.			0.1
	109	Primary silting fill of Pit 110	Firm orangey-brown clayey sand.			0.21
	110	Pit cut	Sub-circular? Pit aligned north-east to south- west. Steep slightly concave sides and rounded base. Filled by 103 – 109. Overlain by 101	4.0		1.15
	111	Furrow Cut	East to west aligned linear furrow		2.6	
	112	Furrow Cut	East to west aligned linear furrow		1.71	
	113	Pipe trench Cut	East to west aligned linear pipe trench. Cuts 120		0.66	
	114	Furrow Cut	East to west aligned linear furrow		1.28	
	115	Furrow Cut	East to west aligned linear furrow		1.39	
	116	Fill of 111	Compact light yellowish brown clay with charcoal flecking, . Coal, brick or tile fragments		2.6	
	117	Fill of 112	Same as 116		1.71	
	118	Fill of 113	Firm dark blackish- brown clay. Concrete pipe and occasional large angular bricks and stone		0.66	
	119	Fill of 114	Same as 116		1.28	
	120	Fill of 115	Same as 116, cut by 113		1.39	
Trench 2	201	Topsoil	As 101			0.4
1	202	Natural	As 102			
	203	Fill of 204	Firm dark brown sandy-clay with occasional rounded pebbles, charcoal and chalk flecking. Truncated by furrow 220, same as 215. Pottery.		0.5	0.24
	204	Gully Cut	Linear north-east to south-west aligned gully, rounded base, Cuts 211 or 217.		0.5	0.24
	205	Secondary	Firm greyish black silty clay with occasional		2.51	0.20

Trench	Context No	Туре	Description	Length in M	Width in M	Depth in M
		disuse fill of	charcoal flecks and occasional rounded			
		207	pebbles. Cut by Gully 212. Pottery and bone.			
	206	Primary fill	Firm brownish grey silty clay, with charcoal			
		of 207	flecking and occasional small rounded		2.24	0.63
			pebbles. Pottery, bone, iron nail (SF5)			
	207	Boundary/	Linear south-west to north-east aligned ditch,			
		enclosure	rounded base, concave sides. Cuts fill 208.		2.51	0.83
		Ditch Cut				
	208	Secondary	Compact very dark brownish grey silty clay,			
		disuse fill	with frequent charcoal flecking and		1.40	0.79
		210	occasional small rounded pebbles. Cut by			0173
			207. Pottery and bone.			
	209	Primary	Firm greyish brown silt.			
		silting fill			0.56	0.16
		210				
	210	Boundary/	Linear south-west to north-east aligned ditch			0.70
		enclosure	with convex sides and a rounded base. Cuts		1.4	0.79
		Ditch Cut	202 (natural).			
	211	Fill of 212	Firm dark brownish silty clay with		0.50	0.22
			occasional charcoal flecking and occasional		0.56	0.33
	212		coarse poor sorted gravel. Pottery.			
	212	Gully Cut	Linear south-east to north-west aligned		0.50	0.22
			gully, with concave steep sides and rounded		0.56	0.33
	212	D'11 CO14	base. Cuts 213 and 205.			
	213	Fill of 214	Firm brownish grey silty clay with occasional coarse poor sorted gravel.	1.5	0.34	0.21
	214	Gully Cut	Linear north-west to south-east aligned			
			gully. Filled by 213 later re-cut by 212. Cuts	1.5	0.34	0.21
			202 natural. Only visible to the south-west of	1.5	0.54	0.21
			212.			
	215	Fill of 216	Same as 203, pottery and bone		0.8	0.28
	216		Same as 204		0.8	0.28
	217	Fill of 218	Hard dark greyish brown silty clay with			
			moderate chalk flecking. Cut by 216. Pottery		0.77	0.36
			and bone.			
	218	Gully Cut	Linear north north-east by south south-west		0.77	0.36
			aligned 'v' shaped gully. Cuts 202 natural.		5.77	5.50
	219	Fill of 220	Compact light yellowish brown clay with			
			charcoal flecking. Coal, brick or tile		2.3	
		~ ^	fragments and clay pipe fragment.			
	220	Cut for	Same as 304. Truncates 203/215 fills of		2.3	
		furrow	gullies 204/216.		2.3	
Trench 3	301	Topsoil	As 101			0.3
	302	Natural	Compact orange sandy-clays and gravels			
			with flint and chalk inclusions			
	303	Furrow Cut	Linear aligned east to west. Cuts natural 302		3	
	304	Furrow Cut	Linear aligned east to west, gradual concave		3.2	0.08
			sloping sides and flat base. Cuts 309.		5.2	0.00
	305	Pit Cut	Circular steep sided pit with sharp breaks of	1.1	1.1	0.31
			slope and a flat base. Cuts 302 natural.	1.1	1.1	0.51
	306	Fill of 305	Firm dark brownish yellow silty sandy clay,			
			few small flint nodules and few small sub-	1.1	1.1	0.31

Trench	Context No	Туре	Description	Length in M	Width in M	Depth in M
			rounded pebbles. Cut by 307 gully.			
	307	Gully Cut	Linear north-east to south-west aligned gully with gradual concave sides and rounded base. Cuts 306.		0.75	0.25
	308	Primary silting fill of 307	Firm dark brownish yellow silty clay, little charcoal flecking, few small flint nodules and few small sub-angular stones. Burnt flint.		0.58	0.1
	309	Secondary disuse fill 307	Firm dark blackish brown clay, occasional charcoal flecking, and few flint nodules. Truncated by furrow 304. pottery, bone, iron nail and metal working debris.		0.75	0.16
	310	Fill of 311	Firm mid-brown sandy-clay loam with chalk flecking. Brick/tile fragments.		1.6	0.15
	311	Furrow Cut	Linear east to west aligned furrow, gradual concave sides, rounded base.		1.6	0.15
	312	Fill of 313	Firm dark brown sandy clay with few chalk flecking. Cut by 311.		0.36	0.08
	313	Gully Cut	Re-cut of gully [317]		0.36	0.08
	314	Fill of 303	Compact light brown clay with few flint nodules, small rounded stones and charcoal flecking. Coal, brick/tile fragments.		3.0	
	315	Fill of 304	Same as 314. Brick/tile fragments, iron nails		3.2	0.08
	316	Fill of 317	Firm dark brown sandy clay with occasional small rounded pebbles. Cut by 313. Pottery and bone.		0.7	0.15
	317	Gully Cut	Linear east to west aligned gully, gradual concave sides, rounded base. Cuts natural 302.		0.7	0.15
	318	Furrow Cut	Linear east to west aligned furrow. Shallow concave sides and flat base.		2.4	0.05
	319	Fill of 318	Same as 314.		2.4	0.05







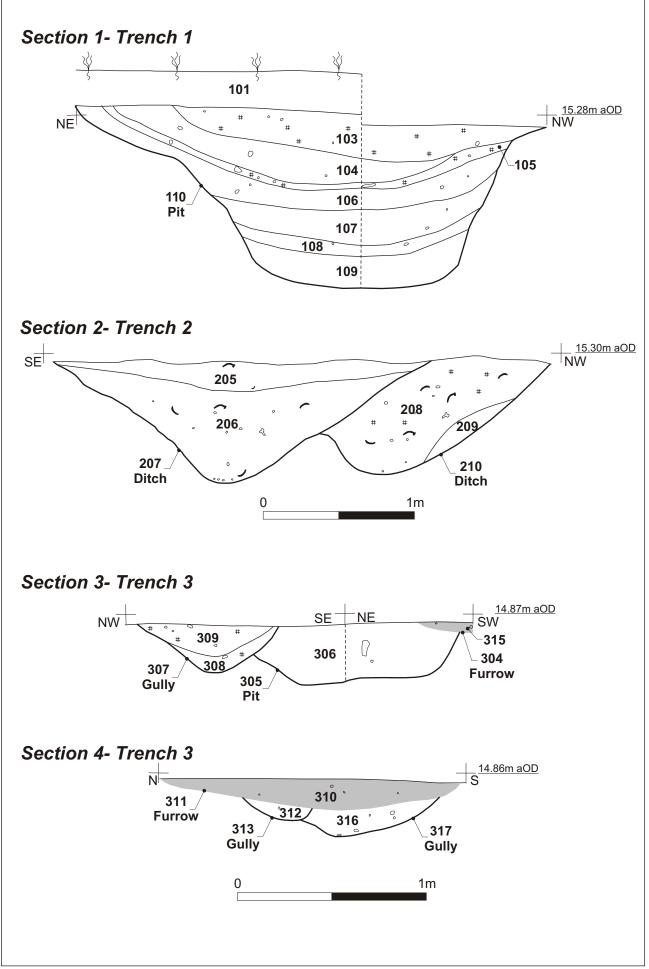




Plate 1: General post-excavation view of trench 1 with pit [110] in the centre, looking north-east



Plate 2: Pit [110] showing silting fills overlain by disuse fills, looking south-west



Plate 3: General post-excavation view of trench 2 with gully [204] in the foreground, truncated by a furrow, looking north-west

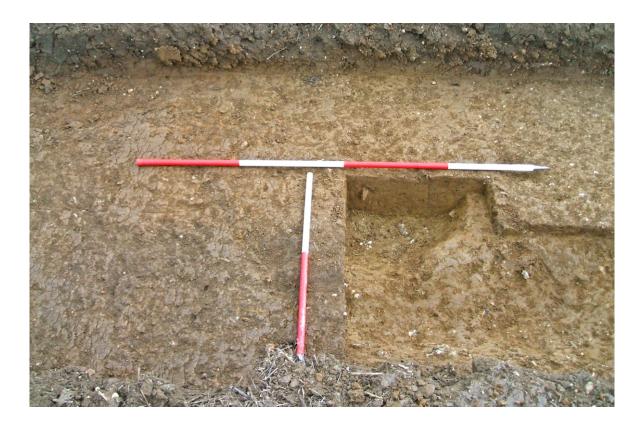


Plate 4: Overview of features in trench 3, gully [307] in the foreground and pit [305] in the centre, looking south-east



Plate 5: Worked bone (SF1) from the last fill of Pit [110]