Tracing the Line

Archaeological Investigations along the Cambridgeshire Guided Busway.







Matthew Collins and Alison Dickens





Tracing the Line:

Archaeological Investigations along the Cambridgeshire Guided Busway; Part 1

Matthew Collins & Alison Dickens

With contributions from: Katie Anderson, Laurence Billington, Matthew Brudenell, Natasha Dodwell, Andrew Hall, Mark Knight, Duncan Mackay, Vida Rajkovaca, Krish Seetah, Adam Slater, Simon Timberlake, Anne de Vareilles and David Webb.

Illustrations by Bryan Crossan and Vicki Herring

Cambridge Archaeological Unit University of Cambridge Department of Archaeology

May 2009

Report No. 883

CONTENTS

Non Technical Summary	6
Introduction	7
Section 1 – Swavesey	14
Part 1) Swavesey within Track Alignment (CBG:SIT)	16
Part 2) Swavesey Kiss and Ride (CGB:SKR)	26
Appendix 1 – Prehistoric pottery (CGB:SIT) – Mark Knight	32
Appendix 2 – Late Iron Age and Roman pottery – Katie Anderson	32
Appendix 3 – Faunal Remains (CGB:SIT) – Krish Seetah	34
Appendix 4 – Faunal Remains (CGB:SKR – Krish Seetah	36
Appendix 5 – Flint (CGB:SIT) – Lawrence Billington	38
Appendix 6 – Bulk Environmental (CGB:SIT) – Anne de Varielles	39
Appendix 7 – Bulk Environmental (CGB:SKR) – Anne de Varielles	44
Appendix 8 – Pollen Analysis (CGB :SIT) – Simon Timberlake	46
Appendix 9 – Worked Stone (CGB:SKR) – Simon Timberlake	48
Section 3 – Landscape and Ecological Mitigation Area (LEM) D (CGB:LMD) 52
Appendix 10 – Prehistoric pottery – Matthew Brudenell	67
Appendix 11 – Late Iron Age and Roman pottery – Katie Anderson	71
Appendix 12 – Faunal Remains – Vida Rajkovaca	77
Appendix 13 – Flint – Lawrence Billington	80
Appendix 14 – Worked Stone – Simon Timberlake	81
Appendix 15 – Bulk Environmental – Anne de Varielles	83
Appendix 16 – Cremated Bone – Natasha Dodwell	84
••	
Section 4 – Longstanton Park and Ride (CGB:LPR) – with Duncan Mackay	87
Appendix 17 - Later Prehistoric pottery – Matthew Brudenell	97
Appendix 18 – Faunal Remains – Krish Seetah	98
Appendix 19 – Copper Alloy Brooch – Andrew Hall	100
Appendix 20 – Flint – Lawrence Billington	101

Appendix 21 – Bulk Environmental – Anne de Varielles	101
Appendix 22 – Burnt Stone – Simon Timberlake	104
Appendix 23 – Pollen Analysis – Simon Timberlake	104
Section 5 - Landscape and Ecological Mitigation Area (LEM) I (CG)	B:LMI) 105
Appendix 24 – Bulk Environmental – Anne de Varielles	108
Section 6 – Arbury	109
Part 1) Arbury Trackway (CGB :ABQ) – with David Webb	109
Part 2) Arbury Park (CGB:APK)	114
Appendix 25 – Roman pottery (CGB:ABQ) – Katie Anderson	118
Appendix 26 – Roman Tile (CGB:ABQ) – Katie Anderson	122
Appendix 27 – Faunal Remains (CGB:ABQ) – Vida Rajkovaca	124
Appendix 28 – Non Ferrous metalwork (CGB:ABQ) – Andrew Hall	124
Appendix 29 – Shellfish (CGB:ABQ) – Simon Timberlake	125
Appendix 30 – Bulk Environmental – Anne de Varielles	126
Section 7 – Long Road Construction Site (CGB :LRD)	128
Appendix 31 – Later Prehistoric pottery – Matthew Brudenell	132
Appendix 32 – Bulk Environmental - Anne de Varielles	132
Appendix 33 – Flint – Lawrence Billington	133
Section 8 – Addenbrooke's Link (CGBABL)	135
Part 1) CGB:ABL (watching brief) – with David Webb	138
Part 2) CGB:ABL (open area) – with Adam Slater	140
Appendix 34 – Bulk Environmental – Anne de Varielles	143
Section 9 – Shelford Road Construction Site (CGB :SRC)	145
Appendix 35 – Later Prehistoric pottery – Matthew Brudenell	155
Appendix 36 – Roman pottery – Katie Anderson	158
Appendix 37 – Faunal Remains – Vida Rajcovaca	163
Appendix 38 – Flint – Lawrence Billington	166
Appendix 39 – Bulk Environmental – Anne de Varielles	167
Appendix 40 – Worked Stone – Simon Timberlake	169

General Discussion	173
Acknowledgements	175
References	176
Appendix 41 – Feature Descriptions	182
List of Figures	
Figure 1 – Site Location Plan	9
Figure 2 - Location Plan of CGB:SIT, SKR, LMC and LMD	10
Figure 3 – Location Plan of CGB:OCS, LPR and LMI	11
Figure 4 – Location Plan of CGB:ABQ and APK	12
Figure 5 – Location Plan of CGB:LRD, ABL and SRC	13
Figure 6 – Plan of site CGB:SIT	17
Figure 7 – Plan of site CGB:SIT	18
Figure 8a – Section of F.48; a Late Iron Age/Early Roman ditch (CGB:SIT)	20
Figure 8b – Photograph of F.76; a Late Iron Age/Early Roman well (CGB:SIT)	20
Figure 9 – Photographs of F.15 and F.63 showing them as earthworks in adjacent field (CGB:SIT	22
Figure 10 – Section of ditches F.14 and F.15, (CGB:SIT)	23
Figure 11 – Photograph showing railway related quarry pit (CGB:SIT)	23
Figure 12 – Plan of site CGB:SKR	27
Figure 13a – Section of post medieval quarry pits F.12, F.13, F.14, F.17 and F.18 (CGB:SKR)	29
Figure 13b – Section of post medieval build-up layers (CGB:SKR)	29
Figure 14 – Plan of site CGB:LMC	51
Figure 15 – Geophysics results from CGB:LMD	53
Figure 16 – Site plan of CGB:LMD	54
Figure 17 – Plan of open area (CGB:LMD)	61
Figure 18a – Section of ditch F.17 (CGB:LMD)	62
Figure 18b – Photograph showing ditches F.34 and F.35 (CGB:LMD)	62
Figure 19a – Section of enclosure ditch F.36 (CGBLMD)	63
Figure 19b – Photograph showing western corner of enclosure ditch F.36 (CGB:LMD)	63

Figure 20 – Section showing complexity of features at CGB:LMD	64
Figure 21 – Plan of site CGB:LPR	88
Figure 22 – Plan of open area (CGB:LPR)	92
Figure 23a – Section of large Early Iron Age pit F.25 (CGB:LPR)	94
Figure 23b – Section of large Early Iron Age pit/well F.32 (CGB:LPR)	94
Figure 24 – Romano-British knee brooch from ditch F.9 (CGB:LPR)	96
Figure 25 – Plan of site CGB:LMI	106
Figure 26 – Plan of sites CGB:ABQ and APK	110
Figure 27 – Plan of site CGB:ABQ	111
Figure 28a – Roman ditch F.1 overlain by quarry related layers (CGB:ABQ)	113
Figure 28b – Late Roman coin from F.3 (CGB:ABQ)	113
Figure 29 – Site plan of CGB:APK	116
Figure 30 – Photographs of Roman pit F.4 and ditch F.1 (CGB:APK)	117
Figure 31 – Site plan CGB:LRD	129
Figure 32 – Site plan of CGB:ABL	137
Figure 33 – Site plan of open areas (CGB:ABL)	138
Figure 34 – Site plan of watching brief (CGB:ABL)	139
Figure 35 – Site plan of CGB:SRC	146
Figure 36 – Phased plan of CGB:SRC	148
Figure 37 – Section and photograph of ditch F.19 (CGB:SRC)	150
Figure 38 – Aerial photograph of CGB:SRC	151

Non Technical Summary

The Cambridgeshire Guided Busway (CGB), the longest guided busway in the world, has been constructed in large part on the trackway of the former Cambridge to St. Ives railway. As part of the programme extensive archaeological work was undertaken in order to satisfy conditions placed on planning permission. Ten locations along the CGB route were eventually designated for mitigation by excavation or to be evaluated in order to determine mitigation, with monitoring on groundworks at other locations. The fieldwork was carried out between October 2006 and July 2008, as sites were made available.

Swavesey-in-Track: - Despite significant disturbance by large scale quarrying related to the construction of the railway, a significant amount of archaeology was present here. The two main pre-railway phases were Late Iron Age/Early Roman and late medieval. The Late Iron Age/Early Roman activity consisted of a field system and a more dense area of archaeology which environmental and finds evidence suggests is very close to a settlement. The late medieval phase consisted of several ditches, which were still visible as earthworks in the adjacent field.

Swavesey Kiss & Ride: - Most of the site was dominated by post medieval quarrying, probably related to road construction, although some Early Roman activity, including a possible droveway ditch was identified towards the north end of the site.

Landscape and Ecological Mitigation Area (LEM) C: - Very limited archaeology was present here and none was dated earlier than the post medieval period.

LEM D: – Significant archaeology dated primarily to the Late Iron Age/Early Roman period, with some earlier elements, was present towards the northwest end of site. This included an enclosure, field boundaries and a dense area of ditches and other features which evidence suggests were near to a rural settlement.

Longstanton Park & Ride: - Very limited archaeology was identified within the trenched evaluation, however, the open area revealed a substantial Early Iron Age pit/well along with several other discreet features dating to this period.

LEM 1: – Elements of a post medieval field system were identified along with a possible late medieval curvilinear feature.

Arbury Park and in-track monitoring: - Significant quantities of finds, including several $3^{rd} - 4^{th}$ century AD coins, recovered from features at Arbury suggest the presence of a probable later Roman building within the immediate vicinity.

Long Road Construction site: - A limited amount of archaeology was revealed and included several small Late Iron Age ditches probably forming part of a field system and a number of post medieval ditches.

Addenbrooke's Link: (watching brief and open area) - Quite dense archaeology was identified in the open areas, however, much of it was either post medieval or undated. Three possible prehistoric ditches were also identified during the watching brief.

Shelford Road Compound: - Two primary phases of archaeology were identified, Late Bronze Age/ Early Iron Age and Late Iron Age/Early Roman. The LBA/EIA phase consisted of a possible structure lying outside a significant boundary/enclosure ditch which had evidence for an internal bank. The LIA/ER phase was primarily a field system, however environmental and finds evidence suggests settlement activity is very close by.

Introduction

The Cambridgeshire Guided Busway (CGB), the longest guided busway in the world, has been constructed in large part on the trackway of the former Cambridge to St. Ives railway. Work began in late 2006 and as part of the programme extensive archaeological work was undertaken in order to satisfy conditions placed on planning permission. The archaeological work was co-ordinated on behalf of BAM Nuttall by Steve Haynes of Arup (Archaeologist to the Design JV) and was monitored for the County Council Archaeology Office (CAPCA) by Andy Thomas, Senior Development Control Archaeologist. The work was carried out in accordance with a Written Scheme of Investigation by Arup (Haynes 2005) and a specification drawn up by CAU and approved by CAPCA (Dickens 2006).

Previous Work

A desktop assessment of the route was carried out in 2003, which broadly identified the potential for archaeological remains along the route (Arup 2003). Subsequently evaluation was carried out by CAU at 18 locations in 2003/4 (Cessford and Mackay 2004). In 2005 geotechnical test-pits were monitored along the route (Webb and Dickens 2005) and during 2006 hand dug test-pits were dug at specific locations to investigate soil cover and the potential for preservation *in situ* (Jones 2006).

The Archaeological Scheme

Based on the earlier results, and reflecting a number of subsequent design changes, ten locations along the CGB route were eventually designated for mitigation by excavation or to be evaluated in order to determine mitigation. The fieldwork was carried out between October 2006 and July 2008, as sites were made available. Specifically these were (from north to south):

- 1. Swavesey within track alignment (Jun/Jul 2008)
- 2. Swavesey Kiss & Ride (Jan/Feb 2007)
- 3. Landscape and Ecological Mitigation Area (LEM) C (Apr 2007)
- 4. LEM D (Nov 2006-Jan 2007)
- 5. Park & Ride (Oct/Nov 2006)
- 6. LEM I (Apr 2007)
- 7. Arbury Park (Sep/Oct 2007)
- 8. Long Road Construction Site (Jan/Feb 2007)
- 9. Addenbrookes Link (Mar 2007)
- 10. Shelford Road Construction Site (Feb/Mar 2007)

In addition to the 'set piece' sites archaeological monitoring was carried out on the contractor's groundworks along the entire length of the busway, commencing in December 2006. This included:

- Monitoring of geotechnical test pits along the entire route
- Monitoring of ballast stripping
- Monitoring of haul road construction
- Monitoring of service diversions and replacements
- Monitoring of track groundworks (e.g. pad foundations)

During monitoring archaeological remains pre-dating the post-medieval period were observed at relatively few locations; these have been incorporated into this report at the appropriate points. The later and railway related findings are covered in a second report focusing on the built and railway heritage aspects of the project (Dickens forthcoming).

Layout of Report

The report is divided into nine sections, arranged from north to south, the two Swavesey sites are together in Section 1. Where the monitoring revealed early findings these have been incorporated into the nearest site section. The specialist reports for each site follow at the end of each section. Figures, tables and appendices have a consecutive numbering sequence across the whole report.

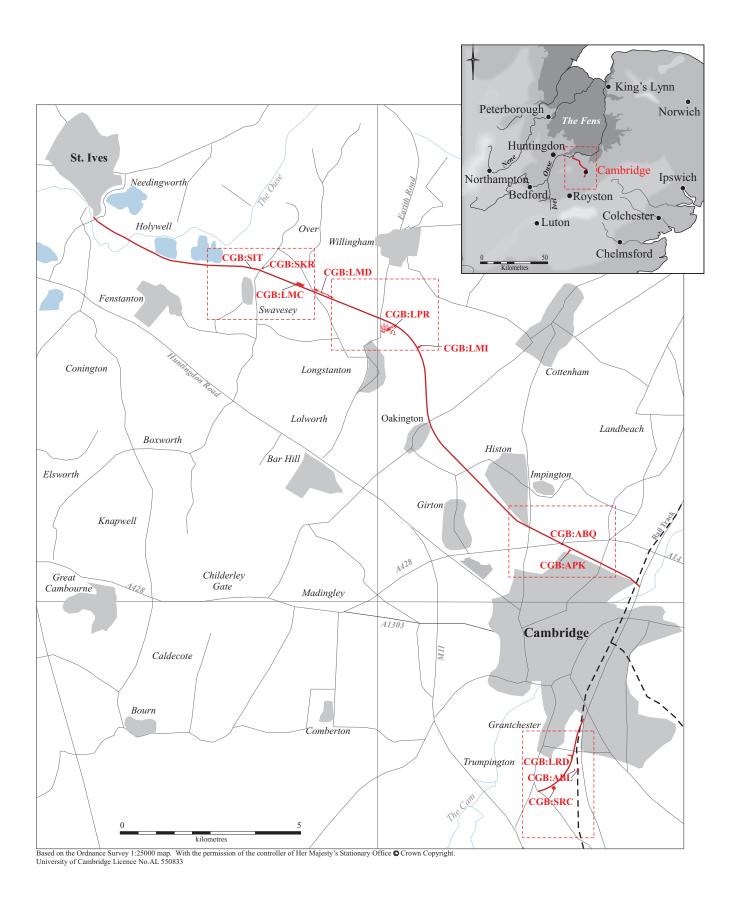


Figure 1. Site Location Plan

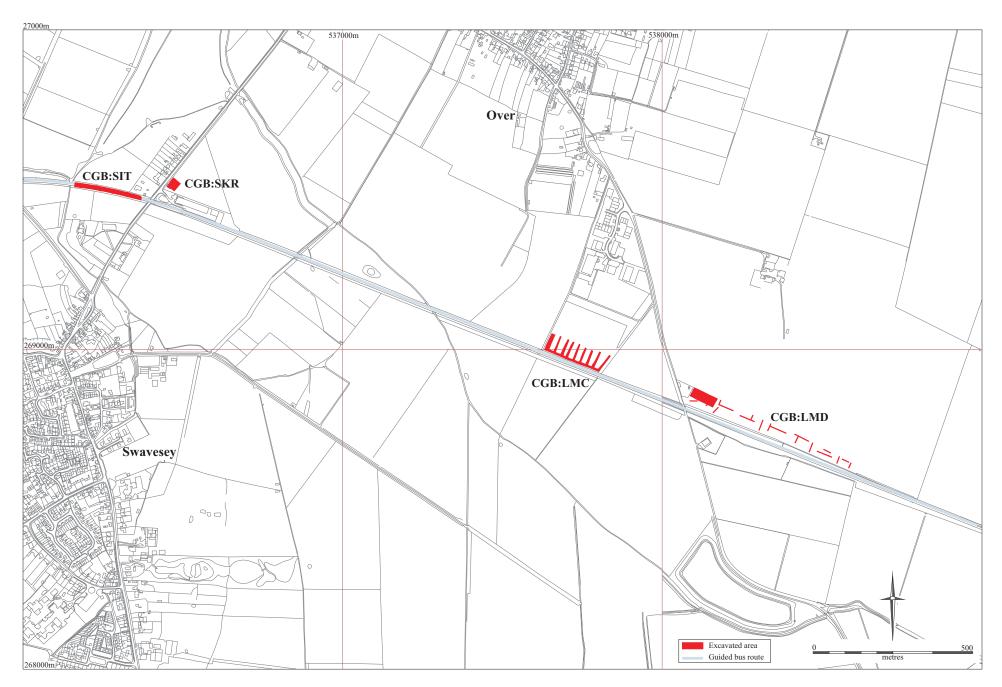


Figure 2. Plan of CGB:SIT, SKR, LMC and LMD $\,$



Figure 3. Plan of CGB:OCS, LPR and LMI

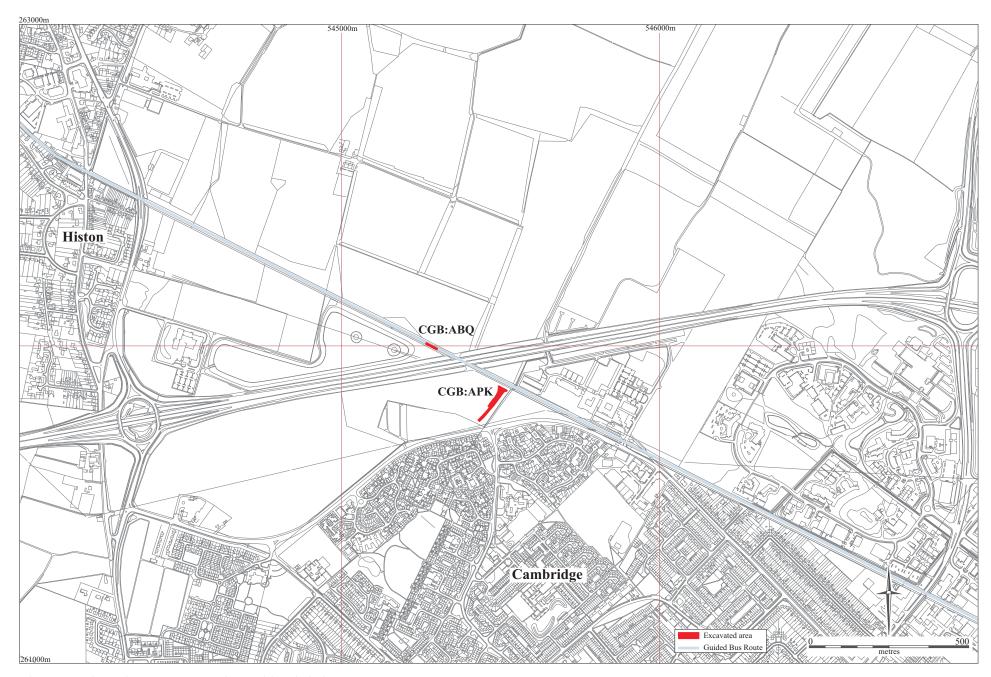


Figure 4. Plan of CGB:APK and watching brief CGB:ABQ

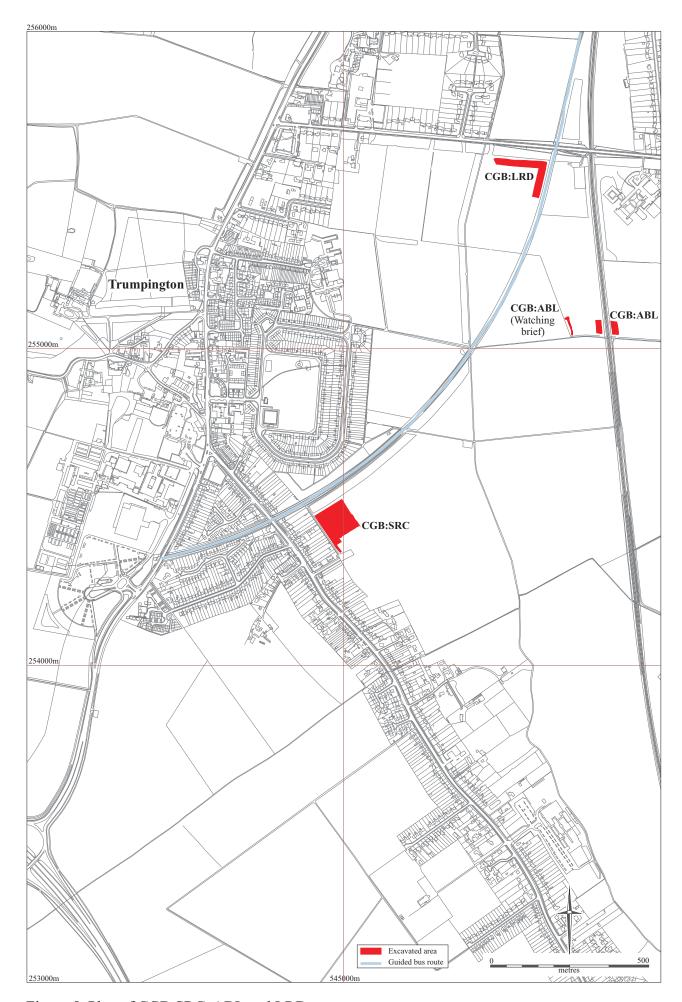


Figure 5. Plan of CGB:SRC, ABL and LRD

Section 1

Swavesey

General Location, Topography and Geology

The village of Swavesey lies on the fen edge approximately 10 miles northwest of Cambridge and is located primarily upon two 1st Terrace gravel islands, with the one to the north being smaller than the southern one. The islands rise to an approximate high of 15m OD, with the 4m OD contour correlating generally to the fen edge prior to drainage during the medieval and post medieval periods (Cambridgeshire County Council, 2001). Both CGB:SIT (Swavesey within track alignment) and CGB:SKR (Swavesey Kiss & Ride) were located on the northern periphery of the north gravel island (see Figure 2) at a height varying between 3.81m and 5.10 OD.

Archaeological/Historical Background

Swavesey has been subject to many archaeological investigations (Cessford & Mackay, 2004; Cooper & Kenney, 2001; Cooper & Spoerry, 1997; Evans, 1990; Roberts, 1998; Spoerry, 1996; Whittaker, 2001), and its history from the Saxo-Norman period onwards is also well documented, (Erlington, 1989). This background aims to give a brief summary of what is known.

The only pre Iron Age activity noted so far within the immediate vicinity is a low density scatter of worked Neolithic flint recovered at Blackhorse Lane that is sufficient only to suggest this landscape was not being densely utilised at this time. The earliest known settlement in Swavesey, also located at Black Horse Lane, has been dated to the Late Iron Age/Early Roman period, and included a (Belgic) kiln which is uncommon for this area, (Evans, 1990). No evidence for later Roman occupation has been identified to date within the village itself, however, a recent evaluation some 400m to the northwest discovered fairly dense Romano-British activity in the form of a droveway and accompanying enclosure ditches. This evaluation indicated the presence of an extensive area of agriculture attached to a significant rural dwelling/settlement dated to the later Roman period, (Murrell, 2007). The only other known Romano-British finds recovered within the vicinity are some pot and quern stone found c.500m to the west of the village (SMR 3481), and a quantity of pot discovered during drainage works on the Swavesey Drain, Mare Fen, just north of the village and some 200m northwest of the Kiss & Ride site (Evans, 1990).

Archaeological evidence suggests Swavesey village has been continuously occupied since Saxo-Norman times, and St. Andrew's, the parish church, is known to have its origins in the Late Saxon period. A Benedictine priory was built around the church grounds by 1086, the surviving earthworks of which can still be seen. These lie a mere 100m southwest of CGB:SKR and abutt the southern edge of CGB:SIT. The Domesday Book documents that at this time the population of the village was 65, however by the end of the 13th Century it is recorded as having grown to '212 holdings' equating to an estimated population of 1000 (Ravensdale 1984). The manor, located on the site of the current Manor Farm and some 150m to the south of the Kiss and Ride, changed hands several times within this time span, but it was

mainly under the Zouche family that Swavesey saw much of its growth. The building of a canal (known within the Fens as a 'Lode') from the River Ouse to the market place and establishment of a quayside (again, known locally as a 'hithe') together with the granting of a market and fair by Henry III in 1244 led to Swavesey becoming a locally important economic centre. For example; evidence shows both herring and marine shellfish were processed here in commercial quantities for use throughout the area (Spoerry 2005).

The construction date for the castle at Swavesey is unknown, however, it is acknowledged that a castle existed or had existed by 1476, because by then the area around 'Castle Mound' was known as the *castell croft* (Hall 1996). The presence of a castle demonstrates that Swavesey had grown sufficiently to become strategically and economically important enough to warrant it. Suggested dates and reasons for its construction are: campaign of Ely in 1070-71, the baronial unrest (or Anarchy period) of the 1140's (Erlington 1989; Ravensdale 1984) or the troubles in the late 13th century when the uprisings of Simon de Montfort led to the raiding of villages along the fen-edge (Taylor, 1998). More recent interpretations, however, tend to place the castle's construction within the Anarchy period of the mid 12th century (Spoerry 2005).

The construction of the railway in the 1840s led to the infilling of parts of the lode, leaving a pond adjacent to what is now Station Road and another one at Market Street. Swavesey's waterborne trade was such, however, that it was considered necessary to build the New Dock, which abuts the western edge of the SIT site. The actual route of the Lode into the centre of the village is not precisely known and it has been theorised that an off-shoot of it may have led to the Benedictine Priory, possibly crossing the SIT site, and may still be visible today as an earthwork (Cambridgeshire County Council 2001).

There are also several dated and undated sites listed on the Cambridgeshire Historic Environment Record (CHER) which bear some relevance to these two sites and their potential for archaeology. CHER 08897, some 200m southeast of the level crossing that divides CGB:SIT and SKR, is purported to be the location of Swavesey Manor and its associated structures. CHER 09128 which lies directly adjacent to the northern edge of excavation for the SIT site was identified through aerial photography and seemingly consists of possible enclosures and trackways that have been tentatively dated to the medieval period and linked to the Benedictine Priory.

The archaeological and historical evidence to date shows the potential for significant archaeological remains anywhere within or on the periphery of this village dating from the prehistoric through to the post medieval and modern periods.

Methodology

Both sites at Swavesey were excavated by tracked 360° machine using a 2.20m wide toothless ditching bucket. The Kiss and Ride site was excavated in two halves because the restricted nature of the site limited areas for spoil storage. All work was carried out in strict accordance with statutory Health and Safety legislation and with the recommendations of SCAUM (Allen and Holt 2002).

Swavesey within Track Alignment (CGB:SIT)

Introduction

Location, topography and geology

The within track site is located at the north end of Swavesey, Cambridgeshire, on land formerly occupied by the disused railway. It is bounded by the site of a Benedictine priory to the south (CHER 03488), Station Road to the east, agricultural land to the north and the disused railway to the west. The excavation area was 0.28 hectares in size (*c*.200m in length by 14m wide) and centred on NGR 536268/269497, (see Figure 6).

The site lies upon marginal land on the edge of the northern, smaller island. The site slopes upwards from a height of 3.81m OD at the west end to 5.01m at the east end. Sloping downwards from c.4.30m OD the geology changed from mixed gravel and sand to a thin band of natural sand overlaying blue/grey clay.

Archive

A total of 338 contexts and 77 features were excavated and recorded and finds including prehistoric, Roman and post medieval pot, animal bone, flint, brick, tile, tobacco pipe and artefacts related to the railway were recovered. The documentary and photographic records and accompanying artefacts have been assembled into a catalogued archive in line with Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeological Unit offices. CHER number is ECB 3203

Results

Most of the archaeology identified on this site lay underneath up to 1.50m of overburden, with the western end of site having significantly more than the eastern end (see Figures 6 and 7). The overburden was made up from several different layers including an upper layer of railway ballast up to 0.30m deep and, underlying this, a layer of compacted yellowish sand and gravel up to 0.50m deep. Towards the western end of site additional layers were present including a dark grey band of clay up to 0.20m deep, a buried soil up to 0.23m and a layer of disturbed natural up to 0.15m deep. The increasing depth of overburden appeared to coincide with the relative drop in the land level, presumably built up to maintain a level bed for the railway track.

Four different phases of activity were identified within the excavation area. These included; Early Bronze Age, Late Iron Age/Early Roman, medieval/early post medieval and post medieval/modern in the form of railway related activity. A significant number of features also contained no dating evidence, however many of these have been ascribed to a particular phase due to several factors including fill type, feature profile, and in the case of undated ditches, their alignment compared to that of other, dated ditches.

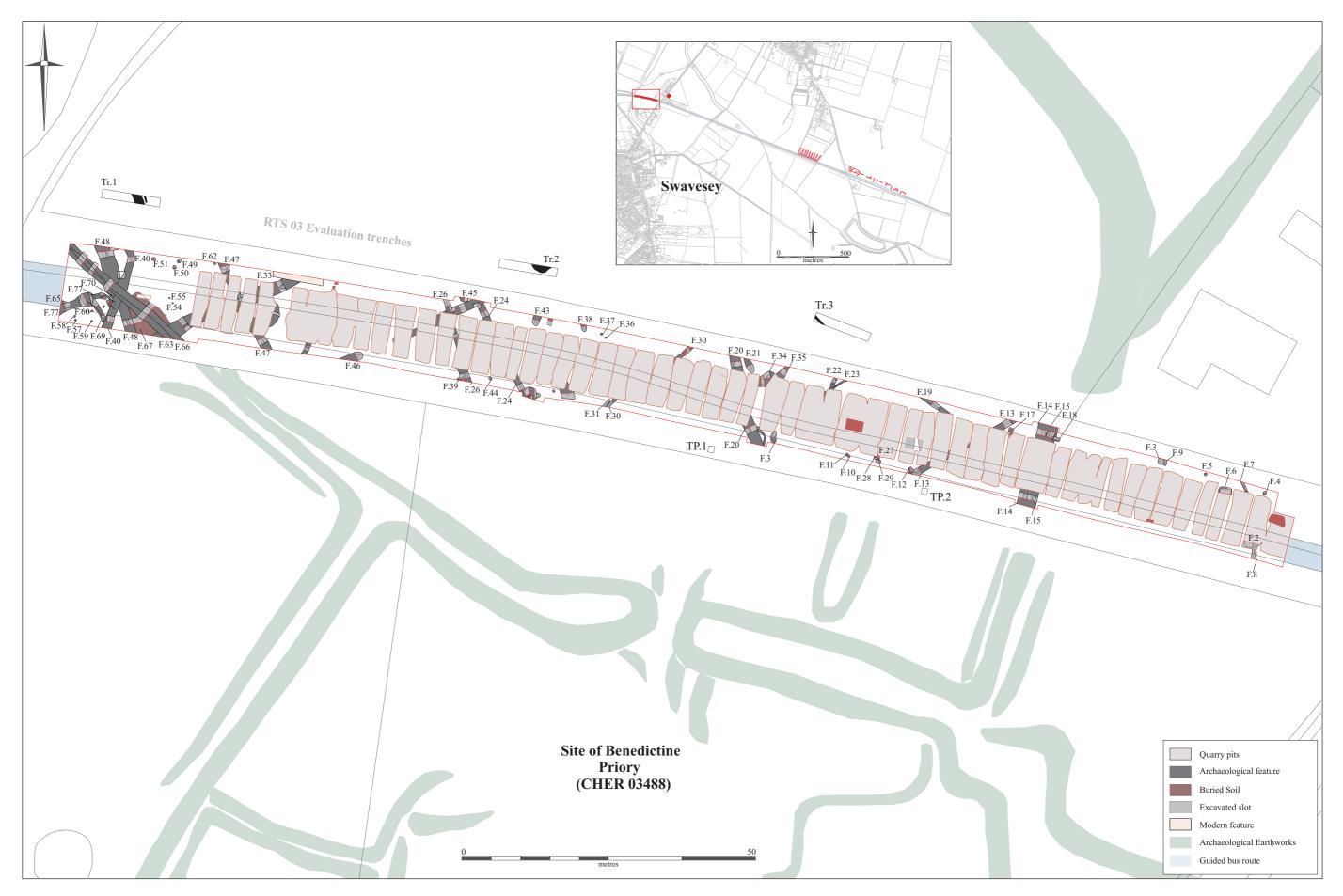


Figure 6. Plan of site CGB:SIT

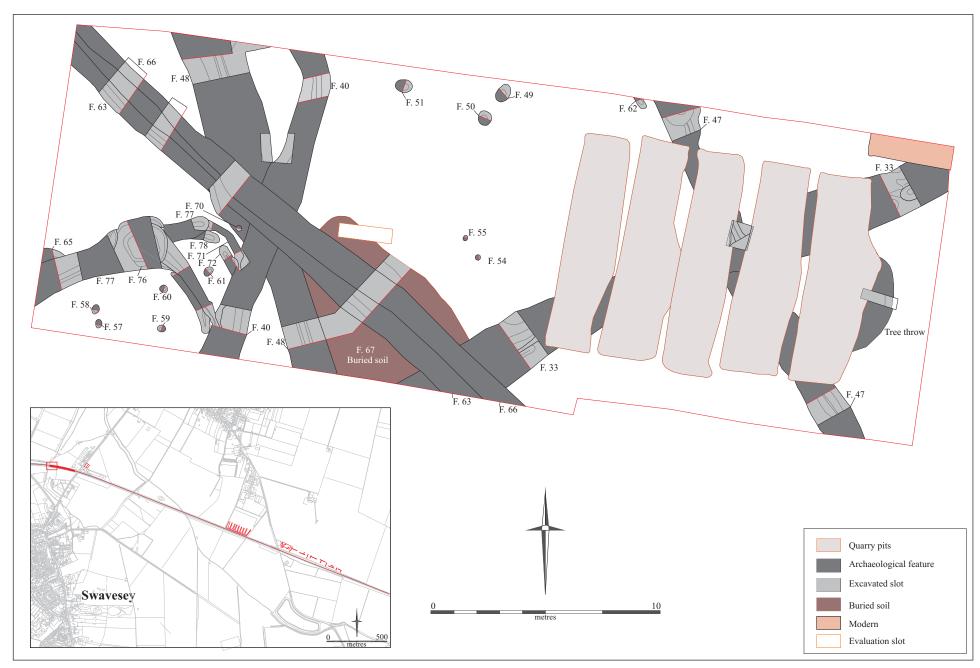


Figure 7. Plan of CGB:SIT

Prehistoric

Three small pits (F.49, F.50 and F.51), were, by virtue of comparing and contrasting the ranges of both pot and flint dates, ascribed to the Early Neolithic period. They were grouped relatively close together towards the northwest end of site and all three shared similar characteristics and fills. Steep sides led to rounded bases and they were all of a similar size, except F.51, which was slightly deeper and contained a significant amount of degraded pot, much of which, due to its condition, could not be retrieved, (see Appendix 1). The fills were generally pale to mid grey sandy silt, very similar to that which constituted the buried soil that survived on parts of the site, suggesting a similar date. A bulk environmental sample taken from F.51 did however show the presence of oats, a crop introduced to Great Britain during the Roman period.

The 35 flints recovered from across the site were primarily residual within later features, (see Appendix 5), but all diagnostic pieces dated to either the Late Mesolithic or Early Neolithic which, together with the three pits suggest the area was certainly utilised to a certain degree during that period.

Late Iron Age/Early Roman

Features attributed to this period included a series sixteen ditches (F.7, F.13, F.19, F.20, F.21, F.24, F.25, F.26, F.30, F.33, F.40, F.46, F.47, F.48, F.64 and F.74), almost all of which were either on a northeast-southwest or northwest-southeast orientation. There was also three probable ditch termini, again either orientated northeast-southwest or northwest-southeast (F.31, F.38 and F.39), a curving ditch, F.35, four pits, F.32, F.34, F.65 and F.75 and a possible beam slot (F.62) that was adjacent to, and parallel with, ditch F.47. Grouped towards the southwest corner of site was a group of five curving gullies and gully segments (F.68, F69, F.71, F.72 and F.73, all of which were truncated by ditch F.40. Also present were six postholes (F.57, F.58, F.59, F.60, F.61 and F.70) and two stakeholes lying adjacent to each other (F.54 and F.55). The postholes were primarily grouped in the southwest corner of site and potentially represented part of a structure, this is however difficult to determine definitively due to the limited extent of the excavation area.

Most of the ditches, and the probable ditch termini, shared a relatively common fill type of pale to mid, grey and brownish grey sandy silt with occasional gravel and charcoal inclusions. Also, although their average width varied between 0.70m (F.19) and 2.03m (F.20) and their depth between 0.23m (F.26) and 0.85m (F.21) the profiles were very similar with most having steep sides leading to a fairly narrow rounded base. Furthermore very few finds were recovered from any of them. Two of the ditches however (F.33, F.48) were more substantial (see Figure 8a showing F.48 profile) and possibly formed the sides of an enclosure, one corner of which was partially exposed against the northern edge of excavation (F.48). The fills of both these ditches were very similar, being mainly dark grey sandy silts with lenses of almost black organic matter suggesting a previously wet environment. Both ditches also contained small quantities of finds that included pot, tile (including floor tile), animal bone, burnt clay and worked flint. Ditch F.40 was also slightly more substantial than average and possibly represents the last phase of Roman activity on

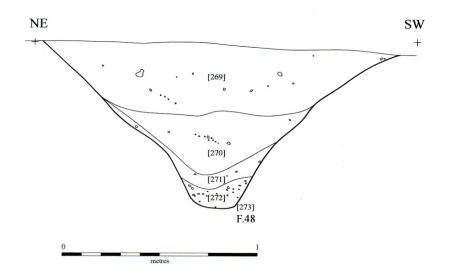


Figure 8a. Section of F.48, a Late Iron Age / Early Roman ditch (CGB:SIT)



Figure 8b. Photograph of F.76; a Late Iron Age / Early Roman well (CGB:SIT).

this site as it cuts the series of curving gullies and the possible enclosure formed by ditches F.33 and F.48.

Ditch F.35 appeared to turn almost 90 degrees from a northeast-southwest orientation to east-west before either terminating or joining with ditch F.20. However both ditches have been heavily truncated by railway related quarry pits at this point so their actual relationship is ambiguous. Pit F.34 was cut into the corner of this ditch but again was truncated by the quarry pits.

F.76 was an oval shaped, probable well with vertical sides that levelled off on the north side to form a step before becoming vertical again (see Figure 8b). The excavated half section contained the most pot obtained from any feature dating to this period on site, 20 sherds that included 18 from a single vessel (see Appendix 2). It was cut by several features including ditches F.64, F.68, F.77 and pit F.75 and therefore probably represents one of the earliest phases of Roman activity on this site.

Medieval/Early post medieval

Only four features were dated to this period, ditches F.14, F.15, F.63 and F.66. Ditches F.14 and F.15 were parallel to each other on a north-south alignment and shared a capping fill which meant no relationship could be determined (see Figure 10 for their profile). These ditches are visible as an earthwork in the field directly to the south (Figure 9) and have been interpreted as being related to the Benedictine Priory whose remains are located within this field. To the north, maps dated to the 1960's suggest the ditches continued northwards before turning northwest, possibly forming part of an enclosure, however agricultural activity since that time has removed this evidence. F.14 was quite substantial, averaging 1.65m wide and 0.96m deep where as F.15 was smaller and shallower and averaged 1.45m wide and 0.38m deep.

Ditches F.63 and F.66 were also parallel to each other, but on a northwest-southeast alignment. These two features were also visible as an earthwork in the field to the south (Figure 9) and again were probably associated with the Benedictine Priory. F.66 was the later of the two and cut F.63. F.63 averaged 0.83m wide whilst F.66 averaged 1.1m wide, but both got progressively shallower towards the northwest before F.66 became completely truncated away in the northwest corner. Neither contained any finds.

All four ditches were probably still visible as earthworks prior to the construction of the railway and were almost certainly backfilled as part of the construction process, as evidenced in ditches F.14 and F.15 by the topsoil derived backfill that constituted the upper fills and capping layer, which contained mid 19th century finds in the form of decorated tobacco pipe, ceramic pot, brick and tile. The only finds recovered from the lower fills, which consisted of natural silting and weathering, were animal bone.

Railway related activity

Of the 200m length of this site approximately 180m was dominated by a succession of rectangular quarry pits which truncated much of the site, leaving around 2m clear on either side. Furthermore, the middle of these quarry pits, which had been lying directly underneath the former rail bed, was contaminated by a substance/substances





Figure 9. Photographs of F. 15 and F. 63 showing them still visible as earthworks in the adjacent field

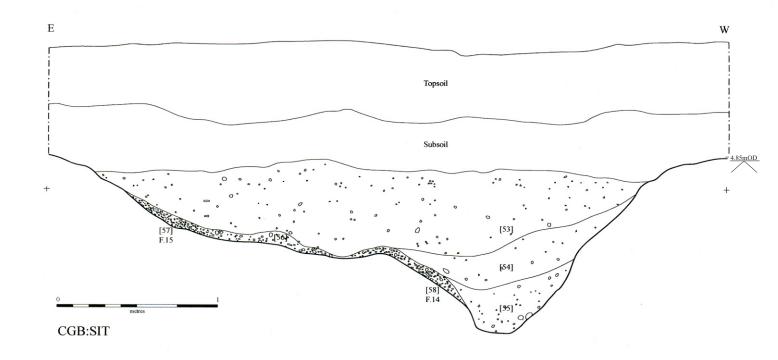


Figure 10. Section of ditches F.14 and F.15 which are linked to the Benedictine Priory earthworks



Figure 11. Photograph showing railway related quarry pit

that had rendered the ground a mid blue colour, although this contamination only appeared where the quarry pits were present. The quarry pits ceased at the point where the geology abruptly changed from gravel/sand mix to a thin band of sand which overlay blue/grey clay.

In light of the contamination, only the ends of two of these pits, located at the eastern end of site, were fully excavated to any depth (F.2 and F.6) and two others were partially excavated to determine relationships (F.17 and F.27). These slots showed the pits reaching depths of up to 1.62m (F.2) and were quite consistent in profile, with each having almost vertical to undercutting sides leading to a flat base, (see Figure 11). The fill was also quite similar in most of the pits (except where it had been contaminated), being generally mid to dark greyish brown silty sand with occasional gravel inclusions and very few finds, which primarily included small brick fragments. The relatively uniform nature of the fill and the lack of finds suggest that after the sand and gravel had been extracted from the pits they were backfilled quite rapidly. The sand and gravel that was extracted appeared to have been used to form a layer of compacted sub ballast that was placed beneath the ballast layer the rails and sleepers were placed upon.

Several other features relating to the railway were also identified, and included a series of substantial postholes located on the northern side of the rail line for telegraph poles (F.6, F.9, F.18 and a further one which was not recorded). Two of these postholes F.9 and F.18 still contained part of the pole. Associated with the postholes were small rectangular pits that were probably dug to help in the raising of the original poles. Other probable railway related features were a small rectangular pit (F.28), a partially exposed circular, clay filled pit (F.45), two square post holes and a large, rectangular, clay filled feature which were neither excavated nor recorded.

Three 1m² test pits (TP 1-3) were also hand dug within the area of the former crossing keepers cottage (F.1) at Middle Fen level crossing, some 200m west of the excavation area. These showed very little remained of the cottage or its foundations apart from some disarticulated building rubble and other debris.

Undated

Undated features included seven postholes (F.5, F.10, F.11, F.12, F.36, F.37, F.42), five small pits (F.29, F.32, F.41, F.44, F.56), a possible pit/ditch terminus (F43) and a small gully (F.23).

Posthole F.10 was cut by posthole F.11, but they are probably relatively contemporary. The fill types were very similar and comparable to the nearby features F.12 and F.29 suggesting they are all of the same period. Both F.10 and F.12 contained small undatable brick fragments suggesting these features may be post-medieval in date.

Discussion

The construction of the railway, and in particular the digging of the quarry pits as part of that construction, has clearly had a substantial impact upon earlier archaeological

activity. As, however there was generally c.2m clear on either side of the railway related quarry pits it was quite easy to determine the nature of most linear features present here. It is possible however the intensive quarrying has removed evidence for discrete features such as postholes and pits, still, the nature of the archaeology does tend to suggest it was not within a settlement or dense occupation area so it is more likely that little significant archaeology was lost. The other problem created by the quarrying is that it has obscured the relationship between several linears (such as that between ditches F.20 and F.35); however, because most of the linear features appear to be broadly contemporary, this again has not hindered the interpretation of this site to a great degree.

The presence of oats within an environmental sample taken from pit F.51, one of three small pits ascribed to the Early Neolithic, was unexpected as this is a crop species introduced into Great Britain during the Roman period. However, it was noted a high concentration of later intrusive material, for instance roots, were present within the sample suggesting a certain degree of bioturbation or soil disturbance making it likely the presence of oat can be attributed to these factors. The possibility does remain however that these features are potentially later.

Most of the pre railway archaeology identified dated to the Late Iron Age/Early Roman period; however due to the narrowness of the site it is difficult to definitively state the exact nature of this activity. It is likely though the ditch system present here. particularly those ditches within the eastern ³/₄ of site represent a field system on the fen edge linked to the agricultural practices of a rural settlement. The relative lack of finds from these features supports the view they were some distance from actual settlement activity. The denser activity present at the western edge of site is of a slightly different character and would appear to comprise of a possible enclosure (formed by ditches F.48 and F.33 whose profile and fill type strongly suggest they are the same feature), a braided gully system, whose purpose could have potentially been to drain water away from the possible structure that the postholes in the southwest corner of the site form part of, and a well. These features again revealed a relative paucity of material culture suggesting the area was not utilised for settlement specifically. However, environmental samples taken from both F.33 and F.48 revealed significant quantities of crop processing waste that was deliberately discarded into these ditches (see Appendix 6) and when looked at in conjunction with the cattle and other domestic and wild animal remains could indicate an area used intensively for the processing of agricultural produce.

Analysis of the animal bone (see Appendices 3 and 4) recovered from both the In—Track site and Kiss & Ride site showed a high percentage of cattle, along with other domestic and wild species, but a complete absence of both sheep and goat. This suggests the site was, perhaps, not suitable for the husbandry of these species due to the location of such a site so close to the fen edge, as ovicaprids are highly susceptible to conditions like foot rot, particularly in wet environments. This is supported in part by the pollen analysis (see Appendix 8) that showed ditch F.48 containing moss spores and alder pollen in the lower fills, both of which thrive in damp or wet conditions.

The presence of so much archaeology that predated both the railway and the medieval period was unexpected and has raised the possibility of a substantial Late Iron

Age/Early Roman settlement being sited within the immediate vicinity, indeed it is plausible, because of the need to build on any elevated land within this very low lying area, the site of the Benedictine Priory and St Andrew's Church could in fact have been constructed on top of a settlement dating to that period. This also raises the possibility that not all of the surviving earthworks seen in the field to the south are related to the priory and some may in fact be earlier. This possibility is negated slightly by the fact that no continuation of the Late Iron Age/Early Roman ditches was observed by eye within that field, and the only continuous visible features (i.e. ditches F.15/16 and F.63/66) were dated to the late medieval/early post medieval period. However a detailed contour survey of these fields in the future may help to resolve this issue.

It is also possible that the cropmarks identified by aerial photography in the field directly to the north (CHER 09128), that had previously been tentatively dated to the medieval period and associated with the priory, are in fact much earlier and possibly Late Iron Age/Early Roman. Archaeological investigation would be necessary before an accurate date for them can be determined.

Prior to this excavation it was believed that an off-shoot of the canal or 'lode' which extended into the centre of Swavesey may have crossed the SIT site (Cambridgeshire County Council 2001). However, this has proved not to be the case, with the most likely pre excavation candidate, ditches F.63 and F.66, turning out to be far too shallow, lacking the appropriate form and showing no evidence of water lain or waterlogged deposits. So if indeed there was an offshoot leading to the priory it must be located further to the west.

The archaeological evidence from this site has helped to highlight that settlement of the north end of Swavesey did not begin with the Saxo-Norman period but was in fact, much earlier. Indeed, this site has raised the possibility that the gravel islands which later became the medieval town of Swavesey, were substantially utilised during the Later Iron Age and Roman periods.

Swavesey Kiss and Ride (CGB:SKR)

Introduction

Location, topography and geology

The Kiss and Ride site is located at the north end of Swavesey, Cambridgeshire, on land off the Over Road. It is bounded by the MG Owner's Club Garage to the south, Over Road to the west and open fields to the north and east. The excavation area was 0.09 hectares in size and the southwest corner was NGR: 536450/269508 (see Figure 12).

The Kiss and Ride is on marginal land at the edge of the northern, smaller gravel island at a height varying from 4.1m OD in the northwest corner to 4.6m OD in the southeast corner.



Figure 12. Plan of CGB:SKR

Archive

A total of 179 contexts from 33 different features were excavated and recorded and a small number of finds, including pot, animal bone, worked flint, a millstone grit quern fragment, ceramic, brick/tile and tobacco pipe were recovered. The documentary records and accompanying artefacts have been assembled into a catalogued archive in line with Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeology Unit offices. CHER number is ECB 2523.

Results

This small open area excavation identified two primary phases of activity; Late Iron Age/Early Roman and post medieval. Post medieval activity consisted of a probable boundary ditch that was later superseded by intensive gravel quarrying. The western half of site was dominated by a series of these quarry pits, 19 of which were excavated to some degree (see Figure 12).

Late Iron Age/Early Roman

The Late Iron Age/Early Roman activity identified was concentrated towards the northeast end of site and centred on a northwest-southeast orientated ditch, F.5, which had several re-cuts, including F.6, F.21 and F.32 and a parallel gully, F.28. In the far northeast corner a possible second Roman ditch, F.26, was identified, and, although only partially exposed, would appear to be parallel to F.5. These two apparently parallel ditches had an approximate gap of 9m between them.

Post medieval

The quarry pits were orientated northeast-southwest, the same alignment as Over Road. All of the quarry pits excavated were also very similar in size and profile, generally being rectangular in shape with very steep or near vertical sides leading to a flat base (see Figure 13a). Furthermore the fill sequence was also uniform, with upper fills consisting of either redeposited yellowish orange sand with frequent small gravel inclusions or mid greyish brown sandy silt with rare small gravel inclusions. The lower fills primarily consisted of mid to dark grey, slightly clayey, sandy silts with frequent black rotted organic material and rare small gravel inclusions. Very few finds were recovered from any of the excavated quarry pits, although sufficient dating evidence was retrieved to place this activity within the 1800's.

Post medieval layers

A total of 29 different layers were identified lying above the quarry pits at varying points, [3-18], [36], [62-67], [132-133], [145-146], and [160-161]. These layers were not present on the eastern half of site, where there was comparatively little archaeological and quarrying activity, and as a result the depth of the excavation area varied quite significantly. For example, in the northwest corner, where quarry pits were present, depth of deposits was up to 1m, whereas in the southeast corner, depth of overburden was only 0.4m.

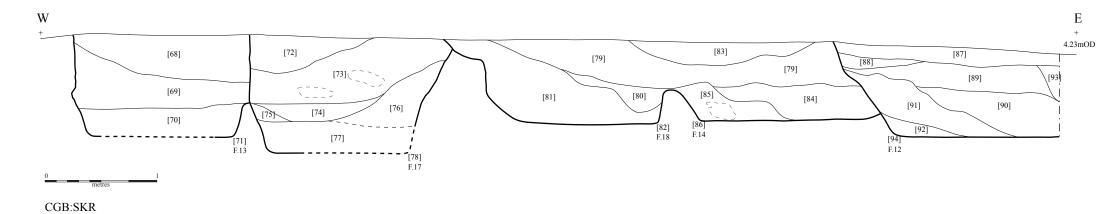


Figure 13a. Section of Post-Medieval quarry pits F. 12, F.13, F.14, F.17 and F. 18.

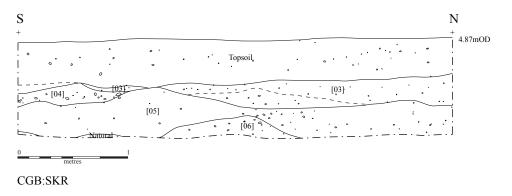


Figure 13b. Section of Post Medieval build-up layers.

The layers were typically made up of mid to dark brown, greyish brown or orangey brown sandy, slightly clayey, silts with generally very few inclusions. Several, including [36], yielded post medieval pot/ceramic and tile. Figure 13b shows several of these layers as they were seen in the northwest edge of excavation.

Auger survey results

A limited auger survey was carried at 5m intervals along the northwest edge of site (see Figure 12) in order to determine the depth of the quarry pits present here, the results of which are shown in Table 1 below.

Auger Survey Point	Coordinates	Relative Depth of Deposits
One	1010/2000	1.40m
Two	1010/2005	0.95m
Three	1010/2010	0.65m
Four	1010/2015	1.0m
Five	1010/2020	1.10m
Six	1010/2025	0.70m

Table 1: Showing results of limited auger survey.

Discussion

With a gap of c.9m between them, it is possible the Roman ditches represented a droveway or trackway, although a lack of metalling and the sizable distance between the ditches would seem to discount them as defining a trackway. Furthermore, features F.5 and F.32 have very similar dimensions and profiles to other droveway ditches dated to the Roman period that have been excavated locally, such as those located on land at Freisland Farm, Swavesey (Murrell 2007).

The lack of finds recovered from the few Late Iron Age/Early Roman features identified here indicates they are some distance from any settlement, an interpretation supported by the results from bulk environmental samples taken from two of the ditches (Appendix 7). The relative proximity to the similarly dated activity located across the road at CGB:SIT would tend to suggest though that both these sites are probably linked, however without further work this would be difficult to ascertain for certain. The only other known Roman finds within the immediate area was the presence of some $1^{st} - 2^{nd}$ century pot that was discovered during drainage works on the Swavesey Drain at Mare Fen, some 200m to the north, (Evans 1990). An alternative location for any settlement these features could be related too, for example to the east of the site, can almost certainly be discounted as trenches approximately 150m away in that direction uncovered no archaeology dated older than post medieval (Cessford & Mackay 2004). Similarly, although much of the southern end of site has been quarried away, and one can assume this carries on southwards outside of the excavation area, the complete lack of residual finds from the extensive slots excavated into the quarries would support the notion no significant archaeology was present here prior to the quarrying.

The quarrying seen here was clearly well organised, as the pits were set out in rows and generally appear to respect each other. Indeed, the fill sequence seen in the long

excavated sections suggests they were dug from west to east, with one pit being backfilled with material from the latest pit. In most of the quarry pits excavated, there were significant dumps and layers of redeposited material consisting of sand and fine/small gravels, and as the natural here consists of seemingly good quality 1st Terrace gravels, generally up to 60mm in size, it is apparent the quarries were dug to obtain this larger grade of gravel, with the finer material being largely discarded.

The purpose of the gravel extraction is not documented, however, the quarry pits appear to be aligned with the current Over Road and it is not unreasonable to assume they were dug to obtain ballast in order to build up and maintain this road when it was first constructed. Bearing in mind this road crosses Mare Fen on its course between the villages of Swavesey and Over, and would need to have been raised above this land in order to keep it dry. It is not exactly known when this road was constructed, however, it wasn't in place prior to 1838, as the only road at this end of the village terminated at St. Andrew's parish church, but it does appear on later 19th century maps (Erlington, 1989). Another possible purpose for the quarrying seen here is for the use as sub ballast on the railway. The quarry pits here are on a similar scale and have comparable profiles to those seen at CBG:SIT; however, the quarrying observed along much of the length of that site was strictly defined by the width of the railway, with no expansion outside of that corridor to follow gravel seams, therefore it seems unlikely the activity at CGB:SKR was railway related.

This type of strip quarrying on a moderately large scale was also observed at Amen Corner in Swavesey. Here it was aligned on a northwest-southeast axis unlike those at the Kiss and Ride site which were northeast-southwest orientated; however a possible reason for such quarrying at Amen's Corner was not determined. This does help demonstrate however that Swavesey has clearly been subject periodic episodes of fairly intensive gravel and/or sand quarrying, particularly during the post medieval period.

Local sources have stated that the western half of the site has in the past been slightly lower than other parts of the field and subsequently, due to the low lying nature of the area, quite boggy. This was apparently rectified over the years by the continuous dumping of various deposits here in order to build up the level of the land. This part of the site is where the quarry pits are concentrated and was almost certainly lower than the rest of field because the natural gravels would have been laterally truncated by the dense quarrying activity. The deliberate build up of land over a period of time would explain the presence of so many different layers that were present here.

This site has helped highlight the intensive nature of sand and gravel extraction during the post-medieval period in Swavesey, and has also raised the possibility for a hitherto unknown Late Iron Age/Early Roman presence within the immediate vicinity.

Appendix 1

Prehistoric pottery (CGB:SIT) – Mark Knight

Feature F.51 [196] produced 13 fragments of pottery weighing 18g (MSW 1.4g). All 13 sherds shared the same fabric (medium hard with frequent small rounded voids) and the same leached and iron encrusted condition. Essentially the assemblage was made up of 13 plain body sherds with a corky or vacuous appearance and minus original surfaces. Lightweight corky fabrics are common in prehistoric pottery and therefore are not particularly helpful when it comes to pinning down a pottery type. This small assemblage could represent the degraded remains of an Early Neolithic bowl, a Grooved Ware (Clacton sub-style) vessel or a Deverel-Rimbury Urn. All that can be said with any confidence is that the sherds are prehistoric and probably belong to the Neolithic or Bronze Age.

Appendix 2

Late Iron Age and Roman pottery (CGB:SIT & SKR) - Katie Anderson

The two assemblages yielded a total of 81 sherds of Late Iron Age and Roman pottery, weighing 885g and representing 0.99 EVEs. Because of the close proximity of the two sites, the pottery data has been combined. All of the material was examined and details of fabric, form, decoration, usewear and date (where possible) were recorded, along with any other information deemed important.

Assemblage Composition

The pottery was generally small to medium in size. A variety of vessel fabrics were recorded (see Table 2), the most commonly occurring being the sandy greywares, which is typical of a Roman assemblage. Reduced sandy wares were also well represented. Most of the fabrics are likely to have been locally produced, although the exact source is unknown. The exceptions to this were the two South Gaulish Samian sherds.

Fabric	No.	Wt(g)
Black-slipped ware	3	48
Buff sandy ware	1	6
Coarse sandy greyware	44	459
Grog-tempered ware	6	109
Oxidised sandy ware	3	18
Reduced sandy ware	20	179
South Gaulish Samian	2	21
Whiteware	3	51
TOTAL	82	891

Table 2: All pottery by fabric

The number of vessel forms was limited (Table 3), which is largely due to the size and condition of the assemblage. Jars were well represented, although only a minimum of five vessels were recorded. This comprised two necked, beaded rim jars, two everted rim jars and one flat-topped beaded rim jar. The remaining diagnostic

sherds comprised a sherd from a South Gaulish Dragendorff 18/31 dish and a whiteware flagon.

Form	No.	Wt(g)
Dish	1	6
Flagon	1	33
Jar	35	479
Non-diagnostic	44	367
TOTAL	81	885

Table 3: All pottery by form

Feature Analysis

Most features contained fewer than ten sherds, with the exception of three features. Feature 33 contained the largest quantity of pottery, with 22 sherds, weighing 270g. This included the two Samian sherds, the flagon handle and a minimum of three coarseware jars. The pottery from this feature ranged in date from the mid 1st-2nd century AD, and included some Late Iron Age/early Roman material and some early Roman pottery.

Feature 48, which is part of the same enclosure, contained 20 sherds, weighing 166g. The pottery was primarily Late Iron Age/early Roman in date, and included several grog-tempered and reduced-sandy sherds. There were a small number of sherds which could only be dated Romano-British; although given the nature of the assemblage an early Roman date seems most likely.

Feature 76 contained 20 sherds, weighing 185g, which included 18 sherds from a single vessel, a sandy greyware jar with a combed band of decoration, dating to the early Roman period.

Discussion

The assemblage primarily dates to the Late Iron Age/early Roman period, with no evidence of activity after early/mid 2nd century AD. The assemblage included Late Iron Age pottery occurring alongside 'Romanising' and early Roman material. In Cambridgeshire this is not uncommon (Anderson in Evans 2008) and there is evidence of pottery made in the Late Iron Age tradition continuing beyond the Roman conquest and the introduction of 'Romanised' pottery. This therefore suggests the site peaked around *c*. AD50-70, although occupation may have gone on until the early/mid 2nd century AD. The pottery is typical of a small rural site, with a small range of vessel forms present (largely due to the condition of the assemblage). The presence of the two Samian sherds implies that the site had access to wider trade networks, although the majority of the pottery is likely to have come from the immediate local area.

Appendix 3

Faunal Remains (**CGB:SIT**) – *Krish Seetah*

Introduction

The assemblage as a whole totalled some 218 assessable fragments (557 were recovered); 159 were identified to element and species group (73%) and 109 (50%) further identified to species.

Methodology

The zooarchaeological investigation followed the system implemented by Bournemouth University with all identifiable elements recorded (NISP: Number of Identifiable Specimens) and diagnostic zoning (amended from Dobney & Reilly 1988) used to calculate MNE (Minimum Number of Elements) from which MNI (Minimum Number of Individuals) was derived. Aging of the assemblage employed a combination of Grant's (1982) tooth wear stages and fusion of proximal and distal epiphyses (Silver 1969). Metrical analysis followed von den Driesch (1976). Elements from sheep and goats were distinguished, where possible, based on criteria established for the post-cranial skeleton by Boessneck (1969) and teeth by Payne (1985) and Halstead *et al* (2002). Identification of the assemblage was undertaken with the aid of Schmid (1972) and reference material from the Cambridge Archaeological Unit, the Grahame Clark Zooarchaeology Lab, Dept. of Archaeology, Cambridge and the Zoology Museum, Cambridge. Taphonomic criteria including indications of butchery, pathology, gnawing activity and surface modifications as a result of weathering were also recorded when evident.

Results

Condition of the assemblage: preservation & fragmentation

The assemblage was hand collected and overall exhibited moderate to good preservation. Of 23 separate contexts studied for this site six were 'Poor' indicating that extensive weathering, bone surface exfoliation and other erosive damage had occurred to the bone. In contrast, 17 contexts showed 'Moderate' or 'Good' levels of preservation. The actual overall state of preservation is best illustrated when we observe the specific numbers of fragments that these figures correspond to: just 20 (9%) bones showed a level of preservation that was poor, compared to 198 (91%) bones that were moderate to good. Erosion and weathering, combined with post-depostional fragmentation, affected 8% of the bone (17 elements).

Species representation

The domesticates were the most abundantly recovered fauna. Cattle were overwhelmingly the best represented of the 'food species' within the context of NISP (Number of Identifiable Specimen) accounting for 81 fragments, or 74.3%, of the overall identified assemblage (refer to Table 4). In contrast, ovicaprids were conspicuously absent. Pig was recovered in small numbers by comparison, with only

three fragments (2.7%) recovered. The MNI (Minimum Number of Individuals) for these species is perhaps more representative and was calculated as showing at least two cows and one pig. Of the non-food domesticates dog and horse were both present on site; dog accounted for 9.2% (ten fragments) and horse for 6.4% (seven fragments) of the overall assemblage respectively. Considering the size of the assemblage, wild species were well represented. Badger and hare were both represented. The bird component was less promising with one element of goose recovered. No fish or small mammal remains were recorded.

SPECIES	NISP	%NISP	MNI
Cow	81	74.3	2
Dog	10	9.2	1
Badger	6	5.5	1
Pig	3	2.7	1
Horse	7	6.4	1
Hare	1	0.9	1
Goose	1	0.9	1
ULM	25	15.7 (Σ=159)	-
UMM	25	15.7 (Σ=159)	-
UUM	59	27 (Σ=59)	-

 Table 4: NISP and MNI counts for all sites and all species

Key: UMM & ULM = Unid. Medium and Large Mammal / UUM = Unid. Fragment. NB: Species percentages are out of 109. These differ from the unidentified counts as these are calculated on the basis of element identification (for UMM & ULM) and total fragments (for UUM) (corresponding to Σ in brackets).

Discussion

Interesting for this particular site is the complete absence of ovicaprids. While caution must be exercised due to the relatively small pool from which this data is drawn, this would suggest a situation where the particular conditions of the site favoured cattle management over sheep husbandry. Most probable is that the local ecology was relatively wet and therefore unsuitable for sheep husbandry, whilst cattle were able to thrive.

In the absence of aging data a kill profile cannot be defined, thus it is not possible to infer whether the management strategy in place was based on dairying or meat exploitation, or if cattle were transported to the site as live animals. If sheep were not present on site, or present only in very small numbers, dairy products would have to be provided from other sources and cattle would likely meet these requirements. The numbers of pig are unfortunately too small for further inference.

Although both dog and horse are proportionally well represented by fragment counts, the minimum number of individuals (one individual animal respectively) is arguably more reflective of the true picture. We can infer more regarding the overall stature of horses on the site due to the recovery of an entire humerus from F.48, [205]. The measurements taken from this bone reflects an animal with a withers height of 13.1 hands, indicating a relatively small, pony-sized individual.

The variety of non-domestic species is good considering the overall size of the assemblage. The presence of both badger and hare, and a possible fox from F.71 [317], indicates the exploitation of wild fauna for both meat (hare) and fur (badger and fox).

Further work should resolve the aging and kill profile for a more complete picture of animal exploitation on the site. A more extensive dataset of measured elements would also be beneficial, particularly for cattle and horse, in terms of refining the exploitation pattern of these species. This site has been dated primarily to the Late Iron Age/Early Roman period and it is during this transition that we see the importation of 'improved' cattle species. Horses were not used for traction during this period, as the cow was the more effective beast of burden. This site could potentially contribute important data, particularly given the suggested environmental condition, to this wider debate.

Appendix 4

Faunal Remains (CGB:SKR) – Krish Seetah

Introduction

The assemblage as a whole totalled some 31 assessable fragments (56 were recovered); the whole assemblage was identifiable to element and species group (45%) and 14 (45%) further identified to species.

Methodology

The zooarchaeological investigation followed the system implemented by Bournemouth University with all identifiable elements recorded (NISP: Number of Identifiable Specimens) and diagnostic zoning (amended from Dobney & Reilly 1988) used to calculate MNE (Minimum Number of Elements) from which MNI (Minimum Number of Individuals) was derived. Aging of the assemblage employed a combination of Grant's (1982) tooth wear stages and fusion of proximal and distal epiphyses (Silver 1969). Metrical analysis followed von den Driesch (1976). Elements from sheep and goats were distinguished, where possible, based on criteria established for the post-cranial skeleton by Boessneck (1969) and teeth by Payne (1985) and Halstead *et al* (2002). Identification of the assemblage was undertaken with the aid of Schmid (1972) and reference material from the Cambridge Archaeological Unit, the Grahame Clark Zooarchaeology Lab, Dept. of Archaeology, Cambridge and the Zoology Museum, Cambridge. Taphonomic criteria including indications of butchery, pathology, gnawing activity and surface modifications as a result of weathering were also recorded when evident.

Results

Condition of the assemblage: preservation & fragmentation

The assemblage was hand collected and overall exhibited moderate to good preservation. Of ten separate contexts studied for this site four where 'Poor' indicating that extensive weathering, bone surface exfoliation and other erosive damage had occurred to the bone. In contrast, six contexts showed 'Moderate' to 'Good' levels of preservation. The actual overall state of preservation is best

illustrated when we observe the specific numbers of fragments that these figures correspond to: just five bones (16%) showed a level of preservation that was poor, compared to 26 (95%) bones that were moderate to good. Erosion, concretions and weathering, combined with post-depostional fragmentation, affected 48% of the bone (26 elements).

Species representation

Only domestic species were represented on this site (refer to Table 5). In terms of fragment counts horse was the most abundant species accounting for 57% (eight bones) of the overall identifiable component of this assemblage. Cow in contrast constituted 36% (five elements) with pig accounting for seven percent (one fragment). The MNI (Minimum Number of Individuals) for these species is arguably more representative with each species registering a count of one individual animal only.

SPECIES	NISP	%NISP	MNI
Cow	5	36	1
Pig	1	7	1
Horse	8	57	1
ULM	17	55 (Σ=31)	-

 Table 5: NISP and MNI counts for all sites and all species

Key: UMM & ULM = Unid. Medium and Large Mammal / $U\dot{U}M$ = Unid. Fragment. NB: Species percentages are out of 14. These differ from the unidentified counts as these are calculated on the basis of element identification (for UMM & ULM) and total fragments (for UUM) (corresponding to Σ in brackets).

Discussion

The quantity of horse bone at this site is high in contrast to other sites in the area, however, in light of the size of the collection it would be a mistake to over interpret the significance of the horse from this site. We can infer more regarding the overall stature of horses on the site due to the recovery of an entire metacarpal, from F.32, [20]. The measurements taken from this bone reflects an animal with a withers height of 14.1 hands, indicating a pony-sized individual. This corroborates results from the Swavesey In Track site were a similarly sized pony was also recovered. Although not recorded directly, the presence of dog was evident from gnawing damage to a horse femur, from F.5 [176].

The absence of aging data precludes a kill profile, thus it is not possible to infer whether the management strategy in place was based on dairying or meat exploitation, or if cattle were transported to the site as live animals. However, although inference from this site is clearly limited due to the small sample size, as a means of corroborating the results from the other sites, and with pooled data, this assemblage has assisted in clarifying at least one area regarding the exploitation of animals. A portion of cow pelvis, specifically the acetabulum, showed extensive pathological changes that indicated both bone infection and eburnation. Eburnation occurs as a consequence of traction. The combined presence of both bone infection and eburnation indicates and old, possibly senile, animal that had spent a prolonged period of time as a beast of burden. This, when combined with the evidence relating the small stature of local horses, and the low number or complete lack of, would indicate a pattern of exploitation for cattle focused on secondary products: dairy

produce and traction. As the other domesticates have been recorded in small numbers it is clear that cattle were also the main providers of meat. However, what remains to be seen is whether the animals were raised on site for meat also (which is probable as surplus males from dairying would fill this gap) or were transported to site. This site also gives tentative indication of further uses: a juvenile pig humerus was recovered with a clear saw mark. This would suggest that bone working was either practiced at this site, or the raw materials were prepared for wider dissemination.

Further work should resolve the aging and kill profile for a more complete picture of animal exploitation on this site. In particular, a more extensive dataset of measured elements would also be beneficial, particularly for cattle and horse, in terms of refining the exploitation pattern of these species. This site has been dated Roman period and it is during this transition that we see the importation of 'improved' cattle species. Horses were not used for traction during this period. As the two examples recorded for this site and Swavesey In Track indicate, both animals were too small to be effective traction animals. Cattle were the more effective beast of burden and this is certainly supported from the bones at this site through the pathological changes on the cows pelvis noted above.

Appendix 5

Flint (CGB:SIT) – Lawrence Billington

An assemblage of 32 worked flints weighing 173g accompanied by 3 burnt unworked flint chunks weighing 65.3g were recovered from CGB:SIT. The assemblage provides good evidence for Mesolithic/earlier Neolithic activity taking place in the area, visible only in the form of residual lithic material incorporated into later features. The flint is listed by context and type in Table 6.

The unretouched flakes consist mostly of hard hammer struck pieces of irregular morphology, which are typical of flake based industries of the later Neolithic and Bronze Age. Two blades from F.47, together with several flakes with carefully trimmed platforms from the surface of the site and F.37 are suggestive of Mesolithic or earlier Neolithic activity. A core rejuvenation flake from F.51 is strongly suggestive of dedicated blade production and also indicates Mesolithic or earlier Neolithic flintworking. A multiplatform flake core was recovered from F.12. This piece had been carefully reduced and rotated until no further removals could be made. The efficient use of raw material evidenced by this core and the quality of flaking could indicate a Neolithic date for this piece.

The retouched elements of the assemblage contain a unusually high density of generally rare tool types in the form of two piercers and two notched blades. All four of these pieces were manufactured on blade or narrow flake blanks, and their forms are strongly suggestive of later Mesolithic or earlier Neolithic technologies. Their appearance in a small assemblage such as this, unassociated with more common tools such as scrapers might suggest a discreet episode of non-residential, specialised activity.

Feature no.	Feature type	unworked burnt chunk	chip	chunk	primary flake	secondary flake	o tertiary flake	blade	notched blade	piercer	core rejuvenation flake	core	C Total
3	pit	1											1
12	pit											1	1
30	ditch			1									1
33	ditch					1							1
35	ditch					2	1						3
47	ditch	1	1			2	3	2					9
48	ditch					2			1				3
49	pit									1			1
51	pit						1				1		2
64	ditch	1				2			1	1			5
67	buried soil					1							1
70	posthole				1								1
71	gully			1		1							2
74	ditch		1				1						2
	Totals	3	2	2	1	11	8	2	2	2	1	1	35

Table 6: shows recovered flint by context.

Appendix 6

Assessment of Bulk Environmental Samples (CGB:SIT) - Anne de Vareilles

Methodology

11 bulk soil samples from nine features spanning from the Early Bronze age to the Medieval period were selected for archaeobotanical analysis, and processed using an Ankara-type flotation machine. Flots were collected in 300µm sieves and the remaining heavy residues washed over a 1mm mesh. Both flots and residues were dried prior to analysis. For this assessment, only heavy residue components greater than 4mm were sorted by eye. The smaller 1–4mm fractions have been stored for future reference. Sorting of the flots was carried out under a low power binocular microscope (x6–40) in the George Pitt-Rivers Laboratory, McDonald Institute, University of Cambridge. Nomenclature follows Zohary and Hopf (2000) for cereals and Stace (1997) for all other flora. All macro-remains are listed in Table 7.

Preservation

All macro-remains were preserved through charring. The quality of preservation is highly variable between features, with some containing delicate chaff and small seeds whilst others are relatively rich in distorted and vitrified botanical remains. Intrusive roots are pervasive in all samples and, as well as some modern seeds, show a degree of bioturbation. Molluscs did occasionally occur but are not listed in Table 8, since their presence is too insignificant to warrant an assessment for this report.

Results and Discussion

The results are presented by feature, date and type;

Neolithic pit F.51 [196]. Crop processing waste in the form of wheat chaff (glume bases) and arable weeds seeds, including oat (*Avena* sp.), is well preserved in this sample. Oats were introduced into Britain by the Romans so its find puts the date of this assemblage into question (*cf.* Greig 1991). Only one definite cereal grain (*Triticum/Hordeum* sp.) was recovered, in comparison to the 35 hulled wheat glume bases (*T. spelta* and mostly *Triticum* sp.), suggesting that the final stages of crop sorting and cleaning were performed in the vicinity to this feature.

Probable Iron Age curving ditch F.35 [136] and boundary ditches F.25 [117], F.47 [247] and F.20 [87]. F.35 [136] contained around nine cereal grains, no chaff and only one wild plant seed. The grains may have been lost during cooking. Two of the wheat grains appear to be of a free-threshing variety (T. cf. aestivum sl.) usually associated with the Romano-British period (cf. Greig 1991).

The majority of botanical remains from the boundary ditches were found in F.25 [117]. These comprised of two hulled wheat glume bases (*Triticum* sp.) and 26 wild plant seeds, which are most probably arable weeds. The results indicate that crop processing occurred nearby.

Romano-British ditches F.33 [130] and [224], and F.48 [205]: Roughly the same amount of cereal grains, chaff and wild plant seeds were recovered from F.33 [130]. They occurred in low quantities, especially when compared to the results from F.33 [224]. [224] produced a very large flot composed of - in order of increasing abundance: charcoal, cereal grain, wild plant seeds (mostly grasses) and cereal chaff. One sixteenth of the sample was analysed and only estimated counts of the really large categories, such as grass seed fragments and cereal chaff, are given. Although lumps of charcoal are a minor element of this sample, there is a grey, powdery texture to the matrix which may be ash; some of the grains and seeds are even concreted together in this 'ashy' substance. Wheat is the dominant cereal; it is all hulled and may in fact just be spelt (T. spelta). Hulled barley (Hordeum vulgare sl.) is quite common - predominantly as grain rather than chaff - and rye is also present but in low amounts. Small tail grains of all cereal types are present. The most frequent wild plant seeds are of the grass family, followed by the common/spear-leaved orache (Atriplex patula/prostrata), which thrives on disturbed, nutrient-enriched soils. Its presence, along with the very prolific Romano-British crop weed corncockle (Agrostemma githago) suggests that some form of manuring may have been used (Hanf 1983). Scentless mayweed (Tripleurospermum inodorum) is the next most frequent taxa and is an indicator of light soil, as is wild radish (Raphanus raphanistrum), also present in this sample. Some of the grass seeds and cereal grains germinated before carbonisation.

Although the overall preservation is good, as is shown by the many small seeds and delicate chaff, broken grains, grass seeds and unidentified fragments (probably cereal grains) are very common. It is likely, therefore, that the larger seeds were cracked during pounding prior to charring. Hulled cereals are best stored as spikelets that need to be pounded before the grains can be consumed. The loose chaff is then sieved off, along with any remaining weed seeds, small grains and broken fragments.

The macro-remains from ditch F.48 compare well to those described above. Although far fewer remains were found, the assemblage is rich in the same type of cereal chaff, followed by wild plant seeds, cereal grains and finally charcoal. The concentration of artefact debris and plant macro-remains in these ditches suggests that they lie within or on the edge of an Iron Age or Roman period settlement.

Romano-British well F.76 [337]

The sample contained a little crop processing waste composed of a few common arable weeds seeds, 26 wheat glume bases and four cereal grains. There were no environmental indications that the feature had been a well.

Medieval ditch F.14 [55] and [69]

Only a little charcoal and two blinks seeds (Montia fontana ssp. chondrosperma) were found.

Conclusion

The archaeobotanical remains recovered form an ensemble commonly found on Iron Age and Roman settlements in southern Britain (*cf.* Stevens 2003). The last stages of cereal processing prior to consumption (pounding and sieving) clearly took place in the vicinity, suggesting that the excavation has uncovered a settlement site. The crop processing waste from ditch F.33 appears to be *in situ* – either dumped into the ditch and burnt without the addition of fire wood or set alight before dumping. Dried chaff would burn very quickly without leaving heat marks on the surrounding matrix.

Concentrations of later intrusive material, such as roots, indicate a high degree of bioturbation capable of disturbing archaeological layers and macro-remains. The botanical remains in pit F.51 are not Neolithic and suggest that more recent material has been reworked into earlier features. It is also likely that those from F.35 are Romano-British rather than Iron Age. Ecofacts should not, therefore, be used for dating unless found in large assemblages whose crop processing origins are evident.

Recommendations

Further information would be gained from a more detailed analysis of the larger assemblages, especially that from F.33. The potential for other, equally wealthy assemblages should be considered during future excavations of the area. An in depth study of F.33 and others like it could give us a good understanding of the local ecology, economy and settlement use of space for agricultural practices/food preparation and consumption.

sample number		8	4	9	10	11
context		196	136	117	247	87
feature		51	35	25	47	20
feature type		Pit	Ditch		ı	Ditches
Phase / Date		Neo		Iron Age/RB		
sample volume - litres		8	7.5	10	10	8
flot volume - mililitres		10	1	55	8	90
flot fraction examined		1/1	1/1	1/1	1/1	1/1
large charcoal (>4mm)		-	-			
med. charcoal (2-4mm)		+	+	++	+	++
small charcoal (<2mm)		+++	++	++	++	++
vitrified charcoal parenchyma fragments -		+		++	++	++
undifferentiated plant storage tissue		-	-	++		++
Cereal grains						
Hordeum vulgare sensu lato grain	domesticated barley grain		1			1
Triticum spelta/dicoccum grain	spelt/emmer wheat grain		1			
Triticum cf. aestivum sl. grain	free-threshing wheat grain		2			
Triticum sp. grain	wheat grain		2			
Triticum/Hordeum sp. grain	wheat/barley grain	1				
cereal grain fragments indet.			3			1
Cereal chaff						
Trititcum spelta glume base	spelt wheat chaff	3				
Triticum sp. glume base	hulled wheat chaff	32		2		
Non Cereal seeds						
Papaver sp.	рорру	2				
small <i>Chenopodium</i> sp	goosefoot	5		1		
Atriplay not do prostrato	common/spear-leaved orache			4		
Atriplex patula/prostrata Chenopodiaceae indet.	Oracrie	6 4		2		
small Rumex sp.	small-seeded dock type	2				
·	wild cabbage/mustard					
small <i>Brassica/Sinapis</i> sp. (c. 2mm)	type	4			1	
small <i>Trifolium</i> sp. (<1mm)	small-seeded clover	1				
Plantago major	Greater Plantain	1		10		
Tripleurospermum inodorum	scentless mayweed	20		12		
Avena sp.	wild/cultivated oat	3		2		4
large Poaceae indet (>4mm) medium Poaceae indet. (c. 4mm)	large Grass Family seed medium Grass Family seed	5 2		2		1
small Poaceae indet. (c. 4mm)	small Grass Family seed	4		2		
Small I Daceae muet. (<2mm)	Small Grass Family seed	2				
Poaceae fragment/(whole) indet.	wild/cultivated seed frag.	(2)				
seed indet.		3	1	3	1	
intrusive seeds Table 7: Botanical Remains from t		++		++		++

Table 7: Botanical Remains from the Bulk Soil Samples taken from F.20, F.25, F.35, F.47 and F.51. Key: '-' 1 or 2, '+' <10, '++' 25-50, '+++' >50 items

sample number		3	6	5	12
context		130	224	205	337
feature		33	33	48	76
feature type		Di	tch	Ditch	Well?
Phase / Date		R	lB	RB	RB?
sample volume - litres		10	9	7.5	6
flot volume - mililitres		20	425	30	5
flot fraction examined		1/1	1/16	1/1	1/1
large charcoal (>4mm)			-		1
med. charcoal (2-4mm)		+	-	-	-
small charcoal (<2mm)		++	++	++	+++
vitrified charcoal		-	-		++
compacted ash?					
compacted ash? parenchyma fragments - undifferentiated plant storage tissue		-	+++	+	
Cereal grains					
Hordeum vulgare sensu lato grain	domesticated barley grain	1	50	8	2
Triticum cf. spelta grain	spelt wheat grain		26	3	
Triticum spelta/dicoccum grain	spelt/emmer wheat grain	2	61	4	2
Triticum sp. grain	wheat grain		16		
Triticum/Hordeum sp. grain	wheat/barley grain		34	1	
Secale cereale grain	rye grain		7		
Secale/Triticum grain	rye or hulled wheat grain		7		
cereal grain fragments indet.		4	56		
Cereal chaff					
H. vulgare sl rachis internode	barley chaff		7		
Trititcum spelta glume base	spelt wheat chaff	2	+++	60	5
T. spelta/dicoccum glume base	spelt/emmer chaff		+++	16	
Triticum sp. glume base	hulled wheat chaff	8	+++	199	21
Triticum aestivum rachis node	hexaploid wheat chaff			3	
Secale cereale rachis node	rye chaff		7	1	
Secale/Hordeum rachis node	rye or barley chaff			1	
rachis internode indet.	cereal chaff		+	+	
cereal indet. culm	straw		+		
cereal ear culm node	straw node at start of ear			2	
Non Cereal seeds					
small Chenopodium sp	goosefoot		1		
Atriplex patula/prostrata	common/spear-leaved orache		53		
Chenopodiaceae indet.	ordone		4	2	
Montia fontana ssp. chondrosperma	blinks				
small Stellaria sp.	small-seeded chickweed		1		
Agrostemma githago	Corncockle seed		3		
Polygonum aviculare	knotgrass		3		
Fallopia convolvulus	black-bindweed		5		
small <i>Rumex</i> sp.	small-seeded dock type	1	11		1
Brassica nigra	Black mustard	<u> </u>	3		•
small <i>Brassica/Sinapis</i> sp. (c. 2mm)	wild cabbage/mustard type		4		
Raphanus raphanistrum seed	wild radish		2		
Raphanus raphanistrum seed-case	wild radish		2		
Plantago major	Greater Plantain			1 cf.	

Odontites vernus	red bartsia	1		1	
Tripleurospermum inodorum	scentless mayweed		20		1
flat cf. Carex sp.	sedge	1			
large Poaceae indet (>4mm)	large Grass Family seed		333	15	4
medium Poaceae indet. (c. 4mm)	medium Grass Family seed		25	3	
small Poaceae indet. (<2mm)	small Grass Family seed		13		1
Poaceae fragments	wild grass seed fragments		+++		
Poaceae fragments/(whole) indet.	wild/cultivated seed frag.	3	+++ (38)	27	1
seed indet. (seed head indet.)		1	4 (1)		1
bud indet.			1		
intrusive seeds					

Table 8: Botanical Remains from the Bulk Soil Samples taken from F.33, F.48 and F.76.

Key: '-' 1 or 2, '+' <10, '++' 25-50, '+++' >50 items

Note: the qualitative count of chaff and seed fragments in sample 6 represent more than 200 units in each category. The largest of these is hulled wheat chaff which surpases 500 units.

sample number		1	2
context		55	69
feature		14	14
feature type		Dit	tch
Phase / Date		Med	ieval
sample volume - litres		7.5	10
flot volume - mililitres		50	2.5
flot fraction examined		1/1	1/1
large charcoal (>4mm)			
med. charcoal (2-4mm)			+
small charcoal (<2mm)		++	++
vitrified charcoal		-	+
Non Cereal seeds			
Montia fontana ssp. chondrosperma	blinks	2	
intrusive seeds		++	

Table 9: Botanical Remains from the Bulk Soil Samples taken from F.14.

Key: '-' 1 or 2, '+' <10, '++' 25-50, '+++' >50 items

Appendix 7

Assessment of Bulk Environmental Samples (CGB:SKR) - Anne de Vareilles

Methodology

Two bulk soil samples from two Early Roman ditches (possibly droveway ditches) were selected for archaeobotanical analysis, and processed using an Ankara-type flotation machine. Flots were collected in 300µm sieves and the remaining heavy residues washed over a 1mm mesh. Both flots and residues were dried prior to analysis. For this assessment, only heavy residue components greater than 4mm were sorted by eye. The smaller 1–4mm fractions have been stored for future reference. Sorting of the flots was carried out under a low power binocular microscope (x6–40) in the George Pitt-Rivers Laboratory, McDonald Institute, University of Cambridge.

Nomenclature follows Zohary and Hopf (2000) for cereals and an updated version of Beedham (1972) for molluscs. All macro-remains are listed in Table 10.

Preservation

All botanical macro-remains were preserved through charring. No cereal remains were found but a few wild plant seeds are well preserved. Intrusive seeds and the blind burrowing snail *Ceciloides acicula* suggest that the location and condition of macro-remains have probably been disturbed. Two species of snail were found in each ditch.

Results and Conclusion

Early Roman ditches, F.5 [19] and F.26 [136]

Four wild plant seeds were found in F.5: two dock seeds (*Rumex* sp.), one clover seed (*Trifolium* sp.) and one goosefoot seed (*Chenopodium* sp.). It is possible that these local plants were collected and charred with the firewood. They would have grown on disturbed soil in an open landscape, e.g. a settlement. F.26 did not contain any plant macro-remains other than a little charcoal. The absence of large crop processing assemblages as were found in the adjoining site CGB:SIT could suggest that ditches F.5 and F.26 represent the edge of the settlement.

Sample number			1	5
Context			19	136
Feature			5	26
Phase/Date			E	R
Sample volume - litres				8
Flot volume - mililitres			8	5
Flot fraction examined - 9	%		100	100
Charcoal	>4mm			(-)
	2-4mm		+	+
	<2mm		+++	+++
V	itrified pieces		-	-
Non cereal seeds and c	haff			
Chenopodium sp		goosefoot	1	
Rumex cf. acetosella		Sheep's sorrel	1	
small Rumex sp.		small-seeded dock type	1	
Trifolium sp.		Clover	1	
Damp / Shade loving sp	ecies			
Vallonia excentrica / pul	chella		-	
Oxychilus / Aegopinella			-	
Catholic spec	ies			
Trichia sp.				+
Ceciloides acicula –Blind snail	burrowing			+++
>2mm bone			-	-
<2mm bone			+	+
Intrusive seeds			-	-

Table 10: Botanical and Molluscan Remains from the Bulk Soil Samples Key: '-' 1 or 2, '+' <10, '++' 10-50, '+++' >50 items.

Appendix 8

Pollen Analysis of Monolith Samples (CGB:SIT) – Simon Timberlake

This included four samples taken from a 50cm monolith extracted from the fill of an early Iron Age pit/well (CGB:LPR06 F.32 <6>), and three samples taken from a 30cm monolith extracted from the fill of a possible Late Iron Age/Early Roman enclosure ditch (CGB: SIT F.48 <7>).

Methodology

The samples were extracted by scalpel and spatula from the measured and described (logged) monolith tin cores and then bagged up whilst still damp into small polygrip plastic sample bags. Each sample represented approximately a 10mm interval within the monolith. Prior to sampling the surface of the monolith was first cleaned by slicing off up to 5mm from the outside of this in order to ensure that sampling proceeded from a clean and uncontaminated surface. The removed samples were then weighed and packed into other sealed plastic bags before being sent (by post) to the Department of Geography and Environment at the University of Aberdeen to be prepared for pollen extraction.

The process used for extraction followed that described by Barber (1976); this involved potassium hydroxide digestion to remove some of the plant material, followed by hydrochloric acid treatment to dissolve up carbonate, then acetolysis using sulphuric acid and acetic anhydride (and subsequent washes in glacial acetic acid) to remove the remaining cellulose. Hydrofluoric acid treatment was undertaken on those samples high in mineral matter (particularly silica). The remaining residues containing the palynomorph fraction were then mounted in glycerine. These residues were returned within small plastic phials to the Cambridge Archaeological Unit for analysis.

During the preparation of the pollen samples exotic marker grains (in this case two tablets containing a known number of exotic *Lycopodium clavatum* spores) were added for the purposes of working out a pollen grain density, such that it would be possible to calculate from the proportions observed the original number of grains of each taxon within the sediment sample.

Results

The samples were found to contain very little pollen indeed (< 20 grains each), and of the few grains which could be identified most were very poorly preserved. None of these could be identified to species level. The pollen presence is recorded within the following table which has been constructed for the monolith and which also show the sample depth and sedimentological (contextual) log for each core. Microscopic charcoal inclusions (relative densities) have only been mentioned where considered to be relevant.

12 – 27 cm	Dark chocolate brown – orange sandy silt (soil) with more weathered orange-brown flint and occasional charcoal. Slightly gritty.	Sample 3 (25 – 26 cm)	Alnus sp.? Quercus sp.? Tilia sp. (lime)? herbaceous pollen (indet.) Tilia sp?
		Sample 2 (16 – 17 cm)	Corylus sp.? Fraxinus sp (ash)?
5 – 12 cm	Dark grey-black charcoal-rich soil band with much less silt and no sand/grit	Sample 1 (7 – 8cm)	Sphagnum or moss spore Quercus sp (oak) x6 Betula sp. (birch) x1 Corylus sp (hazel) x2 Alnus sp. (alder) <10
0 – 5 cm (from base)	Dark brown loose silty soil with dark grey-black charcoal inclusions and occ. sand and grit composed of white angular-rounded flint		

Table 11: Monolith core CGB:SIT F.48 [273] cat.no. <7> showing samples and pollen

Discussion

The extremely limited data available from the CGB:SIT monolith only serves to confirm the poor potential for survival of pollen within the ditch fills sampled on this site. The presence of one or two very poorly preserved grains of pollen for each of the tree taxa present, though evidently fossil, and thus broadly contemporary with the deposition of sediment, cannot automatically be taken as reflecting contemporaneous pollen rain, since the condition of these does not preclude some reworking. However, the fact that the pollen appears slightly better preserved within the basal sample, does seem to suggest less oxidation and destruction of grains (perhaps on account of reduced bioturbation), and may imply *in situ*. deposition. The main reason for the poor preservation will be the relatively high pH of these chalky/ marly soils. It is impossible to judge from this very small sample how the differential preservation of pollen species has affected this. However, it is known that *Tilia sp* (lime) is considerably less sensitive than *Quercus sp* (oak) to oxidation.

The presence of moss spores indicates locally damp conditions, whilst the arboreal (tree) pollen can reflect wind-dispersed pollen distributed from a source hundreds of metres away, perhaps from much further afield if this has been deposited from rain or in running water. The slightly increased proportion of alder at the base may reflect the presence of nearby damp or riverside woodland earlier on within the sequence, though in general the assemblage is what one would expect to see of open mixed deciduous woodland. The absence of grass or herbaceous pollen simply reflects the lack of pollen preservation, thus the results are quite unrepresentative of the contemporary environment.

Appendix 9

Worked Stone (CGB:SKR) – Simon Timberlake

Quern fragment

<028> F.5 [162] 120 x 70 x 20-45mm Weight 450g

A rim fragment of what is probably the lower stone of a rotary hand quern, probably of an original diameter of approx. 380-400mm. The original thickness would have been c. 40-50mm. The facies of this is characteristically medium-coarse grained and contains both white and pink feldspar with some small clasts of rounded quartz pebble (<5mm), yet not obviously conglomeratic. The grinding surface of the quern is moderately worn. The likely history of this is that it was broken up after becoming too worn and thin for re-dressing, and may have been burnt during this process.

The quern is made from Millstone Grit, probably of Southern Pennine origin. This quern stone appears to be quite typical of $1^{st} - 3^{rd}$ century Roman sites in Cambridgeshire. The use of rotary querns appears to dominant even in these rural contexts with common usage of stones such as Millstone Grit imported along road routes from the production sites in the Southern Pennines (Roman to Early Medieval quern stone quarries have been identified in North Derbyshire and South Yorkshire such as at Hathersage and Wharnecliffe Edge (Peacock 1988)).

Section 2

Landscape and Ecological Mitigation Area (LEM) C (CGB:LMC)

Introduction

Location, topography and geology

The site is located approximately midway between the villages of Longstanton and Over on land to the west of Gravel Bridge Road, Cambridgeshire. It is bounded by the former Cambridge to St. Ives railway line to the south, the field flanking Over Road to the east and open fields to the north and west. Centre of the site is NGR 537732/268996, (see Figures 1 and 2). The site slopes upwards from the southwest end, from a height of 6.4m OD to a height of 8.5 m OD at the northeast end.

Originally planned as being c.1.09ha in size, the site was reduced to c.0.60 hectares after an initial 6m wide strip was excavated along the length of the southwest edge and revealed almost no archaeology. Nine northeast-southwest orientated trenches 6.5m wide were subsequently excavated at regular intervals across the site at 90 degrees to the southwest edge.

The site was primarily situated on Ampthill Clay, which only changed slightly in the southeast corner where it becomes mixed with overlaying 3rd Terrace gravels.

Archaeological background

An archaeological survey and several evaluations and excavations have been carried out relatively close to the LMC site, (Cessford & Mackay 2004, CGB:LMD and Watson & Hinds 1992), and these showed very different results.

The South Cambs. Village Earthwork Survey (Watson & Hinds 1992) recorded two fields of earthworks either side of Mustill Lane, Over, some 350m northwest of site which included ridge and furrow and a series of 'humps and bumps' all of whom were determined to be medieval. A small evaluation carried out by the CAU on the opposite side of the disused railway from this site revealed almost no archaeology apart from a couple of probably modern postholes and an undated linear (Cessford & Mackay 2004). The only other archaeological work carried out in the immediate vicinity was on land adjacent to the disused railway approximately 400m to the east. This revealed a series Late Iron Age/Early Roman ditches and two enclosures (CGB:LMD; see below).

The sites of archaeological interest within the area are all situated on higher ground however (at least 11m OD) and the low lying nature of this site probably decreases the potential for finding significant archaeological remains.

Archive

A total of 24 contexts from eight features were excavated and recorded and a small number of finds, including pot, animal bone, flint, tile, brick, burnt clay and tobacco pipe, were recovered. The documentary records and accompanying artefacts have

been assembled into a catalogued archive in line with Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeology Unit offices. CHER number is ECB 2521.

Results

Bucket Sampling

Bucket sampling was carried out at eight points across the site, with 90 litre samples being tested at each. Finds were recovered from seven of these points, however they were small in number and consisted of post medieval pot, tobacco pipe, tile, brick, animal bone and burnt clay.

Open Area

The open area revealed a very limited amount of archaeology (see Figure 14). This consisted of a tree throw, F.3, a small post medieval ditch that turned 90° from a northwest-southeast orientation to a northeast-southwest orientation F.5, a post medieval quarry pit, F.10, two small undated pits, F.2 and F.4, and three undated hedgerows, F.7, F.8 and F.9.

Discussion

The results of the bucket sampling correspond well with those of the excavation and show the limited archaeology present here can predominantly be dated to the post medieval period.

The single small ditch was probably a former field boundary predating both the building of the adjacent railway and the current field layout, as its alignment matches neither. The two small pits laying either side of this feature, although undated, are probably related to it as they all share a similar fill type. The post medieval quarry pit located on the slope of the hill is part of a small cluster of such features, and was probably dug to obtain the Ampthill Clay present here. The purpose for the clay extraction is unclear as it is quite small in scale, but was possibly extracted for agricultural use.

The hedgerows identified running parallel to the northwest edge of the excavation appear to be the former field boundary between the existing trackway and the field in which this site is located. Local sources have suggested the hedge was pulled up when the field was turned over to market gardening in the 1960's, in order to facilitate the loading of produce onto railway wagons.

This site has helped confirm the results of the 2003 evaluation (Cessford & Mackay 2004) that was carried out on the opposite side of the trackway in that, the Late Iron Age/Roman activity known to exist slightly to the east (CGB:LMD) does not extend down slope to this location and in fact this immediate area is relatively sterile archaeologically.

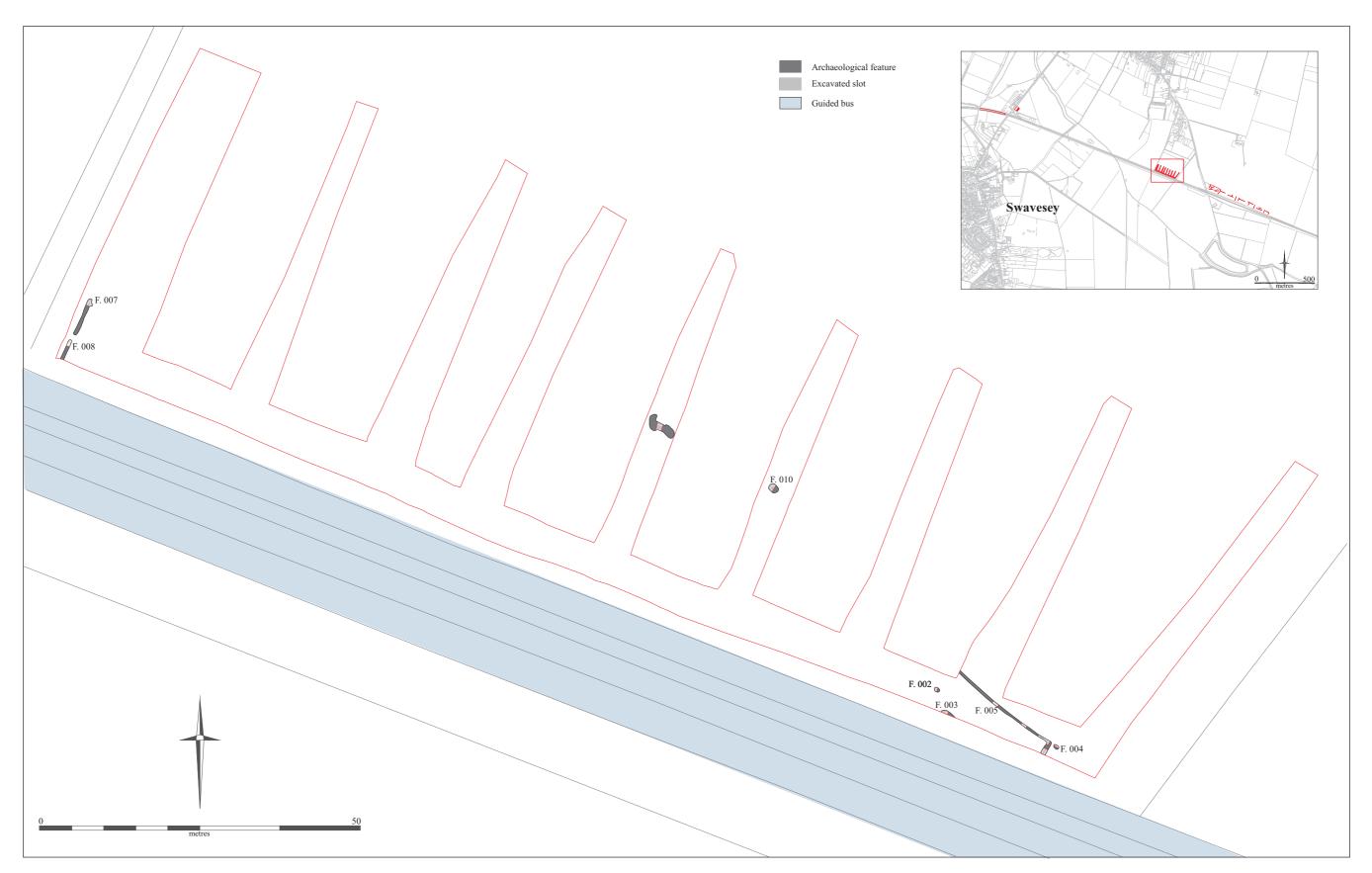


Figure 14. Plan of CGB:LMC

Section 3

Landscape and Ecological Mitigation Area (LEM) D (CGB:LMD)

Introduction

Location, topography and geology

The site is located approximately midway between the villages of Longstanton and Over on land off Gravel Bridge Road, Cambridgeshire. It is bordered by open farmland to the north and east, the disused Cambridge to St. Ives railway to the south and Gravel Bridge road to the west and centred on NGR 538128/268857, (see Figures 2 and 16). The site slopes upwards from the northwest end from 12.82 OD to a maximum height of 15.37m OD before sloping downwards, and at the southeast end the height had reduced to 11.62m OD.

The trenches revealed a varied geology across the site, with the northwest end being mainly a yellowish sandy Boulder Clay with patches of 3rd Terrace gravel. Moving southeast this rapidly changed to blue grey Ampthill Clay, before becoming Glacial gravels as the site sloped upwards. Towards the base of the slope at the southeast end of site geology once again reverted to blue grey Ampthill Clay (British Geological Survey, 1975).

Archaeological Background

Prior to this evaluation and excavation, very little was known about the archaeological potential of the immediate area, in fact a small scale Guided Busway evaluation (Cessford and Mackay 2004) and excavation to the northwest (CGB:LMC) revealed almost no archaeology beyond some background post medieval activity. Slightly further afield, however, some ¾ mile northeast of site excavations during the 1960s at Cold Harbour Farm, Over, Cambridgeshire revealed evidence for fairly substantial Late Iron Age and Roman rural settlement, which included the presence of a Roman pot kiln (Hall 1996).

Other possible sites within the vicinity were also identified during the Fenland Project and included two conjoined rectangular enclosures (CHER 11133) some 2-300m to the northwest, tentatively dated either Iron Age or Roman due to their form (Hall 1996).

It is also not known whether any archaeology was compromised during the 1840's construction of the railway cutting bordering the southwest edge of site. However, a watching brief for the Guided Busway, CGB:OCS, that was carried out along the stretch of line prior to the cutting to the southeast, CGB:OCS, (see Figure 3) revealed the partial remains of an Early-Mid Iron Age pot (based on comments made by Brudenell, M) which had a small quantity of cremated bone associated with it (see Appendix 16), suggesting the likelihood of some nearby prehistoric activity.

Adjacent to the northwest edge of site is the Grade II listed Over Windmill dated to c.1840 and restored to working order in the late 1960's. The geophysics that were carried out across the area prior to this excavation (see Figure 15 for these results)



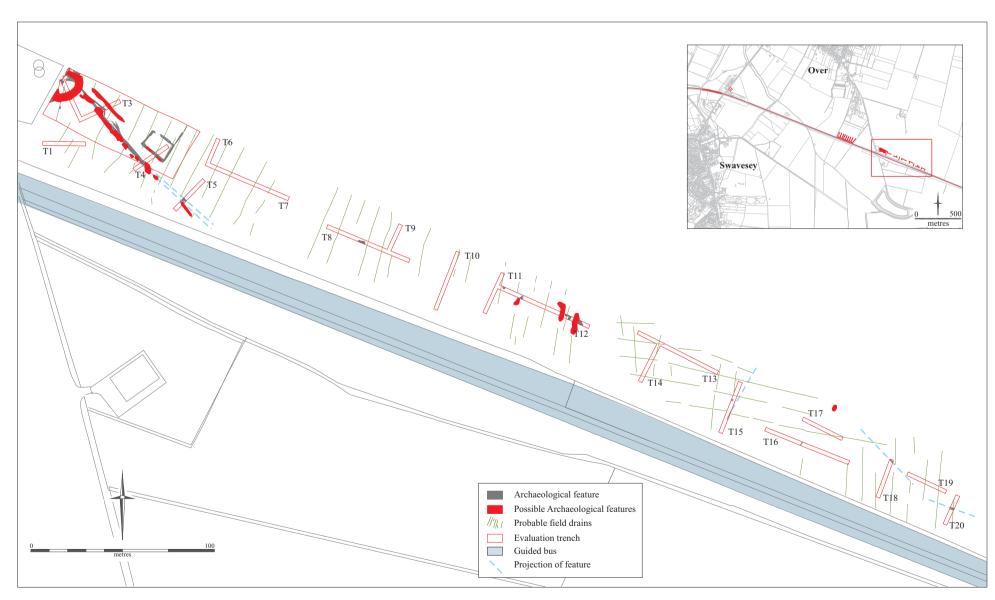


Figure 15. Plan of CGB:LMD

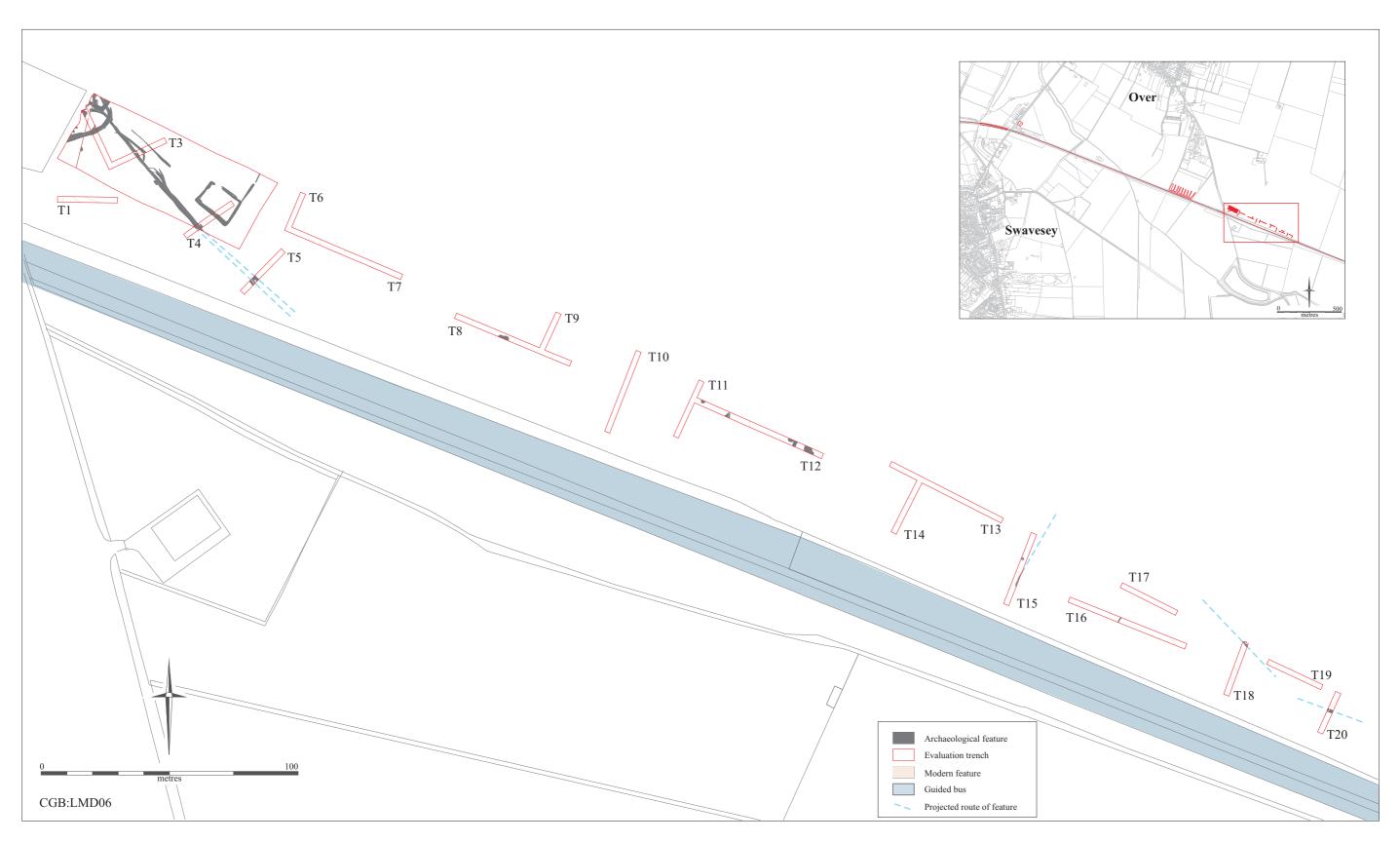


Figure 16. Plan of CGB:LMD, open area and trenches

appeared to show a circular structure neighbouring this windmill suggesting a precursor to the current mill may be present here. The geophysics results also highlighted several possible linear features grouped towards the western half of the site, and a series of rather amorphous looking possible features on the summit of the slope towards the middle of site but very little else.

Methodology

Initially 20 evaluation trenches totalling 612m in length, a sample by area of 5.1%, were excavated. Many of the trenches were positioned to test potential features identified through geophysics (Figure 15 shows these results). As a consequence of this evaluation the CAPCA senior archaeologist determined an area approximately 80m by 30m (c.2400m²)at the western end of the PDA should immediately be examined by open area excavation. Both phases of the archaeological investigations were excavated by tracked 360° machine using a 2.20m wide toothless ditching bucket. Topsoil and underlying deposits were removed under archaeological supervision. The exposed archaeological features were subsequently metal detected, planned and thoroughly sampled.

Excavation of archaeological features was carried out using hand tools. The recording followed a CAU modified MoLAS system (Spence 1990); whereby feature numbers, F. were assigned to stratigraphic events, and numbers [fill], or [cut] to individual contexts. The trench and open area plans were drawn at scale 1:50 and sections at 1:10. A representative number of environmental samples were taken and a digital photographic archive was compiled. All work was carried out in strict accordance with statutory Health and Safety legislation and with the recommendations of SCAUM (Allen and Holt 2002). The site code is CGB:LMD.

Archive

A total of 257 contexts from 60 features were excavated and recorded and a significant number of finds, including pot, animal bone, worked animal bone, flint, burnt flint, burnt stone, worked stone, burnt clay, slag, metalwork and tobacco pipe, were recovered. The documentary records and accompanying artefacts have been assembled into a catalogued archive in line with Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeology Unit offices. CHER number for the trenching is ECB 2515, and ECB 2516 for the open area. Monitoring point Over Cutting South (CGB:OCS) is ECB 3206.

Results: Trenches

A total of 20 trenches were excavated with a combined length of 612m; 10 of these contained archaeology. A concentration of 11 ditches was recorded in trenches at the northwest end of site with most of these yielding quantities of pot, dated late Iron Age/Early Roman, and animal bone. F.9 in Trench 2 yielded a particularly significant quantity of material culture. Trenches in the central part of the site revealed a series of intercutting post medieval quarry pits and those towards the southeast revealed four small ditches, yielding Roman pot and animal bone, a small pit dated Late Iron Age and a post medieval ditch. Table 12 below shows a brief summery of each trench.

Trench 1

Trench 1 was 23.5m long on a W-E alignment. The topsoil was up to 0.33m deep and subsoil was up to 0.29m deep, with an overall trench depth of 0.61m. Natural was yellow sandy Boulder Clay and no archaeology was present.

Trench 2

Trench 2 was 25.5m long on a NW-SE alignment. The topsoil was up to 0.38m deep and subsoil was up to 0.45m deep with an overall trench depth of 0.83m. Natural was yellow sandy Boulder Clay with gravel patches. This trench contained four linear features, three of which, F.9, F.10 and F.17 were excavated at this stage. Ditch F.17 had been recut by ditch F.9 and small ditch F.10 truncated both of these. Late Iron Age and Early Roman pot and animal bone were recovered in quite large quantities, particularly from F.9.

Trench 3

Trench 3 was 25m long on a NE-SW alignment. The topsoil was up to 0.36m deep and subsoil was up to 0.48m deep with an overall trench depth of 0.82m. Natural was yellow sandy Boulder Clay with gravel patches. Two NW-SE orientated, roughly parallel, moderately sized ditches, F.2 and F.13 were recorded and excavated. F.2 contained a significant quantity of Early to Mid Iron Age pot, whilst F.13 contained Late Iron Age pot and both contained animal bone.

Trench 4

Trench 4 was 23.5m long on a NE-SW alignment. The topsoil was up to 0.35m deep and subsoil was up to 0.50m deep with an overall trench depth of 0.85m. Natural was blue/grey Ampthill clay with gravel patches. Two NW-SE orientated, fairly substantial, probable conjoined ditch termini, F.1 and F.3 were recorded and excavated. Both contained Late Iron Age/Early Roman pot and animal bone.

Trench 5

Trench 5 was 23m long on a NE-SW alignment. The topsoil was up to 0.37m deep and subsoil was up to 0.29m deep with an overall trench depth of 0.61m. Natural was yellow sandy Boulder Clay with blue/grey Ampthill clay patches. Three NW-SE orientated parallel ditches, F.21, F.22 and F.23 were recorded and excavated. F.21 lies slightly to the southwest of the other two, and F.22 cuts F.23. Both F.21 and F.22 contained Late Iron Age/Early Roman pot and animal bone.

Trench 6

Trench 6 was 14.0m long on a NE-SW alignment. The topsoil was up to 0.33m deep and subsoil was up to 0.22m with an overall trench depth of 0.53m. Natural was blue/grey Ampthill clay with gravel inclusion and no archaeology was present.

Trench 7

Trench 7 was 49.5m in length on a NW-SE alignment. The topsoil was 0.30m in depth and subsoil was 0.26m deep with a total trench depth of 0.56m. Natural was yellow sandy Boulder Clay with gravel patches and no archaeology was present.

Trench 8

Trench 8 was 49.0m in length on a NW-SE alignment. The topsoil was 0.34m deep and subsoil was up to 0.30m deep with an overall trench depth of 0.60m. Natural was Glacial Sands and gravels. One post medieval quarry pit, F.15 was recorded and excavated

Trench 9

Trench 9 was 15.0m long on a NE-SW alignment. The topsoil was up to 0.40m deep and subsoil was up to 0.30m deep with a total trench depth of 0.60m. Natural was Glacial sands and gravels and no archaeology was present.

Trench 10

Trench 10 was 34.0m long on a NE-SW alignment. The topsoil was up to 0.33m deep and subsoil was up to 0.30m deep with a total trench depth of 0.63m. Natural was Glacial sands and gravels and no archaeology was present.

Trench 11

Trench 11 was 24.50m long on a NE-SW alignment. The topsoil was up to 0.33m deep and subsoil was up to 0.32m deep with a total trench depth of 0.65m. Natural was Glacial sands and gravels and no archaeology was present.

Trench 12

Trench 12 was 55.0m long on a NW-SE alignment. The topsoil was up to 0.30m deep and subsoil was up to 0.42m deep with an overall trench depth of 0.72m. Natural was Glacial sands and gravels. A series of five post medieval quarry pits were recorded and two, F.7 and F.14 were excavated and recorded.

Trench 13

Trench 13 was 55.0m long on a NW-SE alignment. The topsoil was up to 0.37 deep and subsoil was up to 0.29m deep with a total trench depth of 0.60m. Natural was Glacial sands and gravels with blue/grey Ampthill clay patches and no archaeology was present.

Trench 14

Trench 14 was 23.0m long on a NE-SW alignment. The topsoil was up to 0.32m deep and subsoil was up to 0.29m deep with a total trench depth of 0.59m. Natural was Glacial sands and gravels and no archaeology was present.

Trench 15

Trench 15 was 30.0m long on a NE-SW alignment. The topsoil was up to 0.35m deep and subsoil was up to 0.45m deep with an overall trench depth of 0.80m. Natural was Glacial sands and gravels with blue/grey Ampthill clay patches. Two features were recorded and excavated, a small, round pit that contained Late Iron Age pot, animal bone and a broken copper alloy ring, F.8 and the terminus of a NE-SW ditch, F.12 that also contained pot, with a date range from Late Bronze Age to Late Iron Age, and animal bone.

Trench 16

Trench 16 was 51.0m long on a NW-SE alignment. The topsoil was up to 0.35m deep and subsoil was up to 0.37m deep with an overall trench depth of 0.72m. Natural was blue/grey Ampthill clay with gravel patches. A NE-SW orientated post medieval ditch, F.16, was recorded and excavated.

Trench 17

Trench 17 was 25.0m long on a NW-SE alignment. The topsoil was 0.33m deep and subsoil was up to 0.28m deep with an overall trench depth of 0.61m. Natural was Glacial gravels with blue/grey Ampthill clay patches and no archaeology was present.

Trench 18

Trench 18 was 35.0m long on a NE-SW alignment. The topsoil was up to 0.31m deep and subsoil was up to 0.54m deep with an overall trench depth of 0.85m. Natural was blue/grey Ampthill clay with gravel patches. A N-S ditch, F.6 was recorded and excavated and contained Late Iron Age/Early Roman pot and animal bone.

Trench 19

Trench 19 was 23.50m long on a NW-SE alignment. The topsoil was up to 0.38m deep and the subsoil was up to 0.57m deep with a total trench depth of 0.87m. Natural was blue/grey Ampthill clay and no archaeology was present.

Trench 20

Trench 20 was 17.5m long on a NE-SW alignment. The topsoil was up to 0.35m deep and subsoil was 0.46m deep with an overall trench depth of 0.78m. Natural was blue/grey Ampthill clay. Two parallel NW-SE orientated ditches, F.4 and F.5, were recorded and excavated. F.4 cut F.5 and contained Late Iron Age/Early Roman pot.

Trench	Orientation	Length	Depth	Natural Type	Archaeology
		(m)	(m)		
1	E-W	23.5	0.61	Yellow sandy boulder clay	No
2	NW-SE	25.5	0.83	Yellow sandy boulder clay with gravel patches	Yes
3	NE-SW	25	0.82	Yellow sandy boulder clay with gravel patches	Yes
4	NE-SW	23.5	0.85	Blue/grey Ampthill clay with gravel patches	Yes
5	NE-SW	23	0.61	Yellow sandy boulder clay with blue/grey Ampthill clay patches	Yes
6	NE-SW	14	0.53	Blue/grey Ampthill clay with gravel patches	No
7	NW-SE	49.5	0.56	Yellow sandy boulder clay with gravel patches	No
8	NW-SE	49	0.6	Glacial sands and gravels	Yes
9	NE-SW	15	0.6	Glacial sands and gravels	No
10	NE-SW	34	0.63	Glacial sands and gravels	No
11	NE-SW	24.5	0.65	Glacial sands and gravels	No
12	NW-SE	55	0.72	Glacial sands and gravels	Yes
13	NW-SE	55	0.6	Glacial sands and gravels with blue/grey Ampthill clay patches	No
14	NE-SW	23	0.59	Glacial sands and gravels	No
15	NE-SW	30	0.8	Glacial sands and gravels with blue/grey Ampthill clay patches	Yes
16	NW-SE	51	0.72	Blue/grey Ampthill clay with gravel patches	Yes
17	NW-SE	25	0.61	Glacial sands and gravels with blue/grey Ampthill clay patches	No
18	NE-SW	35	0.85	Blue/grey Ampthill clay with gravel patches	
19	NW-SE	23.5	0.87	Blue/grey Ampthill clay	No
20	NE-SW	17.5	0.78	Blue/grey Ampthill clay	Yes

 Table 12: showing a brief trench summary

Results: Open Area

Based on the results of the evaluation, an 80m by 30m open area, totalling 2400m², was subsequently stripped of overburden in the northwest corner of site (see Figure 17). This area was on a slight slope rising upwards from a height of 12.7m OD along the northwest edge to 13.8m OD in the northeast corner. This open area exposed a significant amount of archaeology mostly dating to the Late Iron Age/Early Roman period but with elements of Early – Middle Iron Age as well. There was very little indication of earlier activity, with only 11 flints (generally dating Late Neolithic to Early Bronze Age) recovered from later features across the whole site, (see Appendix 13) suggesting only a background usage of the area during that time.

Crossing much of the site on a northwest-southeast orientation before curving west and terminating was a series of associated ditches and gullies that were also observed continuing southeast into Trench 5. Short, curving ditch F.13 appeared to be the earliest phase of this system, which was superseded by the more substantial F.27. The other ditches and gullies within this system, F.2, F.31, F.32, F.33 and F.39 were all recuts and later additions. The Early to Middle Iron Age pottery recovered from the site is generally present in Late Iron Age features, and particularly from this ditch system. Ditch F.2, which was the latest phase in this Late Iron Age boundary contained a significant number of the earliest pot (some 59 sherds). Other later features which incorporated earlier pot alongside Later Iron Age wares were ditches F.27 and F.32, see Appendix 10.

Towards the northwest corner the archaeology grew progressively denser, suggesting actual settlement is located just outside the site boundary in this direction, indeed, it is likely the Over Windmill is situated on substantial archaeological remains. Within this corner a substantial ditch, F.9, which appeared to be a recut of two earlier features, F.17 and F.43, curved from a northeast-southwest orientation to a northwest-southeast one. This ditch cut the northwest-southeast orientated boundary ditch system and contained significant quantities of domestic rubbish suggesting it was used as a dump after it fell out of use. The best preserved environmental remains on site were also recovered from this ditch and the presence of wheat and barley were indicative of food processing and/or preparation occurring nearby, (see Appendix 15). Figure 18a shows F.17 and Figure 20 is a section showing the complex archaeology of the northwest corner.

A number of small pits and postholes, F.24, F.40, F.41, F.42 F.56, F.59 and F.60 were cut into eastern edge of F.9 and several, including pits F.56 and F.59 contained a reasonable amount of pot dated Late Iron Age and Early Roman.

The final phase of activity within this corner was ditch F.29. This cut both F.9 and the earlier northwest-southeast orientated boundary system. The ditch carried out a sharp 90 degree turn from a northwest-southeast orientation to a northeast-southwest one and again contained Late Iron Age/Early Roman pot, as well as some Romanising sherds. Its form suggests this ditch is the corner of an enclosure and could represent a settlement boundary, however further work is needed in order to prove this definitively.

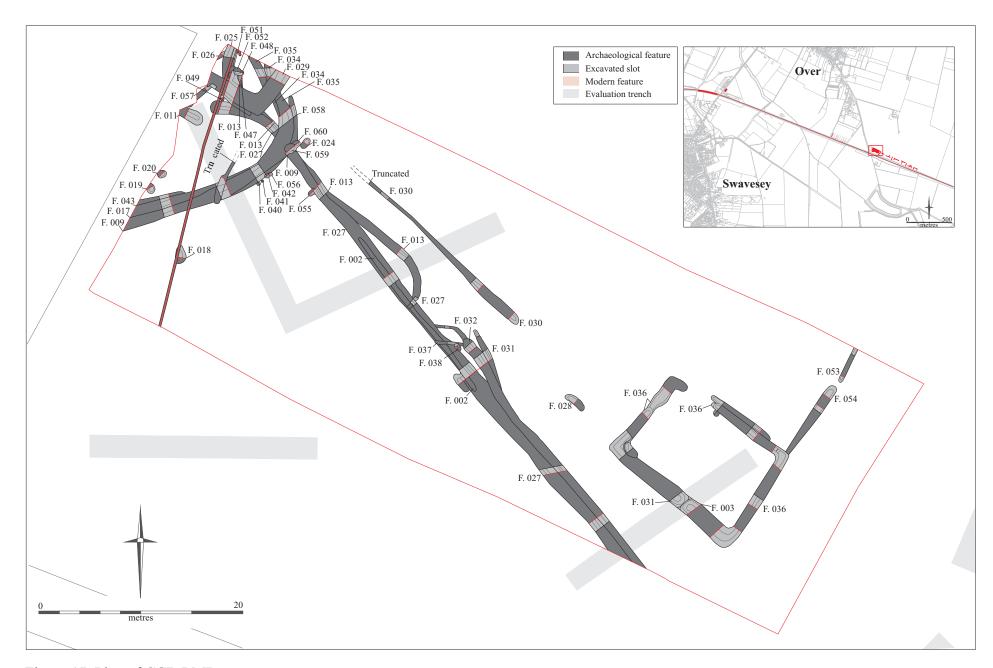


Figure 17. Plan of CGB:LMD

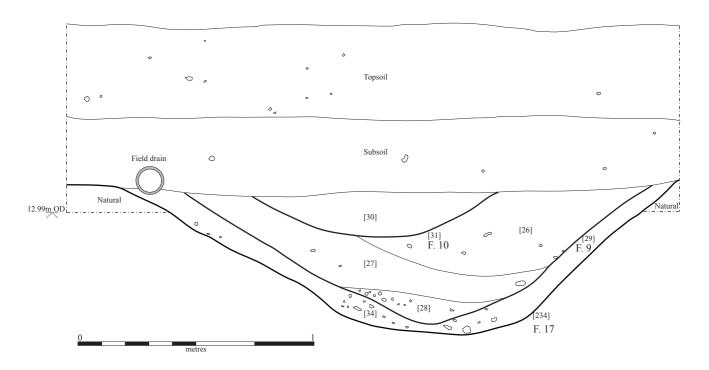


Figure 18a. Section of F. 17



Figure 18b. Photograph showing ditches F. 35 and F. 34 (CGB:LMD)

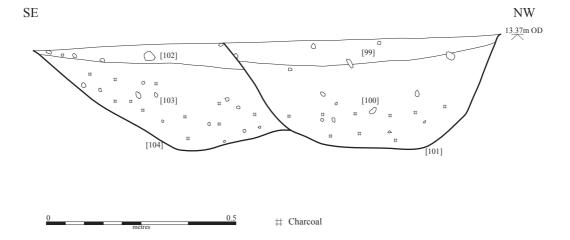


Figure 19a. Section of enclosure F.36



Figure 19b. Photograph showing western corner of Late Iron Age / Early Roman enclosure $F.36\,$

N S

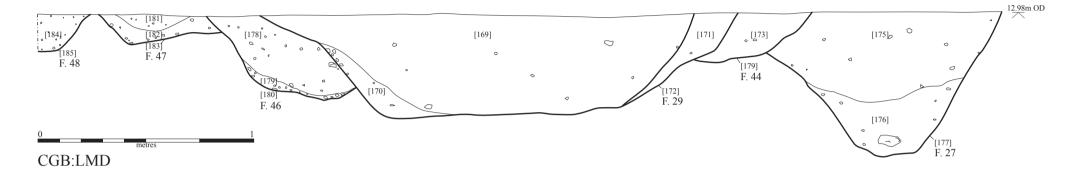


Figure 20. Section showing complexity of features in the northwest corner of the open area

A small rectangular enclosure, F.36, with an internal area measuring 13.5m by 8.5m (approx 115 m²) and an entranceway measuring 3m wide was located towards the southeast end of site. Ten slots (including two in the evaluation phase) were excavated and the few finds recovered included Late Iron Age/Early Roman pot, including 32 sherds from a single vessel (see Appendix 11), animal bone and fragments of lava quern. The enclosure appears to have been originally dug in segments, with two obvious termini abutting each other along the southwest side. Midway along the northwest side also showed a clear termini with a much shallower extension forming the north corner. The northeast edge was re-established by virtue of a recut, as was the western corner (Figure 19a and 19b). Apart from a single post hole lying slightly to the southeast of the entranceway no internal features were identified. Northeast-southwest orientated linears F.53 and F.54 and northwestsoutheast orientated elongated pit/short ditch segment, F.28, and truncated ditch, F.30, were aligned off of the southeast and southwest sides respectively. All four of these features contained pot dating them to the same period as the enclosure (see Appendix 11).

The only other activity noted on the open area was a series of post medieval/modern field drains which crossed the site at regular intervals on varying orientations, and no activity that could have been associated with the Over Windmill or its possible precursors was evident.

Discussion

Prior to excavation, the geophysics results had raised the possibility that a precursor to the current windmill may be located here but very little else. This is clearly not the case, with no sign of an earlier windmill and instead the site has revealed a dense pattern of archaeology, particularly towards the northwest end of site. The archaeology suggests a rural settlement existed here from the Early/Middle Iron Age through to the Early Roman period, with a peak in activity during the Late Iron Age/Early Roman period (based on the pot quantities recovered).

The 20 trenches clearly showed the archaeology concentrated towards the northwest end of site, with only a small number of Late Iron Age and Roman features towards the southeast and a few post medieval quarry pits on the brow of the hill in the centre. The small number of features towards the southeast probably represented field boundaries with the scant amount finds recovered suggesting they are quite some distance from any settlement or more intensive activity, and the small Late Iron Age pit in Trench 15 was probably an isolated event.

The presence of so much Early–Middle Iron Age pot, particularly within ditch F.2, which is a recut of a Late Iron Age/Early Roman ditch, and ditch F.27, which again was attributed to the Late Iron Age/Early Roman period indicates the northwest-southeast boundary of which these ditches are a constituent part, may have been established during the Middle Iron Age. If this is the case it would explain, why so much pot of that period was present within the latest phases of this ditch system. It would also suggest that the large number of recuts and offshoots present along this ditch system represent the recutting and reestablishment of this boundary over a significant period of time.

Because the dense archaeology within the northwest corner is only partially exposed, only a tentative interpretation can be put forward at this time. It is likely, however, these features, including a possible enclosure, F.29, rubbish pits, F.24, F.59, F.60, and curving ditches with dumps of finds within them, F.9, F.17, F.43, represent the edge of a small rural settlement.

Small enclosure F.36 is one of the later phases to this rural settlement indicated by the presence of Romanising pot. It may be located at the corner point of a field boundary formed by ditches F.30, F.53 and F.54, with feature F.28 potentially being a remnant of this boundary. The lack of any evidence for a structure within the enclosure and the paucity of finds from the ditch suggests a use other than for occupation. This is supported by the negative results from the several bulk environmental samples taken from the enclosure ditch. If the enclosure had been a place where people had lived, more evidence for food processing and/or preparation would have been expected, especially as the results from ditch F.9 suggest local conditions did preserve this kind of evidence, (Appendix 15). It is most likely therefore the enclosure was used for holding animals such as cattle, sheep or goats.

The complete lack of later Roman material suggests the site was abandoned soon after the Roman conquest, possibly as early as AD 60 judging by the lack of established Roman wares recovered (Appendix 11), although the reasons for abandonment remain unclear. It is possible the abandonment was a consequence of the 'Romanisation' of the landscape, as after the conquest, land would have been prone to redistribution amongst the new ruling elite and their allies. The winding down of settlements directly after the Roman conquest is certainly well documented within the region, for instance the Hutchinson site at Addenbrookes Hospital, Cambridge (Evans, Mackay & Webley 2008) was a significant settlement site that appeared to peak during the Late Iron Age/Early Roman period but quickly fell out of use. Later Roman activity at this site was limited to agriculture and consisted mainly of droveway related ditches that contained little material culture suggesting they were far removed from any settlement. Future work in the vicinity of the CGB:LMD site may in a broader context, help towards explaining how the transitional period between the Late Iron Age and Early Roman period may have affected rural settlements within the region. The potential for this certainly exists given the known presence of two conjoined rectangular enclosures (CHER 11133) some 2-300m to the northwest that have been tentatively dated either Iron Age or Roman due to their form (Hall 1996).

Appendix 10

Prehistoric pottery – *Matthew Brudenell*

124 sherds (1018g) of handmade later prehistoric pottery were recovered from the excavations dating from the end of the Early Iron Age (c. 500 - 350 BC) through to the Late Iron Age (c. 50 BC - 50 AD). The pottery was recovered from a total of 15 contexts, relating to 11 separate features (Table 13)

Feature	No. Sherds	Wt. (g)	MSW	No. Vessels	Fabrics present
2	59	519	8.8	12	CH1, FQ1-2, G1-2, GFQ1, GQ1, Q, QG1, S, S1-5, SFCH1
4	1	37	37	-	FQ1
9	2	8	4	-	Q1, G3
11	1	1	1	-	S
12	4	13	3.3	-	S1, F1
13	10	198	19.8	1	G3, Q1, S, S5
27	23	135	5.9	1	GQ1, Q, S, S1, S6, SQ1
32	6	25	4.2	-	Q1, S3-4
33	6	18	3	-	Q1-2, QVE1, S1, SQ1
35	5	37	7.4	-	GQ1-2
37	7	27	3.9	-	QF1, S3
TOTAL	124	1018	8.2	14	

Table 13: Assemblage breakdown by feature

Fabrics

Group S, Shell (54 sherds, 381g, 37% of assemblage by weight)

- S1: Moderate to common, coarse and very coarse poorly sorted shell (11 sherds, 122g)
- S2: Sparse coarse and very coarse poorly sorted shell (4 sherds, 22g)
- S3: Moderate to common medium and coarse shell (6 sherds, 22g)
- S4: Moderate fine and medium well sorted (9 sherds, 40g)
- S5: Rare medium and coarse shell (8 sherds, 59g)
- S6: Abundant coarse and very coarse shell (1 sherd, 6g)
- SQ1: Moderate to common, coarse and very coarse poorly sorted shell in a dense sandy clay matrix (4 sherds, 28g)
- SFCH1: Moderate coarse shell, sparse medium and coarse crushed flint and sparse coarse chalk (6 sherds, 76g)
- S: Small sherds with shell inclusions (5 sherds, 7g)

Group CH, Chalk (1 sherd, 7g, 1% of assemblage by weight)

CH1: Moderate to common, coarse and very coarse poorly sorted chalk, with rare coarse flint and shell

Group F, Flint (13 sherds, 115g, 11% of assemblage by weight)

F1: Common medium and coarse flint

FQ1: Moderate medium and coarse flint in a dense sandy clay matrix

FQ2: Moderate to common fine and medium crushed flint in a dense sandy clay matrix

Group G, Grog (42 sherds, 350g, 34% of assemblage by weight)

G1: Common to abundant coarse grog, with very rare medium chalk (1 sherd, 19g)

G2: Moderate to common coarse grog, with rare medium chalk and rare shell (1 sherd, 4g)

G3: Common medium and coarse grog (2 sherds, 46g)

GQ1: Sparse medium and coarse grog, and very rare coarse flint in a dense sandy clay matrix (29 sherds, 171g)

GQ2: Moderate medium grog, and very rare coarse flint in a fine sandy clay matrix (4 sherds, 34g)

GFQ1: Sparse very coarse grog and sparse medium and coarse flint in a dense sandy clay matrix (5 sherds, 76g)

Group Q, Sand (14 sherds, 165g, 16% of assemblage by weight)

Q1: Dense quartz-sand (5 sherds, 124g)

Q2: Sparse sand (1 sherd, 3g)

QF1: Dense quartz-sand with rare medium or coarse flint (5 sherds, 31g)

QVE1: Sparse sand with moderate linear voids from burnt out vegetable matter (1 sherd, 5g)

Q: Small sherds in a sandy fabric (2 sherds, 2g)

The assemblage was dominated by small abraded body sherds with a mean sherd weight (MSW) of 8.2g. Overall, 72% of the sherds were classified as small (measuring under 4cm in size), 27% were classified as medium (measuring between 4-8cm in size) and 1% were classified as large (measuring over 8cm in size). A further 17g of pottery crumbs were noted in the assemblage, but are not commented upon in this report. These comprised sherds weighing under 1g.

Based on the total number of different rims and bases identified, the assemblage contained fragments of a minimum of 14 vessels (9 different rims, 5 different bases) with a combine estimated vessel equivalent (EVE) of 1.45. Only two of these vessels were sufficiently intact to assign to form. As a result, the dating of the pottery in this assemblage is primarily based on the character of the fabrics and their comparison to larger groups from the surrounding region.

Feature assemblages

Ditch F.2, Trench 3 and Open Area

Ditch F.2 yielded the largest single assemblage from the site totalling 59 sherds (519g). The pottery was recovered from contexts [5] (34 sherds, 340g) and [220] (25 sherds, 179g). Sherds belonging to all the major fabric groups were represented. Shell fabrics of Group S dominated the assemblage, accounting for 48% of the pottery by weight. This was followed by Group G grog fabrics (33%), Group F flint fabrics (14%), Group Q sand fabrics (3%), and Group CH chalk fabrics (1%).

Despite this ditch being stratigraphically late in the boundary sequence, the pottery recovered from the slots included a number of sherds which date to the end of the Early Iron Age, c. 500-350 BC. These included the partial profile of a round bodied

bowl with everted rim in fabric GFQ1 (3 sherds, 33g), and two different rim sherds with finger-tip impressed rim tops in fabrics S5 (18g) and QF1 (7g). A rim with a finger-tip impressed neck in fabric S2 (4g) is also likely to date to the 5th or 4th century BC, as are 17 other sherds (159g) in fabrics FQ1-2, QF1 and FSCH. Most other sherds from the ditch cannot be closely dated. Many of the grog-tempered fabrics are likely to be of Late Iron Age date, though there were no wheel-made, corded or combed sherds present in this assemblage. Neither were there any Scored Ware sherds characteristic of the Middle/Later Iron Age (350 BC - 50 AD). That said, the shell-tempered fabrics present are entirely typical of this period. In addition, the two different perforated bases in fabrics GFQ1 (2 sherds, 43g) and G1 (19g) are best paralleled in Late Iron Age assemblages. The perforations on these bases were made prior to firing suggesting that the vessels originally functioned as strainers.

Ditch F.4, Trench 20

Ditch F.4, context [10] yielded a single shoulder sherd in fabric FQ1 (37g). The fabric of this sherd is more typical of the Early rather than Later Iron Age, though it may be residual.

Ditch Terminus/Pit F.11, Trench 2 and Open Area

F.11, context [32] yielded a single undiagnostic sherd (1g) of prehistoric pottery in fabric S.

Ditch F.12, Trench 15

Ditch F.12 yielded 4 sherds of pottery (13g). This was recovered from contexts [35] (2 sherds, 3g), and [36] (2 sherds 10g). The pottery from context [35] comprised of residual sherds in fabric F1 which are of Late Bronze Age or Early Iron Age date (c. 1100 - 350 BC). Those in context [36] were in fabric S1 and probably date to the Middle/Later Iron Age (c. 350 BC - 50 AD).

Ditch F.13, Trench 3 and Open Area

Ditch F.13 yielded 10 sherds of pottery (198g). This was recovered from context [40] (7 sherds, 41g) and context [210] (3 sherds, 157g). The pottery from context [40] consisted of sherds in fabric S5 and included a base and a single Scored Ware sherd (12g). Context [210] yielded a large combed sherd in fabric Q1 (113g), and sherds in fabrics S (3g) and G3 (41). The combed sherd is typical of the Late Iron Age, dating to c. 50 BC - 50 AD. This range also overlaps with the later currency of Scored Wares.

Ditch F.17, Trench 2 and Open Area

Ditch F.17, context [34] yielded two undiagnostic sherds in fabric Q1 (3g) and G1 (5g). The sherds cannot be closely dated, through the fabrics are more typical of the Late Iron Age.

Ditch F.27, Open Area

Ditch F.27 yielded 23 sherds of pottery (135). With the exception of a single body sherd from context [216] (5g, fabric S6), all the pottery was recovered from context [85] (22 sherds, 130g). This contained sherds in fabrics GQ1 (14 sherds, 94g), S1 (2 sherds, 9g), S (2 sherds, 2g), SQ1 (3 sherds, 24g), and Q (1 sherd, 1g). Sherds belong to fabric Group S and Q is likely to be of Later Iron Age date (c. 350 - 50 AD). However, those in GQ1 are probably of late Early Iron Age date (c. 500-350 BC), contemporary to those from Ditch F.2. All appear to belong to the same vessel, and included seven refitting sherds which created the partial profile of an ovoid bodied jar with short upright neck. The jar was decorated with finger-tip impressions on the rimtop and shoulder, which is fairly typical of Early Iron Age ceramics.

Ditch F.32, Open Area

Ditch F.32 yielded 6 plain body sherds (25g) from context [120] in fabrics Q1 (2 sherds, 6g), S3 (2 sherds, 7g) and S4 (3 sherds, 16g). The character of the fabrics suggests a Later Iron Age date for this material (c. 350 – 50 AD).

Pit F.33, Open Area

Pit F.33, context [33] yielded 6 plain body sherds (18g) in fabrics Q1 (1 sherd, 2g), Q2 (1 sherd, 3g), S1 (2 sherds, 4g), SQ1 (1 sherd, 4g) and QVE (sherd 1,5g). A Later Iron Age date (c. 350 – 50 AD) is appropriate for fabrics of this character. *Ditch F.35, Open Area*

Ditch F.35, context [35] yielded 5 plain body sherds (37g) in fabrics G1 (1 sherd, 3g) and G2 (4 sherds, 34g). The character of the fabrics implies a Late Iron Age date for this material (c. 50 BC – 50 AD).

Gully F.37, Open Area

Gully F.37, context [125] yielded 7 plain body sherds (27g) in fabrics QF1 (1 sherd, 16g) and S3 (4 sherds, 11g). The sherd in fabric QF1 is likely to be of Early Iron Age date, and is probably residual. The other shell tempered sherds cannot be closely dated, though they probably belong to the Later Iron Age (c. 350 BC – 50 AD)

Discussion

The earliest datable ceramics from CGB: LMD were residual sherds of late Early Iron Age pottery recovered from ditches F.2 and F.27, together with body sherds from gully F.37 and ditch F.12. The pottery from F.2 and F.27 included several finger-tipped rims sherds, a round bodied bowl with everted rim and an ovoid jar with finger-tipped rim and shoulder. This early material occurred in a variety of fabric groups with flint, sand, grog and shell inclusions (fabrics F1, FQ1-2, QF1, FSCH, S2, S5, GQ1). Some of these fabric types continue to be used into the Later Iron Age, particularly the plain shelly wares. Late Early Iron Age pottery similar to that recovered from this site has been found at Rhee Lakeside South, Earith (Brudenell 2007) and Knobs Farm, Somersham (Brudenell 2008). Both have been dated on

typological grounds to the Early-Middle Iron Age transition around the 4th century BC; the Rhee Lakeside South assemblage being associated with two AMS radiocarbon dates of 400-200 cal. BC (95% confidence, Beta-229352; 2260 ± 40 BP) and 400-210 cal. BC (95% confidence, Beta-229353; 2250 ± 40 BP). The early pottery from CGB: LMD is probably broadly contemporary with these assemblages, and shares fabrics and forms of decorative treatment in common. Given the presence of these Early Iron Age sherds in ditches yielding Later Iron Age pottery, it is possible that there were earlier features along the axis of F.27 and F.2 which were disturbed during boundary construction.

The remaining later prehistoric pottery from the site dates to the Later Iron Age between c. 350 BC – 50 AD. Most of these sherds cannot be closely dated within this bracket, and unhelpfully no wheel made or cordoned sherds were recovered. However, the presence of a vertically combed sherd from F.13 is important in this context, as this form of surface treatment is characteristic of Late Iron Age coarseware pottery dating from c. 50 BC – 50 AD. More significantly, F.13 is early in the boundary sequence and pre-dates the construction of F.27, F.2 and F.32. These ditches must therefore post-date 50 BC, making them of Late Iron Age date. On this basis we may therefore postulate that most of the site's ceramics belong to the Late Iron Age, which would also be fit with the relatively high proportion of grog-tempered pottery sherds: a fabric typical of this period. A late date may also explain the paucity of Scored Ware sherds in this assemblage.

Recommendations: The two partial profiles of late Early Iron Age vessel from F.2 and F.27 should be illustrated for publication.

Appendix 11

Late Iron Age and Roman Pottery – *Katie Anderson*

The site yielded a total of 891 sherds of pottery dating to this period, weighing 9409g and representing 6.3 EVEs. All of the pottery was examined and details of fabric, form (based on Thompson 1982 form codes), decoration, surface treatment, usewear, EVE and date, where possible, were recorded. The assemblage comprised sherds of varying size and condition, with a mean weight of 10.5g. All of the material dates to the Late Iron Age and early Roman period and contained handmade, wheel turned and wheel thrown vessels.

Feature Analysis

A total of 29 features contained pottery, in varying quantities. The details of which can be seen in Table 14. Dating of the features was often complicated by the difficulties in differentiating between Late Iron Age and Early Roman pottery. For the purposes of this report, only some of the features are selected for more in-depth discussion.

Feature	No.	Wt(g)	EVEs	Date
1	5	33	0.13	LIA/ER
3	16	59	0	LIA, LIA/ER ER
4	65	376	0.58	LIA/ER
6	2	57	0	LIA, LIA/ER
8	6	24	0	LIA
9	330	4960	2.7	LIA, LIA/ER, ER
10	7	72	0	LIA
17	83	433	0.28	LIA, Romanising
21	2	4	0	LIA, LIA/ER
22	4	25	0	LIA
25	11	39	0	LIA
26	1	3	0	LIA
27	7	6	0	LIA/ER, ER
28	23	91	0.1	Romanising
29	56	401	0.1	LIA/ER, Romanising
30	1	1	0.5	Romanising
32	11	194	0	LIA/ER
34	87	1218	0	LIA, LIA/ER
36	64	583	1.62	LIA/ER, Romanising
40	27	157	0	Romanising
46	12	56	0	LIA
50	4	83	0	LIA
52	3	17	0	LIA
53	1	2	0	ER
54	18	43	0	LIA
56	4	12	0	LIA/ER
58	1	10	0	LIA
59	21	243	0.15	LIA/ER
60	13	170	0	LIA/ER, ER
Surface	6	37	0.15	Romanising
TOTAL	891	9409	6.31	X

Table 14: All features containing LIA and Roman pottery

F.9, a NE-SW orientated ditch, contained 330 sherds, weighing 4960g, collected from eight different contexts as well as the surface. [026] contained 34 sherds, which included a carinated bowl and three jar sherds. Three further jars along with two beakers and one cup were recovered from context [027]. Context [138] contained 40 sherds, including one combed jar, one carinated jar/bowl, five jars, one of which had slashed decoration on the neck and one with heavy interior sooting, as well as one cup. The pottery from these three contexts all dated Late Iron Age/Early Roman (LIA/ER) and included both handmade wares and wheel turned and thrown vessels.

Context [145] contained sherds which were mostly Early Roman in date. This included three bowls, one of which was rilled (others D1-5 and D2-5) and two jars. There was also one body sherd with barbotine dot decoration. Context [250] contained a mixture of LIA/ER and Early Roman pottery, comprising two jar/bowls, three further jars and one lid (L8). Finally a sherd possibly from a platter was recovered from the surface of this feature.

- **F.59** 21 sherds were recovered from this pit, weighing 234g. This included two globular, grooved rim bowls, one lid-seated jar/bowl and one further jar/bowl, all of which were dated LIA/ER.
- **F.60** This small pit contained 13 sherds weighing 170g, all of which was LIA/ER in date. Three sherds were from a lid-seated bowl/jar, with one sherd from a possible platter, with an angular shoulder.
- **F.59** cuts both **F.9** and **F.60**. There is however, no obvious difference in date between the three features, thus supporting the view that all activity at the site took place over a relatively short period of time. However, the possibility of redeposition should not be ignored.
- **F.17** contained 83 sherds of pottery, weighing 433g and representing 0.28 EVEs. The material came from three contexts, including the surface and comprised one jar with combed wave decoration on the neck and one platter (G1-7) as well as a possible lid. The pottery from this feature included LIA material along with Romanising sherds within the same contexts.
- **F.27** Although spanning almost the entire length of the site, this ditch produced only seven sherds of pottery, weighing just 6g. These included three Early Roman whiteware sherds and two LIA/ER sandy sherds. The small number of sherds recovered from this feature is surprising.
- **F.28** This pit contained 23 sherds weighing 91g, al of which were Romanising in date. This included one sherd from a necked, everted rim jar.
- **F.29** A total of 56 sherds weighing 401g and representing ??EVEs. The pottery dated LIA/ER and included some Romanising material. Two of the contexts from one slot contained refitting sherds.
- **F.34** 64 sherds, weighing 583g were recovered from six contexts. 44 of the sherds (600g) were from a single vessel, a wheel-thrown, burnished jar with a carinated shoulder. This vessel dates LIA/ER.
- **F.36** formed the enclosure on the eastern edge of the site. It contained 64 sherds weighing 1218g, of which 32 sherds were from a single vessel. The vessel was a wheel-thrown lid. Also within this feature were three sherds from a rilled jar. The pottery from this feature primarily dated LIA/ER with a few examples of Romanising vessels.
- **F.1** and **F.3** are also associated with this enclosure. **F.1** contained 4 sherds which were from a single vessel, a wheel-turned jar/bowl, dating LIA/ER. **F.3** contained 16 sherds (59g), which included 13 sherds from an Early Roman whiteware vessel. There was also one sherd from a LIA/ER vessel.
- **F.40** 27 sherds weighing 157g were recovered from this small pit. All of the sherds were from a single vessel, a sandy, Romanising vessel. Although not complete, finding so many sherds from one vessel in a single feature suggests it was probably broken nearby and then quickly deposited.

Assemblage Composition

The pottery from this assemblage ranges in date from the Late Iron Age to the Early Roman period, and is likely to represent a relatively short period of occupation. There are handmade Mid Iron Age wares recovered alongside Late Iron Age wheel-turned wares and Romanising vessels. Chart 1 shows the proportions of the three production techniques. Wheel-turned vessels, which are vessels which are only finished on a wheel, were the most commonly occurring within the assemblage, representing nearly 50% of all identifiable vessels. This is probably a reflection of the date of the assemblage, since this technique was primarily used in the LPRIA, before wheel-throwing became the dominant technique in the Roman period.

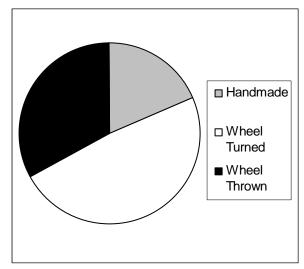


Chart 1: Production technique, excluding 'unknown' sherds

Vessels in the Mid Iron Age handmade tradition are present, although in smaller quantities than vessels made using a wheel. This is a pattern seen in many later Iron Age assemblages (Brudenell pers comm.), with handmade vessels continuing to be used alongside wheel turned and wheel thrown vessels.

A variety of fabrics were present in this assemblage (Table 15), although it can be assumed that most were procured and produced locally. Grog and sand were the most common tempers, with a small number of sherds containing shell or crushed flint. There is some consistency in the fabrics, suggesting the same sources were exploited, although more detailed fabric analysis would be necessary to determine whether or not this was the case. The dominance of sandy wares is expected for a site of this date from this area of Cambridgeshire. The Roman wares consisted of sandy greywares, whitewares and buffwares, with some grog tempered vessels. There were no sherds from known Roman sources, including no imported Samian or amphora, which are often found on Early Roman sites. This absence is again likely to be a result of the date of occupation of the site, which appears to have gone into decline by AD50, before the Roman period had fully emerged. A minimum of 53 different vessels were identified within the assemblage, although this represented a limited number of vessel types (see Table 16). Jars were the most commonly occurring vessel form, representing which is typical of rural assemblages of this date. Within this several different forms were present, including plain everted rim jars, storage jars and tall, plain everted rim jars with offset necks.

Fabric	No.	Wt(g)
Buff sandy	2	10
Coarse sandy	50	312
Coarse sandy greyware	22	178
Fine sandy	5	47
Grog	10	88
Grog and flint	5	38
Grog and sand	291	3884
Grog and shell	14	191
Roman whiteware	16	43
Sand	86	696
Sand and calcareous	18	234
Sand and flint	142	1444
Sand and iron	91	1220
Sand and mica	72	630
Sand and shell	46	290
Shell	21	104
TOTAL	891	9409

Table 15: All pottery by fabric

There were also several examples of Romanizing/Early Roman beaded rim jars. Rim diameters varied from 14cm to 32cm highlighting a variety of uses for the vessels, supported by the evidence of heavy sooting on two of the vessels, interior limescale on a third and one jar which had a perforation under the rim, which appears to be prefiring and was possibly used to suspend the vessel. The same vessel also had a post-firing perforation on the body, which may have been a repair hole. 13 of the jars had been burnished to varying degrees, with five vessels with rilling and three combed.

A relatively large number of sherds were recorded as 'jar/bowl' which occurred when a rim and neck was present but not enough of the vessel to determine whether it was a jar or a bowl. 34 sherds from lids were recovered, although this represents only four different vessels, comprising a bell-shaped lid and a conical lid. Bowls were poorly represented within the assemblage with a minimum of just six vessels, although the category of 'jar/bowl' is likely to have included more examples. The forms included a deep bowl, a plain necked bowl and a globular, grooved rim bowl. Two sherds from a single carinated bowl were recovered from two separate contexts within **F.9**. Three of the vessels were burnished, two of which were heavily polished.

Form	No.	Wt(g)
Platter	3	106
Beaker	1	1
Bowl	10	213
Cup	8	60
Jar	151	3353
Jar/bowl	50	486
Lid	34	238
Unknown	634	4952
TOTAL	891	9409

Table 16: All sherds by vessel form

Fineware vessels consisted of two carinated cups, one of which had two thin cordons, one small beaded rim beaker and one platter, which was a copy of a Gallo-Belgic of a Cam.12. All of these vessels are likely to have been produced locally.

The transition between the Late Iron Age and early Roman periods can often be seen through the pottery, with a typical movement from handmade to wheel turned to wheel thrown vessels and with swift changes to vessel form, reflected either by new forms or alterations to the traditional forms.

A small number of refits, or at least non-refitting sherds from a single vessel were recovered, most of which came from adjacent contexts within one feature. These were probably the result of rapid deposition or recutting and redeposition. There were also two examples of sherds from a single vessel coming from two separate features. One sandy ware sherd and one Roman whiteware sherd were recovered from the ditch, **F.9**. A further two sandy ware sherds and one Roman whiteware were recovered from **F.3**, part of the enclosure, which although do not refit, do appear to be from the same vessels. In terms of distance the two are quite far apart however, and therefore the most likely explanation for this is that the sherds in question had been lying on the surface after breakage and then at some later stage, had been deposited into the respective features after a cleaning event. This view is supported by the small size and poor condition of the sherds in question.

Discussion

Perhaps the most interesting element of this assemblage is its date, which demonstrates that although occupation at the site was short-lived, it did cross between the Late Iron Age and Early Roman periods. Broadly the pottery from this assemblage dates 0-69 AD, although a more precise date of AD 20-60 may be suggested by the lack of any established Roman wares. Although the conquest took place in AD 43, it was some time before changes to indigenous pottery could be seen in this area of East Anglia, and often the only evidence of contact with the Roman world, is the presence of imported wares, namely Samian and amphora, both of which are absent from this assemblage.

The vessel forms present in this assemblage have the potential to give an insight into this transitional period. Unfortunately, only 28% of the assemblage was diagnostic and therefore any discussion is limited. This is further complicated by the apparent short lived occupation which results in a lack of earlier dating Iron Age vessels and later dating Roman vessels.

A comparison of mean weights for pottery of different dates can be made, although as discussed above, distinguishing between the Iron Age and Roman vessels is problematic. The sherds dated LIA had a mean weight of 12.1g, while the Early Roman sherds had a lower mean weight 7.37g. Sherds recorded as Romanising had a mean weight of 9.7g, while those which could only be dated LIA/ER had a mean weight of 11.5g. The assemblage as a whole has a relatively low mean weight, suggesting that the sherds had been left on the surface before being deposited or else had moved some distance from where they were broken. This is supported by the relatively small number of refitting sherds recovered.

A number of large evaluations have taken place locally in and around Longstanton, approximately one mile to the south (Evans, Appleby, Mackay & Armour 2006). This work has uncovered a series of Late Iron Age and Roman settlements, and although few can be pinpointed to the Conquest period as with this assemblage, the fabrics and forms present are comparable. Sand and shell-tempered wares dominate both assemblages, and the range of forms from both a narrow, with open, globular forms being the most common (Brudenell *ibid*). On a small number of sites there was also the occurrence of hand-made vessels alongside wheel-turned and wheel-thrown vessels. It therefore seems likely that this site is a continuation of a swathe of Late Iron Age and Roman settlements, that feature prominently across the landscape.

Approximately five miles northeast of this site, a much larger transitional assemblage was recovered at Wardy Hill, Ely (Evans 2003). Although this site has a longer chronology, the pottery from the transition period has many shared characteristics, most notable is the presence of handmade vessels alongside wheel-turned vessels. Fabrics are also similar with sand and shell dominating.

A further Guided Busway site, south of Cambridge, comprised an assemblage of the same date as this assemblage, and is therefore a good site for comparison. This site contained only half the quantity of pottery as this site (341 sherds) but had many of the same vessel forms, with jars dominating, a small number of simple bowl forms and very little else. In terms of fabrics however, these sites differ quite significantly. This assemblage contained a large number of shell-tempered wares, in contrast to the site from south Cambridge (CGB:SRC), which had no shell-tempered wares. This suggests that much of the pottery industry was very localised during this period, with shell-tempered wares only featuring on sites north of Cambridge.

Overall this assemblage has much to offer in terms of understanding the Late Iron Age and Early Roman transition, as the occupation of this site appears to be very short lived. It probably reflects a small, relatively poor settlement, which had yet to become fully Roman, although further work in the area would be necessary to establish whether or not this site is part of a larger site which continued beyond the conquest period. The assemblage is an important glimpse into the immediate pre and post-conquest period, and although not a focus of a settlement, is still enough to give a much needed insight into the transition period and would certainly be of importance in a wider, regional analysis of the Late Iron Age and Early Roman transition.

Appendix 12

Faunal Remains - Vida Rajkovača

Introduction

The animal bone assemblage recovered from the Longstanton Windmill site during excavations in 2007 comprised a sample of 412 bone fragments. Faunal remains were hand collected and the material from bulk soil samples was not included. The assemblage represented a continuation of archaeological investigation in the area

(Evans 2003, Evans *et al.* 2006) and builds on zooarchaeological research executed by Davis (2003:122-131) and Swaysland (2006:109).

The majority of bone comes from linear and enclosure ditches with small numbers of bones recovered in pits and gullies. Material is dated to Late Iron Age and Early Roman period (0-69 AD, c.f. Anderson this report) and therefore, it has been decided to consider it as a single assemblage. Three features were not possible to date (**F.11**, **F.33**, **F.35**) and they elicited a small sub-set of 16 bone fragments, one of which was identifiable to species.

Methodology

The zooarchaeological investigation followed the system implemented by Bournemouth University with all identifiable elements recorded (NISP: Number of Identifiable Specimens) and diagnostic zoning (amended from Dobney & Reilly 1988) used to calculate MNE (Minimum Number of Elements) from which MNI (Minimum Number of Individuals) was derived. Ageing of the assemblage employed both fusion of proximal and distal epiphyses (Silver 1969) and mandibular tooth wear (Grant 1982). Identification of the assemblage was undertaken with the aid of Schmid (1972) and Hillson (1999) and reference material from the Cambridge Archaeological Unit. Where possible, measuring data was taken (von den Driesch 1976). Taphonomic criteria including indications of butchery, pathology, gnawing activity and surface modifications as a result of weathering were also recorded when evident.

Preservation

The majority of the material was recorded as ranging from 'Moderate' to 'Poor' which indicates that weathering and other erosive damage had occurred to the bone. The assemblage demonstrated quite poor overall preservation: of 47 contexts analysed, only one showed quite good preservation. This indicated bones with minimal or no weathering or bone damage. In contrast, 28 contexts demonstrated 'moderate', 20 'quite poor' and 3 contexts were poorly preserved. This equates to a total number of 18 fragments which demonstrated quite good preservation, compared to 394 fragments with bone damage or signs of weathering.

The low percentage of identifiable elements is due in part to the relatively high numbers of fragmented limb bones which could only be assigned to a size category (Large, Medium or Small Mammal). This was compounded by a generally poor level of preservation: the majority of contexts were categories as being Quite Poor or Poor denoting high levels of weathering and erosion. In some instances this rendered the bone highly friable with considerable damage to the cortical surface.

Results

Late Iron Age/Roman features

Species representation

In total 396 fragments were analysed from the site with 200 (50.5 %) identifiable to element and only 59 (14.9 %) further identified to species. The low percentage of fragments identifiable to species is due in part to the relatively high numbers of fragmented limb bones which could only be assigned to a size category (Large, Medium or Small Mammal). This was compounded by a generally quite poor level of preservation. Of the identifiable elements all were assigned to domesticate mammals with no wild fauna, birds, fish or small mammals evident within the assemblage. Cow accounted for the greatest proportion of the identifiable fragments, followed by sheep/goat, horse, pig and finally dog (Table 17). In terms of the MNI count ovicaprids dominated, but only marginally (refer to Table 18 below).

Species	NISP	% NISP
Cow	28	46.7
Sheep/Goat	15	26.7
Horse	12	20
Pig	3	5
Dog	1	1.6
UUM	10	4.8 (Σ=206)
ULM	72	49.3 (Σ=146)
UMM	59	$40.4 (\Sigma = 146)$

Table 17: Species frequency by NISP (Number of Identifiable Specimens)

Key: USM, UMM & ULM = Unidentified Small, Medium and Large Mammal / UUM = Unidentified Fragment. NB: Species percentages are out of 60. These differ from the unidentified counts as these are calculated on the basis of element identification (for USM, UMM & ULM) and total fragments (for UUM).

The level of preservation has undoubtedly affected the likelihood of recognising taphonomic modifications. For example, of the 28 cow elements recorded, 17 were either fragmented, eroded or fragmented and eroded. Carnivore gnaw damage was noted on one sheep tibia and one cow calcaneum. This might indicate that dogs were likely present on the site and one has been recorded osteologically. One butchery record was noted on a cow astragalus indicating fine knife butchery that took place during the early stages of carcass disarticulation (denoting skinning or gross disarticulation activity). In addition to the butchery, a piece of worked bone was also recovered evidently fashioned into an awl from the limb shaft of a medium sized mammal ([250]; **F.9**; <134>).

Species	MNI	% MNI
Cow	2	25
Sheep/Goat	3	37.5
Horse	1	12.5
Pig	1	12.5
Dog	1	12.5

 Table 18: Species frequency by MNI (Minimum Number of Individuals)

Cow is represented with both cranial and skeletal elements on the site and it is likely that the animals were bred locally. The predominance of cattle bone suggests that they were the most economically significant domestic animal being exploited for both meat and secondary products (milk, traction). Age range derived from a single cow mandible (senile, Grant 1982) does not allow us to draw any conclusions about the economy or the culling of the animals on the site. Sheep would also have been used as a multipurpose animal for milk, wool and meat. Age range for ovicaprids (though only four mandibles were present and therefore the results are ambiguous), obtained from mandibular tooth wear (Grant 1982) and epiphyseal fusion data (Silver 1969) indicate the presence of juvenile, adult and senile animals on the site.

Other livestock species are underrepresented. One unfused pig metatarsal was recorded as of juvenile to young adult animal (0-2 years).

Undated features

Three features were not possible to date (**F.11**, **F.33**, **F.35**) and they have yielded 16 bone fragments. Only one was identifiable and it is a single ovicaprid loose tooth.

Conclusion

Little can be said regarding the presence of domesticates on the site as the species representation was quite poor. However, contemporary sites in the area (Swaysland in Evans *et al.* 2006) demonstrate similar patterns of exploitation of local fauna with the similar species representation. All this data combined (this and other sites assemblages) might give us an insight into the potential this area holds for future research. Detailed analysis of the economy, subsistence and diet practiced on the site would be very important, especially in the absence of any remains of wild fauna or evidence for hunting. Clarifying the age structures and kill patterns from the material with a more in-depth analysis of toothwear and fusion data would be important when larger assemblages are recovered. Also, if the assemblage has a good state of preservation, metric data are much needed particularly if specific cattle types were present on the site.

Appendix 13

Flint – *Lawrence Billington*

Excavations at CGB:LMD produced 11 flints weighing 83g together with five unworked burnt flints weighing 89.7g. The assemblage is shown by context and type in Table 19.

The worked flint assemblage was dominated by unretouched waste flakes. These represent a simple flake based industry concerned with the expedient removal, by hard hammer, of flakes of varied morphology demonstrating a lack of concern over core maintenance or platform preparation. Two cores from F. 3 amplify the attributes seen in the flakes. Both are irregular, multiplatform flake cores with numerous knapping errors in the form of incipient cones of percussion, crushed platforms and hinged flake scars. Little attempt has been made to work consistently from a

dominant platform with flakes being opportunistically removed from any potential platform. The technological traits of the flakes suggest a later prehistoric date; they are typical of the undiagnostic elements of flint working throughout prehistory from the later Neolithic onwards. However the lack of flaking control and anticipation evidenced in the cores from F.3 suggest a later Bronze Age date for these pieces at least

A single retouched tool, an end scraper from F. 11, was recovered. An expedient product made on an irregular flake, this piece is not strongly diagnostic but the character and quality of the retouch suggests a Neolithic or Early Bronze Age date.

Feature no.	Feature type	unworked burnt chunk	chunk	secondary flake	tertiary flake	end scraper	core	Total
1	Ditch	1						1
3	Ditch			1			2	3
4	Ditch				1			1
8	Pit	4		2	1			7
11	Ditch					1		1
17	Ditch				1			1
36	Enclosure		1	1				2
	Total	5	1	4	3	1	2	16

 Table 19: Flint assemblage by context

Appendix 14

Worked Stone – Simon Timberlake

<057> F.29 [78]. A slab of worked gritstone (130mm x 70mm x 33-40mm thick), probably part of a rotary quernstone. The slightly convex surface is pitted, suggestive of the original pick-end dressing across the top of the upper stone, the grinding surface underneath being very slightly concave and typical of rotary querns. No ridging (dressed grinding ridges) can be seen, yet at the same time this surface doesn't seem to be that well worn. In this instance no idea could be gained of the diameter of the stone from the surviving worked surfaces, though typically querns of this thickness (40mm) might be anything up to 500 mm – 700 mm wide. The medium-coarse gritstone lithology with pink orthoclase and large sub-angular glassy quartz grains is very typical of the Millstone Grit (Upper Carboniferous) sandstones quarried during the Roman period at classic Derbyshire (Pennine) sites of Roman-Medieval millstones were being quarried here and distributed through Southern Britain by the 1st century AD (Peacock 1988).

<030> **F.9** [27]. Not a piece of worked stone. The perforations into this limestone are natural and probably represent the borings of fossil molluscs into a limestone hardground formed on the Jurassic or Cretaceous sea bed.

<075> **F.36** [105]. A tiny fragment of lava quernstone (25mm x 25mm x 15mm). The right angled corner of this suggests that it is the edge of a completely fragmented rotary quern. Part of an imported quern from the Eifel region of Germany, perhaps Andernach (see Hayward in Lucas & Whittaker 2001). Of Roman date but may be redeposited.

<071> **F.36** [99]. x5 undiagnostic fragments of lava quern. Probably Roman (see above).

<103> **F.36** [160]. x6 undiagnostic fragments of lava quern stone. Very worn and rounded. As such these may be redeposited.

Slag

<029> **F.9** [27]. x4 slag smithing lumps (SSL) associated probably with the secondary smithing of iron. The two larger pieces are heavy and slightly magnetic suggesting the loss of iron to the slag during the forging of an iron object in the furnace. At least two of the pieces show evidence of the attached baked red clay hearth lining. Roman or possibly Late Iron Age?

<148> **F.9** surface finds. x8 pieces of quite friable and very cindery slag, conceivably associated with ironworking. This type of slag may well have suffered from post-depositional processes such as leaching. It has a bleached 'pumice-like' appearance.

Discussion

The presence here of rotary quern stone fragments composed of Millstone Grit and Rhineland lava are consistent with a Roman date for these features. Although the use of imported or long-distance British sourced quern stones may still be linked to an early 1st century AD context (immediately pre- or post-Conquest), one might expect to see a rather more diverse assemblage of saddle quern and beehive type puddingstone and greensand rotary querns associated with a Late Iron Age/ Roman or Romano-British settlement (Peacock 1987). Cambridge, however, may be on the very edge of the distribution circle of locally sourced quern stone supply.

A road network to the north from the 1st century onwards allowed the distribution of these large items (circular gritstone querns) which could have weighed anything up to 20-30kg each. The imported lava querns were light for their size but bulky; these came by ship from the Rhineland via the distribution centre of *Camulodunum* (Hayward in Lucas & Whittaker 2001), and perhaps thence along the *Via Devana*. Millstone Grit from the Southern Pennines may also have travelled southwards along the same road (the road from Chester). The Roman Road passes just south of Longstanton (and thus the LMD 06 site) on its way to Huntingdon.

Close links to these road networks might explain the similarity in assemblage and also the common presence of these more distantly-sourced quern stones from the

middle of the first century AD onwards at a number of sites near Cambridge, for example Addenbrookes (Evans, Mackay & Webley 2008).

The iron-working slag debris found is fairly typical of secondary smithing of new iron objects from old. This would have been a common activity at most rural settlements. Such slag could be Iron Age or Roman and would most probably have been residual in this context and perhaps unrelated to the location of the original activity.

Appendix 15

Assessment of Bulk Environmental Samples - Anne de Vareilles

Methodology

12 bulk soil samples from ten features of Late Iron Age and Romano-British dates were selected for archaeobotanical analysis, and processed using an Ankara-type flotation machine. Flots were collected in 300µm sieves and the remaining heavy residues washed over a 1mm mesh. Both flots and residues were dried prior to analysis. For this assessment, only heavy residue components greater than 4mm were sorted by eye. The smaller 1–4mm fractions have been stored for future reference. Sorting of the flots was carried out under a low power binocular microscope (x6–40) in the George Pitt-Rivers Laboratory, McDonald Institute, University of Cambridge. Nomenclature follows Zohary and Hopf (2000) for cereals, Stace (1997) for all other flora and an updated version of Beedham (1972) for molluscs. All macro-remains are listed in Tables 19 and 20.

Preservation

Botanical macro-remains were preserved through charring. Charcoal does not abound in any of the samples and is mostly smaller than two millimetres thick. The samples are poorly preserved with distorted and broken grains. Uncharred duckweed seeds (*Lemna* sp.) were found in F.3, F.8 and F.9. Their date is uncertain but they are evidence of a waterlogged phase. There are few intrusive seeds and not many blind burrowing snails *Ceciloides acicula*. Snail shells are not abundant and it is not know whether their low quantities are a result of pre or post-depositional environments.

Results

The results for archaeobotanical remains are presented by feature date. Molluscs are discussed separately.

Late Iron Age pit, F.8 [24]

Three wheat glume bases (of which 2 are spelt wheat— *Triticum spelta*), one grass seed and a fragment of a nut shell were found.

Late Iron Age /Early Roman period features

All eight features contained charcoal but seeds and cereal remains were only recovered from five of these. Less than ten cereal grains (2 of which are definitely wheat) and five wheat glume bases were found in enclosure ditch F.29. Single wheat glume bases were found in ditches F.3 and F.54. A total of five wild plant seeds were retrieved, including three grass seeds.

Early Roman period, ditch F.9 [27]

This sample was the richest in botanical remains. A little hulled barley and wheat grains, and six wheat glume bases (3 spelt) were found along with a minimum of five grass seeds, two legumes (*Pisum/Vicia/Lathyrus* sp.) and three other wild plant seeds. The legumes could not be identified and were not necessarily cultivated. The most numerous finds were of cereal/wild grass caryopses fragments, reflecting the poor level of preservation.

The molluscan assemblages

As mentioned above, few snail shells were recovered. Three or four of the features, namely ditches F.2 and F.22, contained fresh water molluscs suggesting they were seasonally waterlogged. Otherwise, most features appear to have supported damp and shady environments, not devoid of vegetation.

Discussion and Conclusion

Concentrations of plant macro-remains are very low so interpretations can only be tentative. The results suggest that spelt wheat and hulled barley were used on site, although there is no indication as to where these were grown or stored. However, the larger assemblages of botanical remains appear to lie within and around the curvilinear enclosure ditch F.9, suggesting that plant processing and food preparation may have occurred within that area. Unlike the botanical remains, other domestic waste, such as pot sherds and animal bone, was found across the site in significant concentrations. Snail types and the uncertain presence of duckweed seeds seem to indicate that waterlogged archaeological layers may still exist.

Appendix 16

Cremated Bone (CGB:OCS) - Natasha Dodwell

A very small quantity (1g) of buff white, well calcined bone was recovered in association with sherds of a Early-Mid Iron Age vessel. The cremated bone fragments are small, the largest being 14mm and are unidentifiable as either human or animal.

Sample number		2	5	7	6	4	1	12	10	11	8	9	3
Context		24	75	125	83	60	9	78	99	162	202	203	27
Feature		8	28	37	2	22	3	29	36	36	36	54	9
Feature type		Pit	Pit	Gully	Boundar	y ditches		End	losure dito	ches	•	Ditch	Ditch, encl?
Phase/Date		L.I.A.		•	•		on Age	/ Early F	Roman			•	Early Roman
Sample volume - litres		10	7	5	9	14	20	9	14	13	7	12	14
Flot volume - mililitres		15	2	19	11	<1	3	8	1.5	26	9	12	6
Flot fraction examined - %		100	100	100	100	100	100	100	100	100	100	100	100
Charcoal >4mm		- (-)		-	-								-
2-4mm		++		++	++	-		+	+	-	-	-	+
<2mm		+++	+++	+++	+++	++	++	+++	++	+++	+++	+++	+++
Vitrified pieces			-	-	-		-	+	-	-	-	+	+
Parenchyma - undiffer	rentiated plant storage tissue			-				++	-		+	+	++
Cereal grains and chaff													
Hordeum vulgare sensu lato	hulled barley grain												3
Hordeum / Triticum	barley or wheat grain												1
T. spelta/dicoccum	spelt or emmer grain												1
Triticum sp.	hulled wheat grain							2					
Indeterminate cereal grain fragm	nent							6					11
Triticum sp. glume base	hulled wheat chaff	1					1	4					3
T. spelta glume base	spelt wheat chaff	2						1				1	3
Culm node	Straw node												1
Non cereal seeds and chaff													
Capsella bursa-pastoris	Shepherd's-purse										1		
Pisum / Vicia / Lathyrus	pea/ vetches / wild pea												2
Medicago / Trifolium	medics or clover												1
lenticular Carex sp.	flat sedge seed												1
Phleum sp.	Cat's-tail	1									2		
large Poaceae indet (>4mm)	large Grass Family seed												4
small Poaceae indet. (<2mm)	small Grass Family seed						1						1
Poaceae fragment indet.	wild/cultivated grass seed fra	ag.											6
seed indet.					1								
cotyledon indet.													1
nut shell fragment indet.		1											

 Table 20: Botanical and Molluscan Remains from the Bulk Soil Samples

Sample number	2	5	7	6	4	1	12	10	11	8	9	3
Context	24	75	125	83	60	9	78	99	162	202	203	27
Feature	8	28	37	2	22	3	29	36	36	36	54	9
Fresh water Mollusca												
Lymnaea truncatula				+	++		-					
Anisus leucostama		-			-			-				
Damp / Shade loving species												
Vallonia excentrica / pulchella	+		-		-	-	++	-	+		-	+
Columella edentula												-
Ena obscura							+					-
Catholic species			-	-	-	-	-	-	-	-	-	-
Trichia sp.	+				+		++					+
Ceciloides acicula -Blind burrowing snail	++			+		-						
>2mm bone												-
<2mm bone	+			-			-					+
Lemna sp uncharred duckweed seeds	++					+++		-		-		+
Modern intrusive seeds								-				+

Table 21: Molluscs

Key: '-' 1 or 2, '+' <10, '++' 10-50, '+++' >50 items.

Section 4

Longstanton Park and Ride (CGB:LPR)

with Duncan Mackay

Introduction

Location, topography and geology

The Longstanton Park & Ride site is located to the north of the main village and is bounded by the former Cambridge to St. Ives railway line to the north, the B1050 to the west, by open farmland to the east and Longstanton golf course to the south. Site was centred on NGR 540096/267842, (see Figures 3 and 21).

The site was situated on Ampthill Clay overlain with patches of 3rd Terrace gravels in places, particularly towards the western half of the site. There was a slight upward slope from west to east, from a height of 6.50m in trench 18 to 6.70m OD within the open area to 7.9m OD in Trench 15. The open area was initially planned as being 0.50 hectares; however this was reduced during the excavation phase to just over 0.30 hectares.

Archaeological Background

Longstanton and its environs have been subject to extensive fieldwork carried out by the CAU over the past several years in connection to the Guided Busway (Cessford & Mackay 2004) and Northstowe projects (Evans & Mackay 2005, Patten 2004 and Patten & Evans 2005) and need not be repeated in detail here.

In brief however, trial trenching that targeted a dense area of cropmarks (SMR 8298) some 300m to the west identified clusters of dense Romano-British settlement activity (Evans & Mackay 2004), whilst trenching directly to the south identified a limited number of features which were predominantly dated medieval/early post medieval and were classified as either field systems or furrows relating to that period. The exception to this was a probable Late Bronze Age/Early Iron Age pit/well similar to that found in the 2003 evaluation at the Longstanton Park and Ride site (Cessford & Mackay 2004). CGB:LMI lies just to the southeast and most of the identified features on that site were also dated medieval/early post medieval. In general then it can be said the Park and Ride site exists within an area with dense concentrations of primarily Romano-British activity but with extensive areas relatively poor in pre medieval/early post medieval archaeological activity apart from seemingly fairly isolated, but substantial early features and possible outfield systems whose lack of datable finds suggests they are some distance from any settlement activity.

Archive

A total of 115 contexts from 32 features were excavated and recorded and a small number of finds, including pot, animal bone, burnt stone, worked stone, burnt clay and a silvered copper alloy brooch, were recovered. The documentary records and accompanying artefacts have been assembled into a catalogued archive in line with

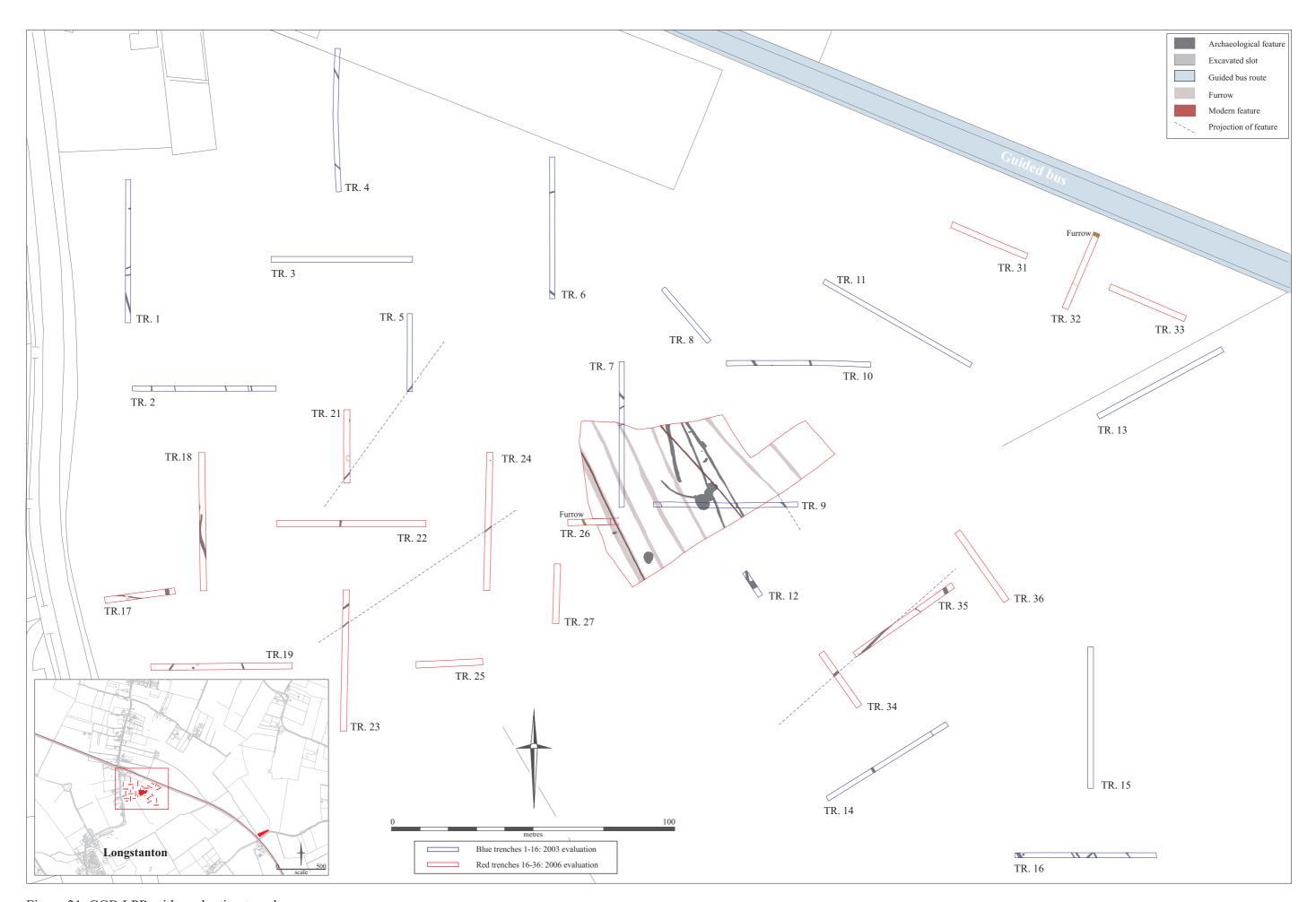


Figure 21. CGB:LPR with evaluation trenches

Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeology Unit offices. CHER number is ECB 2514.

Results: Trenches

The trenching phase of this excavation carried on from the 2003 evaluation (Cessford & Mackay 2004) when trenches 1-16 were excavated, see Figure 21, and showed a continuation of the same pattern from that evaluation of fairly sparse archaeology primarily consisting of small undated ditches and medieval/early post medieval furrows. Table 21 shows a brief trench summery.

Trench 17

Trench 17 was 25m long on an E-W alignment. Topsoil was 0.33m deep and the subsoil 0.26m deep, with an overall trench depth of 0.59m. This trench contained three features, all ditches. F.7, orientated north-south was wide and shallow with the character of a furrow, but there were no similar features nearby. F.13 was orientated northwest-southeast and was a clear cut features, however no finds were recovered.

Trench 18

Trench 18 was 50m long on a N-S alignment. The topsoil was 0.30m deep and subsoil up to 0.20m deep, with an overall trench depth of up to 0.56m. This trench contained a single ditch, F.8, which appeared to have a curvilinear line, becoming roughly cut and segmented at the northern end. This was probably post medieval in date.

Trench 19

Trench 19 was 50m long on an E-W alignment. The topsoil was up to 0.27m deep and the subsoil up to 0.20m deep, with an overall trench depth of up to 0.47m. This trench contained two parallel N-S ditches, F.1 and F.2, and a small pit, F.3. Both ditches had a similar profile of moderately steep sides and a rounded base, no finds were recovered though.

Trench 20

Trench 20 was 25m long on an E-W alignment. The topsoil was 0.27m deep and the subsoil up to 0.21m deep, with an overall trench depth of 0.47m. No archaeology was present

Trench 21

Trench 21 was 26m long on a N-S alignment. The topsoil was up to 0.30m deep and the subsoil up to 0.35m deep, with an overall trench depth of up to 0.63m. This trench contained a single northeast-southwest orientated small ditch, F.9, and a pit, F.15. Ditch F.9 contained a silvered copper alloy Roman broach. The pit was well-defined but contained no finds.

Trench 22

Trench 22 was 50m long on an E-W alignment. The topsoil was up to 0.30m deep and the subsoil up to 0.28m deep, with an overall trench depth of up to 0.56m. This trench contained a single, shallow N-S oriented ditch, F.14, which had no dating evidence.

Trench 23

Trench 23 was 50m long on a N-S alignment. The topsoil was up to 0.30m deep and the subsoil up to 0.23m deep, with an overall trench depth of up to 0.53m. This trench contained two shallow, parallel ditches, F.5 and F.6. Ditch F.6 lines up with ditch F.10 in trench 24. No finds were recovered.

Trench 24

Trench 24 was 50m long on a N-S alignment. The topsoil was up to 0.30m deep and the subsoil up to 0.22m deep, with an overall trench depth of up to 0.50m. This trench contained a single shallow ditch, F.10, and a possible post-hole, F.11. Ditch F.10 lines up with ditch F.6 in trench 23. No finds were recovered.

Trench 25

Trench 25 was 25m long on an E-W alignment. The topsoil was up to 0.30m deep and the subsoil up to 0.23m deep, with an overall trench depth of up to 0.53m. No archaeology was present

Trench 26

Trench 26 was originally 25m long on an E-W alignment, but ultimately ended up lying partly within the open area. Some features within the trench were subsequently lost to the open area and have been described in that section. The topsoil was up to 0.30m deep and the subsoil up to 0.17m deep, with an overall trench depth of up to 0.44m. At the west end of the trench a small, shallow ditch on a northwest-southeast orientation, F.12, and a furrow, F.17 were present.

Trench 27

Trench 27 was 25m long on a N-S alignment. The topsoil was up to 0.30m deep and the subsoil up to 0.25m deep, with an overall trench depth of up to 0.53m. No archaeology was present.

Trenches 28-30

It was not possible to excavate Trenches 28, 29 and 30 due to the presence of a works depot.

Trench 31

Trench 31 was 30m long on an NW-SE alignment. The topsoil was up to 0.32m deep and the subsoil up to 0.25m deep, with an overall trench depth of up to 0.52m. No archaeology was present.

Trench 32

Trench 32 was 30m long on an NE-SW alignment. The topsoil was up to 0.40m deep and the subsoil up to 0.20m deep, with an overall trench depth of up to 0.55m. A furrow, F.28, was uncovered at the northeast end and contained a sherd of residual 1st-2nd century Roman pot.

Trench 33

Trench 33 was 30m long on an NW-SE alignment. The topsoil was up to 0.30m deep and the subsoil up to 0.24m deep, with an overall trench depth of up to 0.54m. No archaeology was present.

Trench 34

Trench 34 was 24m long on an NW-SE alignment. The topsoil was up to 0.35m deep and the subsoil up to 0.78m deep, with an overall trench depth of up to 1.10m. This trench contained a single NE-SW orientated ditch, F.22, which was also present in Trench 35.

Trench 35

Trench 35 was 43m long on an NE-SW alignment. The topsoil was up to 0.38m deep and the subsoil up to 0.86m deep, with an overall trench depth of up to 1.23m. This trench was crossed by F.22, which was excavated in Trench 34. A small gully and associated pit, F.29 and F.30 respectively, were uncovered, the gully on a WNW-ESE line and the pit forming a possible deeper segment of the gully. Also present was an unexcavated furrow lying on a NW-SE alignment.

Trench 36

Trench 36 was 30m long on an NW-SE alignment. The topsoil was up to 0.35m deep and the subsoil up to 0.80m deep, with an overall trench depth of up to 1.15m. No archaeology was present.

Results: Open area

The open area excavation, which was specifically located to expose a large feature identified during the 2003 evaluation, was an irregular shape, its longest N-S axis being c.58m, and the southern E-W edge being c.80m in length. At the eastern end, the N-S axis was only 16m, followed by a step, and another 18m of N-S length (see Figure 22). This edge of excavation was the result of an on-site assessment of the

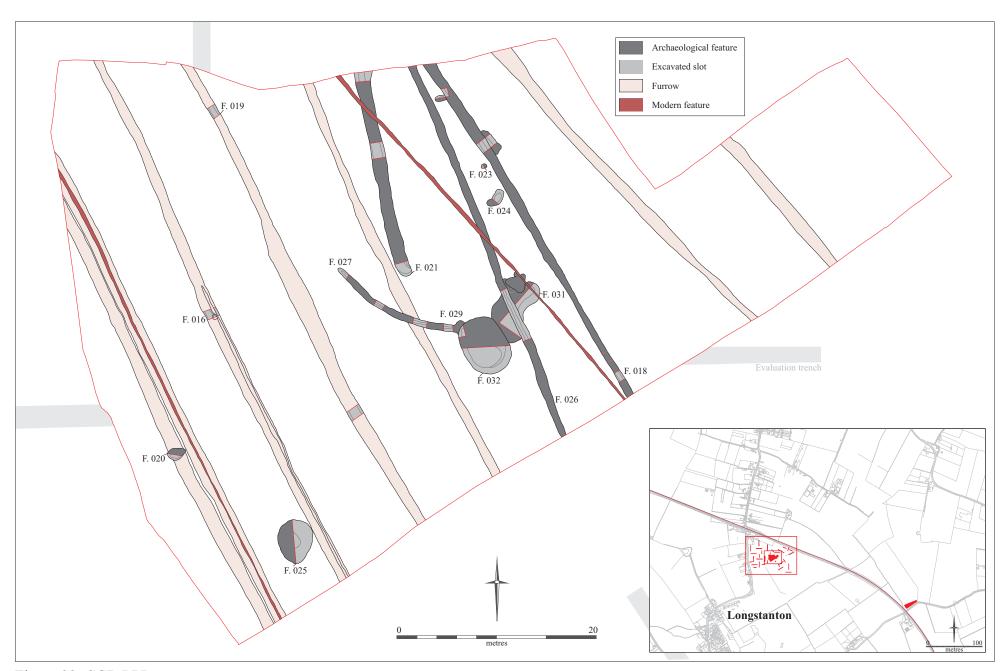


Figure 22. CGB:LPR

archaeology, and in consultation with CAPCA not unnecessarily pursuing machining in areas where no archaeology was present.

The archaeology consisted of two large pits, F.25 and F.32 (see Figures 23a and 23b), and associated cluster F.31, six Medieval/post-Medieval furrows, two of which were test excavated, F.16 and F.19, four ditches, F.18, F.21, F.26 and F.27, and three possible smaller pits, F.20, F.23 and F.24. Except for four furrows, all of the features were excavated.

The two large pits, F.25 and F.32, were 1.20m and 1.95m deep respectively. F.32 contained Middle Bronze Age pottery (see Appendix 17), and although F.25 only contained bone, it is likely that both were of similar date. Although it is tempting to refer to these as "pit-wells", as has been the case with similarly sized prehistoric features in the Longstanton landscape (Patten and Evans 2005; Mackay 2007), neither of these features showed evidence of significant water lain deposits or standing water, although the presence of duckweed seeds in a bulk environmental sample from F.32 does suggest a period when there was standing water present. The environmental samples taken showed no other evidence this feature was ever a well, but the presence of molluscs does suggest it was left open for a reasonable amount of time (see Appendix 21). A monolith sample taken from the lower contexts of F.32 similarly gave very limited results (Appendix 23). Finds were relatively sparse from both, with F.25 containing a small amount of bone (including a cow skull), and burnt stone. F.31 contained similar amounts of both bone and stone, but also contained some pottery. Both features had very steep sides and similar fills, although F.32 lay alongside an area of presumably related disturbance, F.31 – certainly both the pit and disturbance were sealed by the same material, and the pitting contained pottery of the same fabric and date as that recovered from F.32. The F.31 pitting was not particularly deep, 0.75m compared to the 1.95m of the large pit, but this depth of cut on the edge of the deeper feature may have facilitated easier access to it.

The four ditches, despite lying alongside each other, followed different alignments and appeared to be unrelated. The only one of the four to contain any dateable material was F.21, but this consisted of 2g of Late Iron Age pottery, a quantity that could have occurred residually in a feature of any date. Nonetheless, the two most likely to be contemporary were F.21 and F.27, and these were the best candidates for being in some way related to pit F.32. Ditch F.27 butt-ended at the edge of pit F.32, and it appeared that one of the uppermost fills of the pit (probably [094]) sealed the ditch. The second ditch of this phase, F.21, had no cut relationship with either F.27 or F.32, and, although being a relatively small ditch, was nonetheless much more substantial than F.27. However, in plan the features work well in producing an entrance/access to the northern side of F.32, with F.21 butt-ending some 4m from F.27.

The three possible smaller pits, F.20, F.23 and F.24 were generally unimpressive. Several other potential pits were excavated and written off as being natural in origin, and it is quite likely that F.20 and F.24 were small tree-throws or rooting/burrowing. F.23, however, appeared genuine, containing charcoal but no finds.

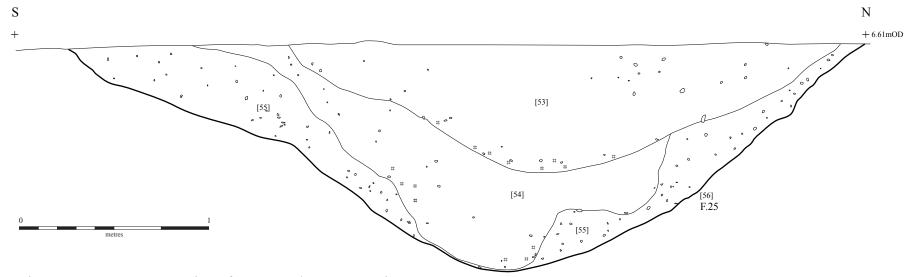


Figure 23a. CGB:LPR Section of Large Early Iron Age pit F.25.

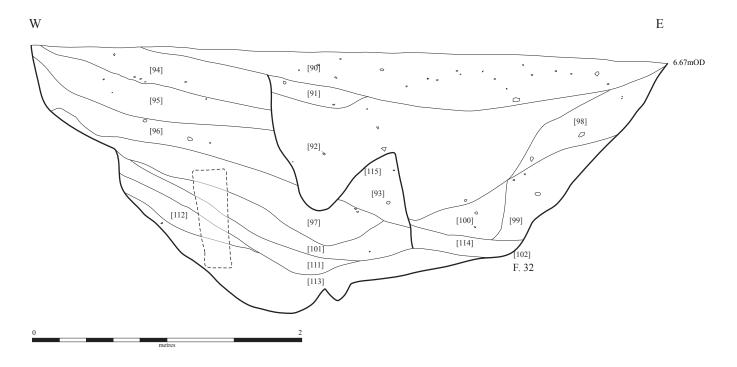


Figure 23b. CGB:LPR Section of Large Early Iron Age pit / well with recut.

Discussion

The trench based assessment, following on spatially from the earlier phase of evaluation and with a greater percentage by area exposed, revealed a similar background level of archaeological activity, but showed nothing of a domestic nature. The ditches, most with a tentative Roman attribution, represent field boundaries, potentially relating to the Roman settlement activity at Striplands Farm (Pattern 2004) or on the golf course (Evans & Mackay 2005). The lack of artefacts would certainly not suggest any closer domestic activity taking place, and the chance find of a silvered brooch (Figure 24), when no other finds were forthcoming, would suggest an isolated, casual loss.

The open area, centred on the one known feature of the site, a large pit, contained less contemporary material than might have been expected. Similar features to the west on Striplands farm were associated with dispersed settlement, although were sometimes relatively isolated from it. Having said that, F.32 was distinct from these other 'pitwells' in that it didn't reach the water table, and appeared never to have done so, at least for any great length of time. There is some ambiguity as to the date and purpose of this feature and its associated pits and further work including carbon dating may help to resolve these outstanding issues.

Trench	Orientation	Length (m)	Depth (m)	Archaeology
17	E-W	25	0.59	Yes
18	N-S	50	0.56	Yes
19	E-W	50	0.47	Yes
20	E-W	25	0.47	No
21	N-S	26	0.63	Yes
22	E-W	50	0.56	Yes
23	N-S	50	0.53	Yes
24	N-S	50	0.5	Yes
25	E-W	25	0.53	No
26	E-W	25	0.44	Yes
27	N-S	25	0.53	No
28	N/A	N/A	N/A	N/A
29	N/A	N/A	N/A	N/A
30	N/A	N/A	N/A	N/A
31	NW-SE	30	0.52	No
32	NE-SW	30	0.55	Yes
33	NW-SE	30	0.54	No
34	NW-SE	24	1.1	Yes
35	NE-SW	43	1.23	Yes
36	NW-SE	30	1.15	No

Table 21: showing a brief trench summary



Figure 24. Romano-British knee brooch from Ditch F.9, Trench 21

Appendix 17

Later prehistoric pottery – *Matthew Brudenell*

17 sherds (40g) of later prehistoric pottery were recovered from the excavations dating from the end of the Middle Bronze Age (c. 1500-1100 BC) and Later Iron Age (c. 50 BC - 50 AD). The pottery was recovered from 6 contexts, relating to 4 separate features (Table 22)

Feature	No. Sherds	Wt. (g)	MSW	No. Vessels	Fabrics present
16	1	1	1	-	S
18	1	2	2	-	Q1
21	2	2	2	-	S1
31	13	35	2.5	2	S6
TOTAL	17	40	2.4	2	

Table 22: Assemblage breakdown by feature

Fabrics

Group S, Shell (16 sherd, 38g, 95% of assemblage by weight)

S1: Moderate to common, coarse and very coarse poorly sorted shell (2 sherds, 2g)

S6: Abundant coarse and very coarse shell (13 sherds, 35g)

S: Small sherds with shell inclusions (1 sherd, 1g)

Group Q, Sand (1 sherd, 2g, 5% of assemblage by weight)

Q1: Dense quartz-sand (1 sherd, 2g)

The assemblage comprised of small abraded body sherds with very low mean sherd weight (MSW) of 2.4g. All sherds were classified as small, measuring under 4cm in size. A further 3g of pottery crumbs were noted in the assemblage, but are not commented upon in this report. These comprised sherds weighing under 1g. Only 2 rims were identified in the assemblage, and no vessel forms could be reconstructed. The dates suggested are therefore based on the character of the fabrics.

Feature assemblages

Furrow F.16, Open Area

Furrow F.16, context [31] yielded a single residual sherd (1g) fragment in fabric S. The sherd cannot be closely dated but is probably prehistoric.

Ditch F.18, Open Area

Ditch F.18, context [35] yielded a single sherd (2g) in fabric Q1. The sherd is thin, hard and well-fired suggesting it is probably Late Iron Age or Romanizing, c. 50 BC - 50/60 AD.

Ditch F.21, Open Area

Ditch F.21, context [70] yielded 2 sherds (2g) in fabric S1, though the shell had leached from the surface. The sherds cannot be closely dated, though the character of the fabrics would suggest a Later Iron Age date, c. 350 BC – 50 AD.

Pit F.32, Open Area

Pit F.32, yielded 13 sherds (35g) of pottery in fabric S6. The assemblage included two different flat rims. The pottery cannot be closely dated, though similar shelly fabrics are shared by some Middle Bronze Age vessels from the region (M. Knight pers. comm.). The two flat rims may therefore belong to urns which would suggest a dated between c. 1500 - 1100 BC.

Discussion

None of the later prehistoric pottery from CGB: LPR can be closely dated. However, the earliest ceramics are from Pit F.32, and are probably of Middle Bronze Age origin. The remaining sherds are likely to be of Later Iron Age date ($c.350 \, \text{BC} - 50 \, \text{AD}$), whilst that from F.18 is possibly Late Iron Age/Romanizing.

Recommendations: Radiocarbon dating of charred material in Pit F.32 would clarify the date of its associated ceramics.

Appendix 18

Faunal remains - Krish Seetah

Introduction

The assemblage as a whole totalled some 460 assessable fragments (678 were recovered); 229 were identified to element and species group (50%) and 48 (10%) further identified to species.

Methodology

The zooarchaeological investigation followed the system implemented by Bournemouth University with all identifiable elements recorded (NISP: Number of Identifiable Specimens) and diagnostic zoning (amended from Dobney & Reilly 1988) used to calculate MNE (Minimum Number of Elements) from which MNI (Minimum Number of Individuals) was derived. Aging of the assemblage employed a combination of Grant's (1982) tooth wear stages and fusion of proximal and distal epiphyses (Silver 1969). Metrical analysis followed von den Driesch (1976). Elements from sheep and goats were distinguished, where possible, based on criteria established for the post-cranial skeleton by Boessneck (1969) and teeth by Payne (1985) and Halstead *et al* (2002). Identification of the assemblage was undertaken with the aid of Schmid (1972), Serjeantsen & Cohen (1996) and reference material from the Cambridge Archaeological Unit, the Grahame Clark Zooarchaeology Lab,

Dept. of Archaeology, Cambridge and the Zoology Museum, Cambridge. Taphonomic criteria including indications of butchery, pathology, gnawing activity and surface modifications as a result of weathering were also recorded when evident.

Results

Condition of the assemblage: preservation & fragmentation

The assemblage was hand collected and overall exhibited poor preservation. Of 15 separate contexts studied for this site 10 were 'Poor' indicating that extensive weathering, bone surface exfoliation and other erosive damage had occurred to the bone. In contrast, five contexts showed 'Good' levels of preservation. The actual overall state of preservation is best illustrated when we observe the specific numbers of fragments that these figures correspond to: some 355 (77%) bones showed a level of preservation that was poor, compared to 105 (23 %) bones that were good. Although the assemblage, as might be expected, had undergone a high degree of fragmentation, only a relatively small proportion – 19 individual bones (4%) – showed evidence of excavator mediated damage. More problematic was the level of erosion and weathering which, combined with the fragmentation, had affected 13.2% of the bone (61 elements).

Species representation

The domesticates were the most abundantly recovered fauna. Cattle were overwhelmingly the best represented of the 'food species' within the context of NISP (Number of Identifiable Specimen) accounting for 40 fragments, or 83%, of the overall identified assemblage (refer to Table 23). In contrast, ovicaprids and pig were recovered in similar proportion: sheep being represented by 4 fragments (8.3%) and pig by 2 fragments, constituting just over four percent of recovered material. The MNI (Minimum Number of Individuals) for these species was calculated as showing at least 4 cattle, the most abundant, and a count of one for both cow and pig. Of the non-food domesticates horse was represented by one fragment (1%).

Of the wild species only red deer was represented by one element. No fish, bird or small mammal remains were recovered.

SPECIES	NISP	%NISP	MNI
Cow	40	83	4
Ovicaprid	2	8.3	1
Pig	4	4.1	1
Horse	1	2	1
Red deer	1	2	1
ULM	168	73.3 (Σ=229)	-
UMM	13	5.7 (Σ=229)	-
UUM	231	50 (Σ=460)	-

Table 23: NISP and MNI counts for all sites and all species

Key: UMM & ULM = Unid. Medium and Large Mammal / UUM = Unid. Fragment. NB: Species percentages are out of 48. These differ from the unidentified counts as these are calculated on the basis of element identification (for UMM & ULM) and total fragments (for UUM) (corresponding to Σ in brackets).

Discussion

The marked dominance of cattle and the overall species counts relative to one another are in keeping with findings from other sites (notably the Shelford Road assemblage). This would suggest a trend that is environmentally defined, indicating a region that was typically suited for raising cattle. In the absence of aging data a kill profile cannot be defined, thus it is not possible to infer whether a management strategy was in place, and whether it was one based on dairying or meat husbandry. The alternative explanation is that this site was provisioned externally. While we must *caveat* the small sample size, all carcass parts from both fore- and hind-limbs were recovered. This would indicate that, if the site had been provisioned externally, animals where brought in on-the-hoof and butchered on site. Unfortunately, the state of preservation seems to have adversely affected the sample as no butchery marks were recorded. Results from F.31, a large pit/possible well, may assist with this issue as only fore-limb and axial parts were recovered suggesting differential deposition possibly indicative of butchery waste.

Little can be inferred from the other domesticates. It would appear that pigs were kept and raised on site and not brought from external sources. Pig was the second most abundant species, and again, while only recovered in small numbers, would suggest that the environment was not suited for sheep husbandry. A pig humerus, with advanced bone infection following a break, suggests that these animals may have been semi-feral and less managed than other domestic livestock. The break was likely the cause of death.

Although the overall species representation indicates an impoverished assemblage, we must take the size of the recovered finds into consideration as this has surely adversely affected the diversity of fauna. In fact, from a relatively small assemblage all the main domestics species, with the exception of cat, are represented. The species list can potentially be augmented by one with the inclusion of a portion of cranium possibly from a dog.

Further work should resolve the aging and kill profile for a more complete picture of animal exploitation on the site.

Appendix 19

Copper alloy brooch – *Andrew Hall*

Tr.21 F.9 < 035 > SF.1

A copper alloy Romano-British knee brooch (see Figure 24) measuring 31mm in height. The body of the brooch is complete and in good condition; however, the pin is missing and the coiled spring heavily corroded. The latter is coiled around a rod held between the ends of a cylindrical head-plate (tubular headed). The s-shaped bow tapers from front to rear and leads down to a pronounced splayed foot incorporating an intact hooked catch-plate. The surface of the main body of the brooch appears to have been tinned, with a large proportion of this silver metallic surface surviving. Close parallels have been found at Colchester (Crummy 1983 p.14 No. 70), with three

examples from Richborough, and further examples from Leicester and along Hadrian's Wall (*ibid*). Their analysis of the Richborough assemblage classifies this form of knee brooch as T176, part of a group of brooches of continental origin, dating to the 150-200 AD period. Hattatt's typology and dating conforms to this date range (Hattatt 2007 p.335). Although several have been identified from military sites, they are now believed to span both the military and civilian markets (Bailey and Butcher 2004).

Appendix 20

Flint – *Lawrence Billington*

Excavations at CGB:LPR recovered a single burnt flint nodule of broadly cylindrical shape with a weight of 187g from the fill of a furrow, presumably deriving from surface deposits.

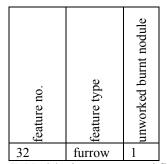


Table 24: shows recovered flint by context.

Appendix 21

Assessment of Bulk Environmental Samples - Anne de Vareilles

Methodology

Five bulk soil samples from three prehistoric features were selected for archaeobotanical analysis, and processed using an Ankara-type flotation machine. Flots were collected in 300µm sieves and remaining heavy residues washed over a 1mm mesh. Both flots and residues were dried prior to analysis. For this assessment, only heavy residue components greater than 4mm were sorted by eye. The smaller 1–4mm fractions have been stored for future reference. Sorting of flots was carried out under low power binocular microscope (x6–40) in the George Pitt-Rivers Laboratory, McDonald Institute, University of Cambridge. Nomenclature follows an updated version of Beedham (1972) for molluscs. Macro-remains are listed in Table 25.

Preservation

Charred botanical macro-remains other than charcoal are absent. Uncharred duckweed seeds (*Lemna* sp.) were found in sample 3 and appear to have been waterlogged. Small snail assemblages have survived in all samples. Modern rootlets

in samples 2 and 7 suggest that the location and condition of macro-remains have been disturbed.

Results and Conclusion

Prehistoric ditch F.21 [75], Early Iron Age pit or well F.32 [92], [96] and [100], and Early Iron Age pit F.25 [56]

Charcoal was the only charred botanical macro-remain recovered. Each sample had a little with F.32 [92] containing the most. The quantity and size of the charcoal suggest that it is not *in situ* but wore away on the ground surface for some time before ending up in the pits or ditch. Uncharred duckweed seeds were noticed in F.32 and indicate that [96] was probably once waterlogged, although no other waterlogged remains have survived. The function of F.32 as a pit or well is not proven by these results. The largest snail assemblage was found in F.25. It shows, as suggest those in the other two features, that plants grew in the pits and ditch creating damp and shady environments that were also seasonally, temporarily or even very locally wet.

Sample number	2	3	4	5	7
Context	75	96	92	100	56
Feature	21	32	32	32	25
Feature type	ditch	larg	e pit or	well	pit
Phase/Date	prehis.	Ear	ly Iron	Age	E.I.A.
Sample volume - litres	12	10	12	8	9
Flot volume - mililitres	1	1.5	5	1.5	3
Flot fraction examined - %	100	100	100	100	100
Charcoal					
>4mm	-		- (-)		- (-)
2-4mm	-		++		
<2mm	+	++	+++	++	+
vitrified pieces	-				
parenchyma - undifferentiated plant storage tissue	-				
Fresh water Mollusca					
Lymnaea truncatula	-		-		+
Damp / Shade loving species					
Carychium minimum/tridentatum			+	+	+
Cochlicopa lubrica/lubricella			-		
Punctum pygmaeum	+++	++	++	+	+++
Vallonia excentrica / pulchella		+	-	-	++
Vertigo antivertigo					+
Oxychilus / Aegopinella					++
Catholic species					
Trichia sp.	-	-	+		++
Ceciloides acicula -Blind burrowing snail					+
uncharred Lemna sp duckweed		+++			
>2mm bone					+
<2mm bone					+++
modern rootlets	Р				р

Table 25: Botanical and Molluscan Remains from the Bulk Soil Samples

Key: '-' 1 or 2, '+' <10, '++' 10-50, '+++' >50 items.

() indicate items found in the >4mm residues

Appendix 22

Burnt Stone – Simon Timberlake

<025> F.32, [98], x11 pieces. Weight 676g.

All consist of a variety of burnt stone, some pieces of which are heavily calcined and cracked. Most are composed of fine grained, pale, and slightly micaceous sandstone – probably of pale greensand. Some of the sandstones are slightly calcareous, and at least one contains the cast of a fossil bivalve (Modiolus sp.). It seems likely that these derive from Lower Greensand outcrops such as occur north of the Thames valley. However these may have been derived from glacial erratics. The burnt stone may be residual, thus might have been associated with Bronze Age burnt stone spreads in its original context.

Appendix 23

Pollen Analysis of Monolith Sample from F.32 – Simon Timberlake

Methodology

The samples were extracted by scalpel and spatula from the measured and described (logged) monolith tin cores and then bagged up whilst still damp into small polygrip plastic sample bags. Each sample represented approximately a 10mm interval within the monolith. Prior to sampling the surface of the monolith was first cleaned by slicing off up to 5mm from the outside of this in order to ensure that sampling proceeded from a clean and uncontaminated surface. The removed samples were then weighed and packed into other sealed plastic bags before being sent (by post) to the Department of Geography and Environment at the University of Aberdeen to be prepared for pollen extraction.

The process used for extraction followed that described by Barber (1976); this involved potassium hydroxide digestion to remove some of the plant material, followed by hydrochloric acid treatment to dissolve up carbonate, then acetolysis using sulphuric acid and acetic anhydride (and subsequent washes in glacial acetic acid) to remove the remaining cellulose. Hydrofluoric acid treatment was undertaken on those samples high in mineral matter (particularly silica). The remaining residues containing the palynomorph fraction were then mounted in glycerine. These residues were returned within small plastic phials to the Cambridge Archaeological Unit for analysis.

During the preparation of the pollen samples exotic marker grains (in this case two tablets containing a known number of exotic *Lycopodium clavatum* spores) were added for the purposes of working out a pollen grain density, such that it would be possible to calculate from the proportions observed the original number of grains of each taxon within the sediment sample.

Results

The samples were found to contain very little pollen indeed (< 20 grains each), and of the few grains which could be identified most were very poorly preserved. None of these could be identified to species level. The pollen presence is recorded within the Table 26 which has been constructed for each sample and which also shows the sample depth and sedimentological (contextual) log for each core. Microscopic charcoal inclusions (relative densities) have only been mentioned where considered to be relevant.

46 – 50 cm	Mottled and quite crumbly gritty silty clay	Sample 4 (46 – 47cm)
	[97]	
36 - 46 cm	Slightly crumbly light	Sample 3 (38 – 39.5cm)
	grey – mottled brown	
	silty clay [101]	
29-36 cm	Grey-brown sandy silty	Sample 2 (29 – 30 cm)
	clay with occ grit	
	inclusions [112]	
25 - 29 cm	Streaky mid-grey silty	
	clay [112]	
20 - 25cm	Brownish light grey	
	silty sandy lenses	
	within clay [113]	
18 - 20 cm	Clay silt lens with voids	
8 - 18 cm	Brownish light grey	Sample 1 (14 – 15cm)
	silty sandy lenses	
	within clay [113]	
0 - 8 cm	'natural' consisting of	
(from base)	mid-grey clay with	
	darker grey streaks and	
	brownish mottling	

Table 26: Monolith core CGB:LPR, F.32 cat no. <6>

Section 5

Landscape and Ecological Mitigation Area (LEM) I (CGB:LMI)

Introduction

Location, topography and geology

The development area comprises c.0.51 hectares located adjacent to the line of the Guided Bus approximately one mile northeast of the village of Oakington, and just outside the northeast boundary of Oakington Airfield, Cambridgeshire. Centre of the site is NGR 541338/267428 (see Figure 25).

The site is situated on Third Terrace gravels interspaced with frequent clay patches at a height varying slightly between 4.5m and 5.0m OD.

Archaeological background

The area surrounding this excavation has been the subject of a desktop assessment (Evans & Dickens 2002) and several phases of evaluation by the CAU (Evans & Mackay 2005 and Evans, Appleby, Mackay & Armour 2006) so the archaeological background is not discussed in detail here.

Worth noting however are the results of 2004 evaluation (Evans & Mackay 2005), whose trenches came to within 50m of this excavation and revealed a similar pattern of post medieval agricultural ditches but no evidence for earlier activity. The only other activity known within the immediate vicinity of the site is the location of a Type 22 Pillbox some 20m west of site that is part of a series of defences dated to WWII that cover the approaches to Oakington Airfield.

Archive

A total of 93 contexts from 21 features were excavated and recorded and a small number of finds, including pot, burnt clay, tile, tobacco pipe and an iron artefact, were recovered. The documentary records and accompanying artefacts have been assembled into a catalogued archive in line with Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeology Unit offices. CHER number is ECB 2522.

Results

The 21 features identified within the excavation area consisted of 15 linears, two curvilinear ditches, three small pits and a posthole.

Of all the features on site, only two, curvilinear ditches F.15 and F.18 were deemed to potentially predate the post medieval period, due to the presence of a sherd of probable late medieval pot in F.15. Of the remaining linear features, eleven were deemed to be post medieval, with ditch F.5 in particular yielding a significant amount of post medieval tile. The remaining two linears were quite substantial modern

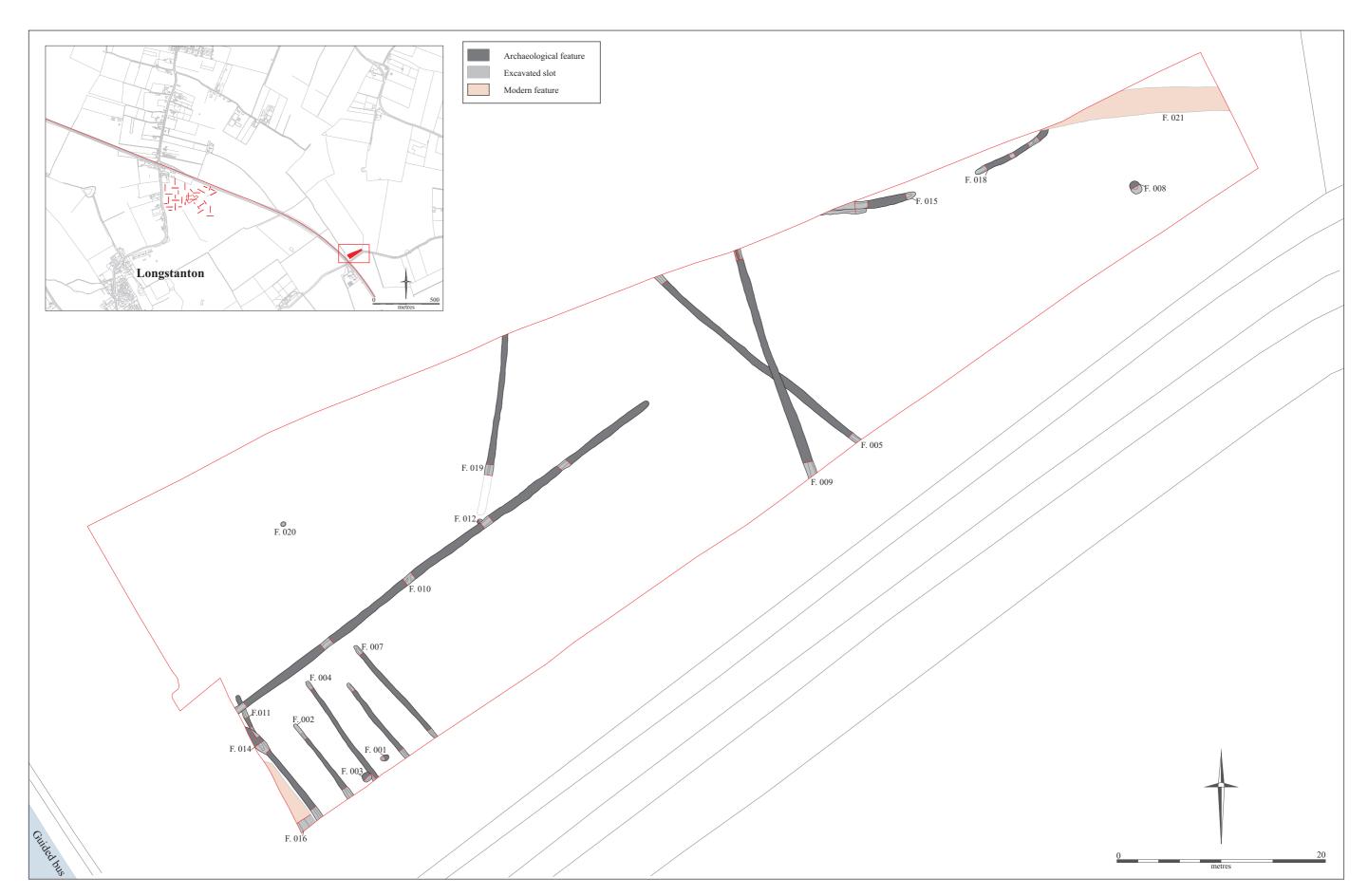


Figure 25. Plan of CGB:LMI

boundary ditches that appeared to have been backfilled within recent times. Ditch F.21 is probably the continuation of a still active field boundary ditch whose course has been recently changed. The three small pits and isolated post hole contained no dating evidence, although they are all probably post medieval, especially F.12 which cuts post medieval ditch F.10.

Discussion

The two curvilinear ditches are very similar in form and terminate opposite each other leaving a possible entrance way approximately 6m in width. However, because only a small fraction of this possible circular feature was exposed its purpose, date and extent are difficult to ascertain, especially as only one small, abraded, probable late medieval pot sherd was recovered from its surface and a bulk environmental sample taken from F.15 was fairly sterile, (Appendix 27).

The post medieval ditches identified on site can be broken into two categories. The first category is made up of ditches which appear to form part of a northeast–southwest, northwest-southeast orientated field system. The second category consists of several tightly spaced parallel gullies on a northwest-southeast alignment (F.2, F.4, F.6, F.7 and F.11) which are probably associated with the cultivation of crops that can be grown close together but don't require support (as there is no evidence of post or stake holes). A sequence of closely spaced ditches were identified in the 2004 evaluation, (Evans & Mackay 2005), some 50m to the southwest and are probably of the same system meaning these features must predate the completion of the railway in the 1840's.

Whilst being only a small open area, the lack of features and artefacts that predate the post medieval period can possibly be attributed to the low lying nature of this site. This would have potentially made this area boggy and prone to flooding and therefore not a desirable place to settle or utilize prior to the introduction of more intensive drainage methods during the post medieval period.

Appendix 24

Assessment of Bulk Environmental Sample - Anne de Vareilles

Methodology

One bulk soil sample from a curvilinear ditch of possible Medieval date was selected for archaeobotanical analysis, and processed using an Ankara-type flotation machine. The flot was collected in a 300µm sieve and the remaining heavy residue washed over a 1mm mesh. Both flot and residue were dried prior to analysis. For this assessment, only heavy residue components greater than 4mm were sorted by eye. The smaller 1–4mm fraction has been stored for future reference. Sorting of the flot was carried out under a low power binocular microscope (x6–40) in the George Pitt-Rivers Laboratory, McDonald Institute, University of Cambridge. Nomenclature follows Beedham (1972) for molluscs. All remains are listed in Table 27.

Preservation

All botanical macro-remains were preserved through charring. It is uncertain whether the absence of material is a result of preservation conditions, such as disturbance by modern rootlets and soil movements. A few snail shells have survived.

Results and Conclusion

Curvilinear ditch, possibly Medieval, F.15 [65]

A few snails and almost no charcoal were retrieved from this 12litre sample. The snails show that the ditch was seasonally waterlogged. No further comments can be made.

Sample number	3
Context	65
Feature	15
Feature type	ring ditch
Phase/Date	Late Med.
Sample volume - litres	12
Flot volume - mililitres	4
Flot fraction examined - %	100
Charcoal	
<2mm pieces	+
Parenchyma - undifferentiated plant storage tissue	-
Fresh water Mollusca	
Lymnaea truncatula	+
Anisus leucostama	+
Damp / Shade loving species	
Carychium tridentatum / minimum	+
Catholic species	
Vertigo pusilla	-
Modern rootlets	Р

Table 27: Botanical and Molluscan Remains from the Bulk Soil Samples Key: '-' 1 or 2, '+' <10, '++' 10-50, '+++' >50 items. P = pres

Section 6

Arbury

Introduction

Location, topography and geology

CGB:ABQ was part of the watching brief that monitored the length of the Guided Busway route. It was located along the line of the former railway some 220m northwest of CGB:APK (see Figures 4 and 26) and centred on NGR 545287/261993. It was bordered by a lake to the southwest, a copse of trees to the northeast and the continuation of the Guided Bus Route to the northwest and southeast respectively. The site was approximately 262.2m² and situated on Third Terrace gravels with patches of clay at a height varying slightly from 12.5m OD at the northwest end to 12m OD at the southeast end.

CGB:APK was an open area excavation comprising c.0.18 hectares located just to the north of Kings Hedges Road, Cambridge, and some 150m west of Cambridge Regional College. The centre of the site is NGR 545485/261814. The site was situated on Third Terrace gravels with patches of clay at a height varying slightly between 11.8m and 12.0m OD.

Archaeological Background

The archaeological background for the north area of Cambridge has been extensively covered in several evaluation and excavation reports (Lisboa 1995, Hounsall 2002, Timberlake 2006, Slater 2007) and won't be discussed in-depth here. Of note however is the projected line of Roman road 'Akeman Street', whose predicted course takes it within 5m of the northeast corner of CGB:APK (see Figures 26 and 29).

In brief, other known archaeological sites within the area include the substantial circular Iron Age earthworks of Arbury Camp, some 600m to the west (Evans & Knight 2005), and the considerable Roman remains known to exist within the present day Arbury and King's Hedges wards. These include a Roman villa with associated enclosure ditches and field systems centred on Kings Hedges primary school (Lisboa 1995) some 300m to the south. Furthermore, just 15m east, and on the opposite side of the projected line of the Roman Road, an archaeological evaluation (Evans 1991) uncovered a series of Roman pits, containing a significant amount of pottery, and a metalled surface which was believed to be part of the road surface.

Arbury Trackway (CGB:ABQ)

with David Webb

Methodology

The site was stripped using a tracked 360° machine using a 2.20m wide toothed excavation bucket.

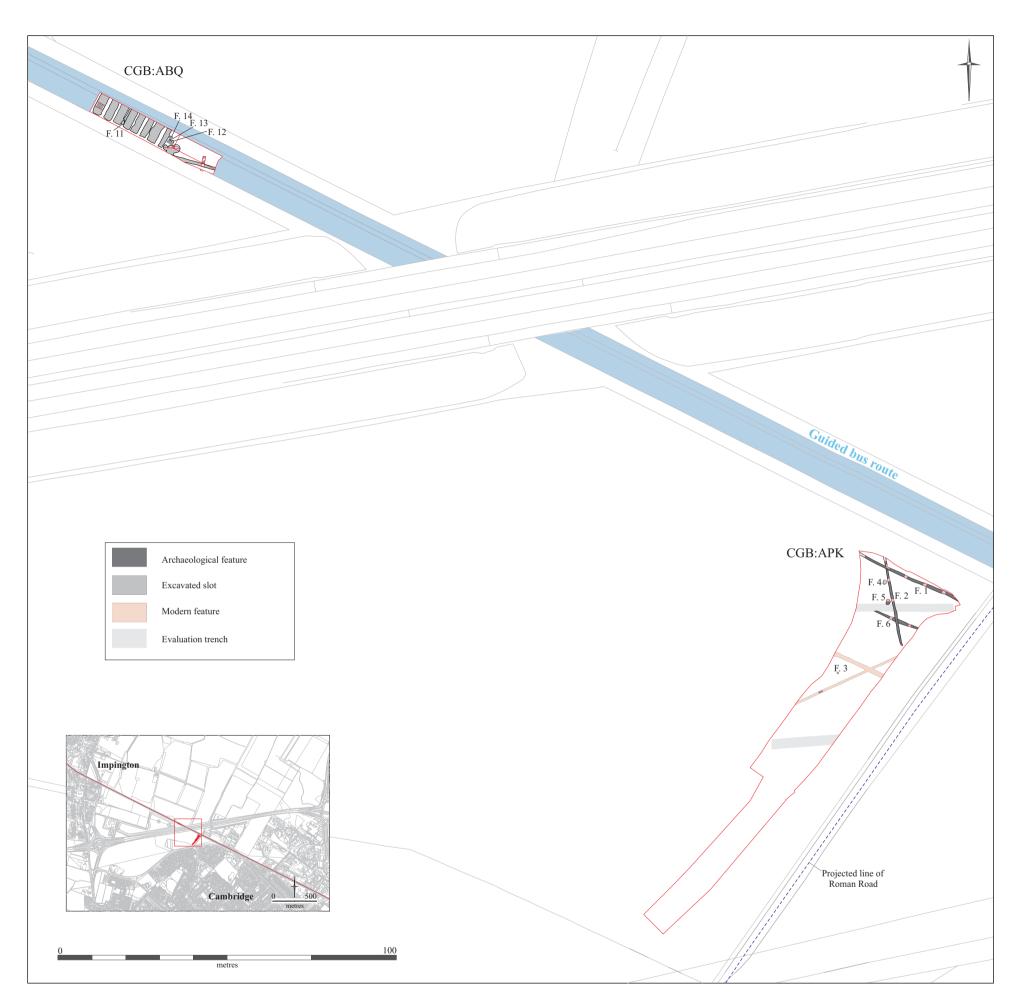


Figure 26. Plan of CBG:APK and CGB:ABQ

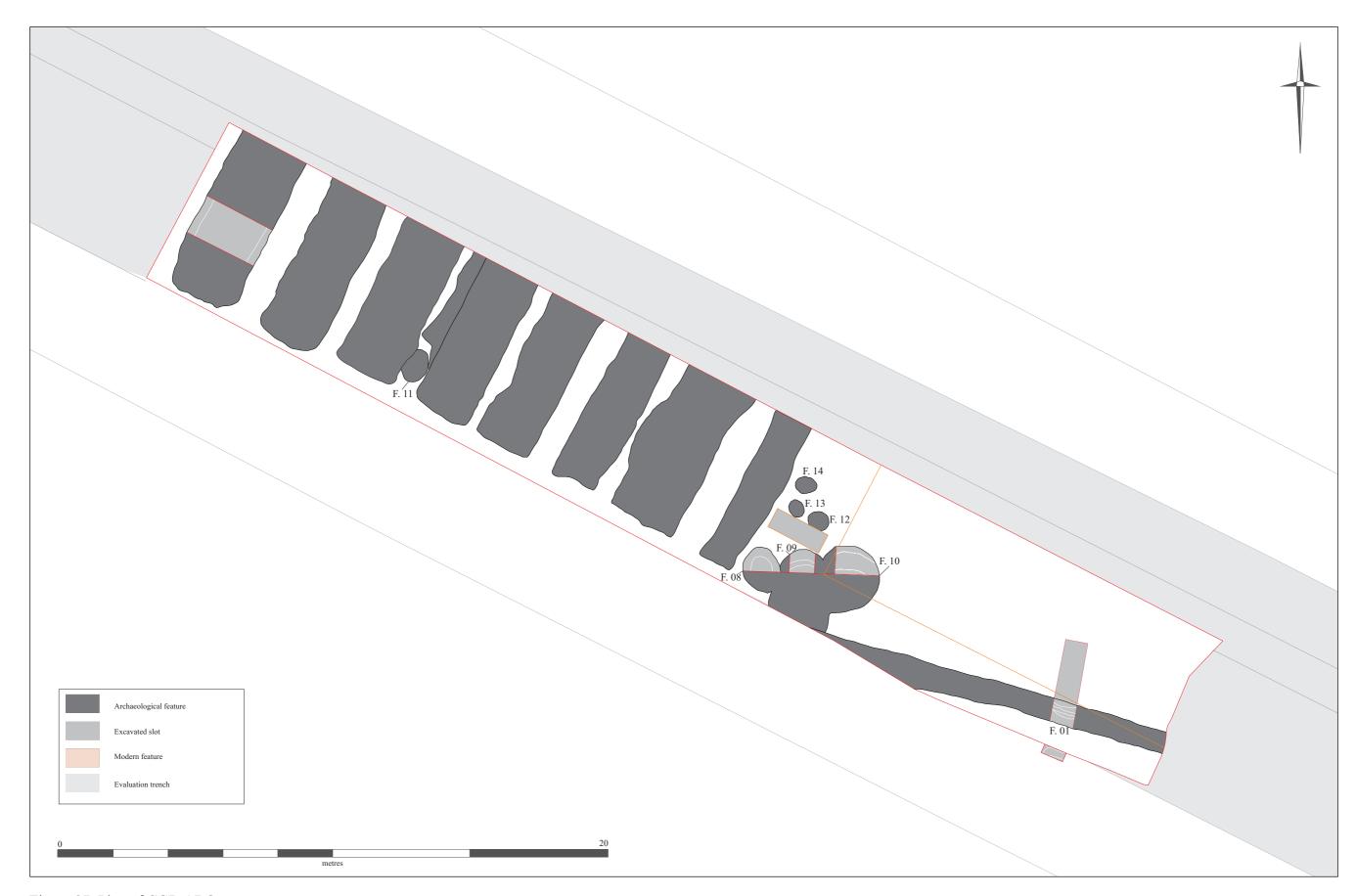


Figure 27. Plan of CGB:ABQ

Archive

A total of 40 contexts from 14 features were excavated and recorded and a significant number of finds including pot, tile, animal bone, coins and other cu alloy artefacts and oyster shell were recovered. The documentary records and accompanying artefacts have been assembled into a catalogued archive in line with Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeology Unit offices. CHER number is ECB 3207.

Results

Despite the nature of the site, a significant amount of archaeology was discovered during this phase of the watching brief. As was also seen at the CGB:SIT site at Swavesey, large, regular quarry pits lay under much of the old track bed. These appeared to have been dug in order to obtain sand and gravel for the construction of a sub ballast layer for the railway. Despite these quarry pits obscuring much of the site, several features dating Roman 2nd-4th Century AD were identified.

The Roman activity consisted of a fairly substantial northwest-southeast orientated ditch, F.1 (see Figure 27), with a further ditch F.4 that was only visible in section and either terminated or, more likely turned sharply, and another possible ditch, F.2 which again was only visible in section. As well as the ditches a series of pits and possible pits, F.3, F.5, and F.7-14 were present along with a probable quarry pit F.6. Two of these pits, F.3 and F.7 were very shallow and potentially natural hollows that had Roman material culture caught up within them, where as the others were quite substantial, particularly F.8.

The majority of the finds recovered from this site came from ditch F.1 which contained significant quantities of pot, tile, animal bone and shellfish (see Appendices 27 and 29), mainly concentrated in the upper fills. The other features however also produced significant amounts of material, for instance F.8, which was part of a small pit cluster with F.9 and F.10 contained almost 70 sherds of Roman pot, including several from an East Gaulish Samian dish (Appendix 25). Six Roman coins, three from F.1, including a quite rare 2nd Century AD silver *denarius*, two from F.3 and 1 from F.6 were also recovered from the site (see Figure 28b and Appendix 28).

Discussion

Many of the features on site were only identified within the sections of the baulk, and therefore few conclusions can be drawn at this stage to their purpose and extent. It is also probable that due to the presence of substantial railway related quarry pits, some archaeology possibly relating to the Roman features has been lost, a view supported by the presence of residual Roman pot within these quarries.

Of the remaining features, the purpose of ditch F.1 is also unclear at this stage, however the large quantities of finds recovered from it strongly suggests it is either a settlement boundary or is located very near to one and therefore could be part of an in-field system. The concentration of finds in the upper fills of this ditch does suggest it was used as a dump for domestic rubbish after the ditch fell out of use, whilst the

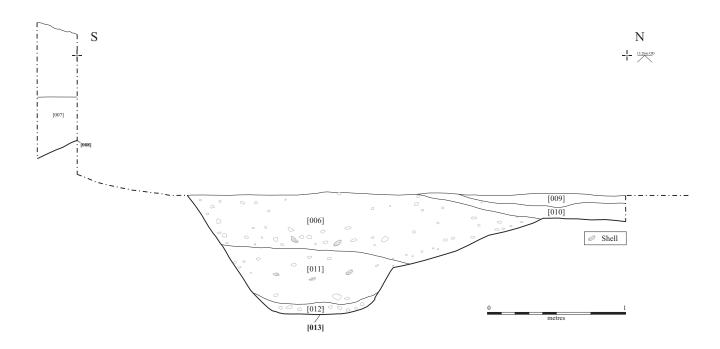


Figure 28a. Roman ditch overlain by railway related layers [9] and [10]



Figure 28b. Late Roman coin from F.3

distribution of finds within other features appeared more even. This could mean either a more gradual accumulation of material or more likely in the case of most of the pits they were used as dumps for rubbish.

Pits F.8, F.9 and F.10 formed a small intercutting cluster on the edge of ditch F.1 and were possibly a series of Roman quarry pits dug in quick succession (as the date range of the pottery is very tight) and backfilled with domestic rubbish. Similar clusters of pits that have been associated with small scale sand and gravel extraction are known within the region, for instance at Womb Farm, Cambridgeshire (Collins 2009b *forthcoming*) and their presence near to a probable settlement/villa site is to be expected.

A recent monitoring visit observed quantities of animal bone, Roman pot and building material being washed out of the section at the edge of the lake that lies near the southwest edge of site, strongly suggesting the Roman activity in this vicinity is quite extensive and certainly extends in this direction (D. Webb pers. comm..). It is also therefore conceivable any settlement or villa associated with this activity was located on land now occupied by the lake, although a location outside of the northeast site boundary, under the copse of trees, cannot be ruled out.

This section of the watching brief has certainly identified a significant archaeological presence. Whilst the site itself is quite small it is clear from significant amount of Roman pot and building material recovered that either a Roman settlement or 'villa' is located within the immediate vicinity. Both the pot and coins recovered point towards a 2nd-4th century AD date, although the presence of a small quantity of Samian ware and the date range for the coins strongly suggests this site peaked in the late 3rd and 4th centuries. This date is certainly in line with other villas in the area and in particular the one known to exist within the Arbury Road area of Cambridge some distance to the south. This villa is known to have been founded sometime around 130 AD and occupation carried on through to the late 4th century with a possible peak in the late 3rd or early 4th centuries (Elrington 1978). Evidence from the CGB:ABQ site therefore points towards there being a potentially vibrant villa economy within the northern environs of Cambridge within the later Roman period.

In its wider context, this settlement would probably have been linked to the nearby 'Akeman' Street some distance to the southeast and would be one of a number of villas known to be located within the northern environs of Cambridge, and further work in the area could significantly increase our knowledge of Roman settlement within this landscape.

Arbury Park (CGB:APK)

Methodology

The site was stripped by a wheeled 360° machine using a 2.20m wide toothless ditching bucket. The southwest end of site was excavated first, revealing no archaeology, and was subsequently used as the spoiling area for the overburden from the rest of site.

Archive

A total of 34 contexts from 6 features were excavated and recorded and a small number of finds, including pot, animal bone and tile were recovered. The documentary records and accompanying artefacts have been assembled into a catalogued archive in line with Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeology Unit offices. CHER number is ECB 2520.

Results

A limited amount of archaeology was identified during this excavation. This was restricted to the north-eastern end of site, with no features of any kind being identified in the south-western half.

The archaeology consisted of two parallel ditches, (F.1 and F.6) approximately 12.5m apart on a northwest by southeast axis, a ditch on an almost north—south axis, (F.2), two medium sized pits (F.4 and F.5) and a post hole (F.3). Also present on site was a fairly substantial post medieval field drain and a modern service trench.

The three ditches all shared a similar profile of moderate to quite steeply sloping sides leading to a rounded base, and they were all of a similar size. All three showed a paucity of finds, with a small amount of animal bone recovered from F.1 and a single Roman pot sherd dated 2nd -4th century AD recovered from F.2. F.1 cut F.2, which in turn cut F 6

Both pits identified during this excavation were located along the southwest edge of ditch F.2 and neither contained any finds. The only other feature identified was a small, isolated, modern posthole.

Discussion

All three ditches almost certainly date to the Roman period, and as the fills in the pits are very similar to those of the ditches, these to are probably of Roman origin. Archaeology is probably concentrated at the northeast end of site as this is the point closest to the projected line of Roman road 'Akeman Street', with the northeast corner being some 5-10m from this line (Timberlake 2006).

These ditches and the two associated pits probably represent the edge of a Roman field system, possibly dating between 2nd-4th centuries AD (based on the dates from the CGB:ABQ watching brief) which radiated out from Akeman Street. The small scale of this excavation however makes it difficult to fully understand the extent and complexity of this activity; however, it is likely the features on this site are linked to the probable Roman settlement identified at CGB:ABQ just to the northwest.

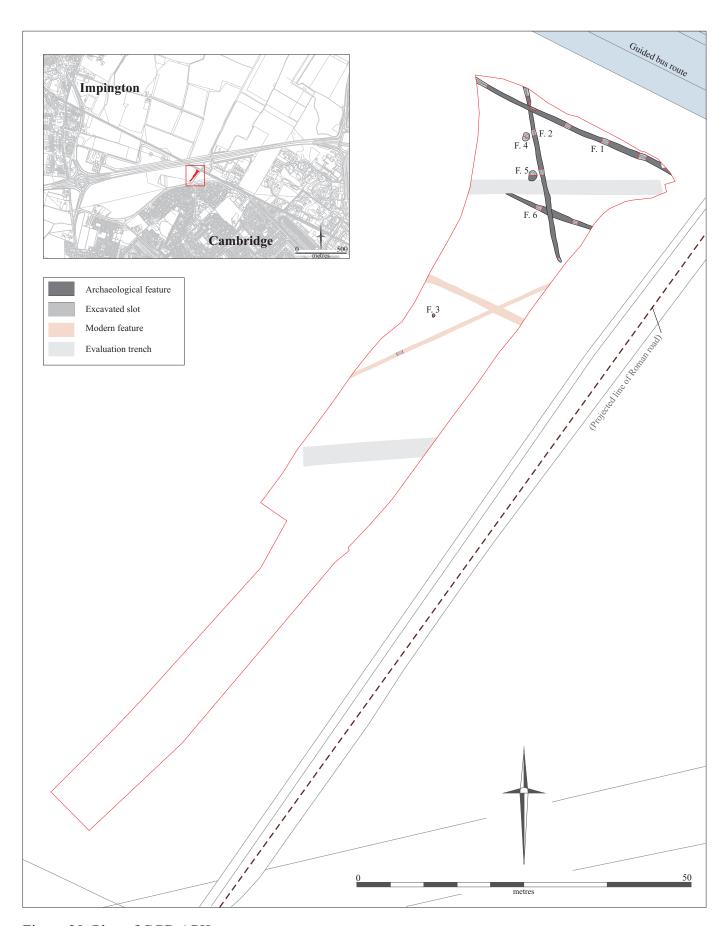


Figure 29. Plan of CGB:APK





Figure 30. Photographs of Roman pit F. 4 and ditch F. 1, CGB:APK

Appendix 25

Roman Pottery (CGB:ABQ) - Katie Anderson

The watching brief yielded a relatively large assemblage of Roman pottery, totalling 574 sherds, weighing 14186g and representing 23.14 EVEs. All of the pottery was examined and details of fabric, form, EVE and date were recorded, along with any other information deemed significant.

Assemblage Composition

The assemblage was characterised by relatively large sherds, which were relatively fresh and unabraded, as is emphasised by the high mean weight of 24.7g. The assemblage broadly dates 2nd-4th century AD, however the presence of a number of Late Roman pottery types suggests a 3rd-4th century AD for the main phases of activity.

Given the moderate size of the assemblage, a large number of fabrics were identified (see Table 28). Of this coarseware fabrics dominated, representing 77% of the assemblage. Locally made, sandy coarsewares were the most commonly occurring fabric, which included 67 Horningsea greyware sherds, although the majority of sherds within this category are unsourced. Shell-tempered wares, which are likely to have been produced locally (e.g. Earith) were well represented, totalling 45 sherds. A variety of fineware fabrics were recorded, including local, non-local and imported wares. Nene Valley colour-coated wares were the most common (49 sherds weighing 927g), with Hadham oxidised wares also well represented. There were two sherds of Oxfordshire red-slipped ware and two Pakenham colour-coated sherds. The imported wares comprised of 11 East Gaulish Samian sherds (a maximum of three vessels), one Central Gaulish sherd and three Late Baetican amphora sherds, although it is unclear whether the latter is from a single vessel or not.

The vessel fabrics represented in this assemblage suggest a 2nd-4th century AD date range. However, the very small quantity of Samian in the assemblage, suggests that the site peaked in the 3rd-4th century AD, since if the peak had been during the 2nd-3rd century AD, then a greater number of Samian vessels would have been expected. Even on small rural sites in Cambridgeshire, it is fairly typical that Samian accounts for up to 5% of an assemblage (Anderson), however, in this assemblage, it accounts for just 2%. Given the nature of the assemblage (see the discussion below), it therefore seems most likely that the relative lack of Samian is a reflection of chronology rather than status/wealth. This view is supported by the presence in the assemblage, of material from Later Roman industries including Hadham and Oxfordshire.

The higher frequency of Nene Valley products is somewhat expected, given the location and date of the site and its relative proximity to the production centres. The same can be said of the Horningsea wares, which were produced within a 5km of the site.

Fabric	No.	Wt(g)
Black-slipped	33	474
Buff sandy	1	2
Central Gaulish Samian	1	19
Colour Coat	17	155
Coarse sandy greyware	224	4781
East Gaulish Samian	11	162
Fine sandy greyware	9	195
Fine sandy oxidised	4	96
Hadham oxidised ware	26	245
Horningsea greyware	67	3994
Imitation BB	3	49
Late Baetican amph	3	570
Micaceous GW	4	81
Nene Valley CC	49	927
Oxford red-slipped ware	2	7
Oxidised sandy ware	53	827
Pakenham CC	2	63
Red-slipped	1	14
Shell-tempered	45	796
White-slipped	10	69
Nene Valley whiteware	9	660
TOTAL	574	14186

Table 28: All pottery by fabric

The assemblage contained a wide variety of vessel forms (see Table 29). Although jars were the most common type (42% of all diagnostic sherds), beakers and dishes were also well represented (both accounting for c.16% of all diagnostic sherds). Most of the main Roman vessel forms are represented in this assemblage, including jars, dishes, flagons, mortaria and bowls as well as some more unusual forms such as Castor box.

Jars dominate the assemblage, representing 42% of diagnostic sherds. This is typical of assemblages throughout the Roman period. There was a variety of different sized jars with rim diameters measuring between 12-24cm. Fineware forms were fairly well represented, although this is influenced by a large number of Nene Valley vessels.

Feature Analysis

Feature 1

The majority of the pottery was recovered from a single feature, a northeast-southwest ditch, Feature 1. The pottery totalled 327 sherds, weighing 7906g and representing 11.73 EVEs and was recovered from several slots along the length of the ditch, from three different contexts. The upper fill [005] contained most of the material, totalling 221 sherds of pottery (5323g, 9.72 EVEs), collected from seven slots. The lower ditch fill [006] contained 92 sherds of pottery (2352g, 2.57 EVEs) from five slots, while context [011] totalled 14 sherds, weighing 231g. As suggested by the mean weight of the pottery from this feature (24.2g), this included large and unabraded sherds, suggesting primary deposition.

The pottery from Feature 1 has a date range from 2nd-4th century AD, although the bulk appears to be 3rd-4th century AD. There is no clear difference in date between the different contexts in the ditch, suggesting fairly rapid deposition.

Feature 2

Feature 2, a ditch, contained 20 sherds of pottery, weighing 192g. Seven sherds from a white-slipped beaker (56g) were recovered, alongside a sandy greyware beaded, flanged bowl, dating 3rd-4th century AD.

Feature 4

26 sherds of pottery, weighing 957g were recovered from this small section of ditch. The pottery included some large, unabraded sherds, highlighted by the high mean weight of 36g. This included one Nene Valley colour-coated mini-funnel beaker, with white painted swirl decoration, dating 3rd-4th century AD, three dishes, including a Nene Valley colour-coated convex dish, dating 4th century AD, four greyware jars and two mortaria, one from the Nene Valley kilns and one from Hadham. Although some material from this context dates 2nd-4th century AD, the presence of the Nene Valley and Hadham vessels described above suggest a 4th century AD date is appropriate for this feature.

Feature 5

Two sherds of Roman pottery were recovered from this feature, comprising two shell-tempered sherds, weighing 47g. The vessel forms could not be identified, however, the fabrics suggest a 2nd-4th century AD date.

Features 8, 9 and 10

These three features are intercutting pits, to the northwest of Feature 1. Feature 8, a pit/well, contained a moderate pottery assemblage, totalling 64 sherds weighing 1786g, with a high mean weight of 27.9g. This included several Nene Valley colour-coated sherds and Horningsea greywares, as well as nine sherds from an East Gaulish Dr31 dish. The pottery from this feature dates 2nd-4th century, and thus appears to be contemporary with the material from Feature 1.

Feature 9 contained eight sherds of pottery, weighing 283g, including a Horningsea greyware jar. The pottery from Feature 10 totalled 31 sherds, weighing 633g. 14 sherds were from a single vessel, a colour-coated beaker. Also represented were three greyware jars and one large Nene Valley whiteware mortaria sherd. The pottery from Features 9 and 10 date mid 2nd-4th century AD.

The stratigraphic evidence from this group of features suggests Feature 10 was the earliest, as it was cut by Feature 9, which was subsequently cut by Feature 8. There is, however, no difference in date between the sherds from the different features, with all dating mid 2nd-4th century AD. This therefore suggests either that these pits were dug and filled in quick succession, or that the cutting of the later pits, disturbed the earlier ones, thus resulting in a redeposition of material.

Feature 11

A total of seven sherds of pottery, weighing 142g were recovered from this pit. This included one Nene Valley colour-coated convex dish, dating 4th century AD. A further Nene Valley colour-coated sherd was also recovered, along with five Hadham red-slipped body sherds, which date 3rd-4th century AD. Therefore a 4th century AD date is suggested for this feature.

Features 12 and 14

These two features are possible postholes. Four sherds of pottery, weighing 122g, were recovered from Feature 12. This included one large sherd from a Horningsea greyware storage jar, dating 2nd-4th century AD. A single sandy greyware body sherd, dating 2nd-4th century AD was recovered from Feature 14.

Contexts [037] and [038]

These two contexts were backfill within the later quarry pits, containing a total of 22 sherds of Roman pottery, weighing 773g. Therefore, despite being redeposited, the sherds had a high mean weight of 35g, in part is due to the presence of a large Late Baetican amphora sherd. Other sherds within these contexts included a Nene Valley colour-coated convex dish, Hadham red-slipped sherds and Horningsea greyware sherds from [037], and Hadham red-slipped sherds from [038]. The pottery in the quarry pits therefore primarily date 3rd-4th century AD.

No.	Wt(g)	Form
Amphora	3	570
Beaker	36	349
Beaker/jar	2	7
Bowl	16	590
Castor box	4	56
Dish	35	844
Flagon	2	92
Jar	94	3794
Mortaria	12	717
Open	2	195
Storage jar	17	1445
Unknown	351	5527
TOTAL	574	14186

Table 29: All pottery by Form

Discussion

The pottery recovered from this watching brief has provided a good insight into the nature of activity in the immediate area. In particular, the material recovered from Feature 1, which comprised a large number of sherds, in a range of fine and coarseware vessels, broadly dating 2nd -4th century AD.

The pottery suggests a peak in the 3rd/4th century AD, as demonstrated by the relative lack of Samian and the presence of Hadham and Oxfordshire wares, and some Late

Nene Valley colour-coated forms. This is further supported by the coin evidence (see Hall Appendix 28). The material from this feature included some large and refitting sherds, with only a small number showing evidence of heavy abrasion.

A number of the features which contained pottery also contained quantities of Roman Tile (See Anderson Appendix 26), totalling 119 pieces, weighing 12091g. The quantity and condition of the material recovered from this feature in particular suggests the presence of Roman building in the immediate vicinity, although the watching brief did not uncover the footings of any potential structures. However, that so much 'fresh' material was recovered, from a small exposure, suggests potential for much more material evidence.

The composition of the pottery assemblage gives a suggestion of status/function. Initially, the range of vessel forms and fabrics identified within the assemblage suggests that the site had good access to trade networks, and the presence of the amphora sherds in particular, suggest some wealth not often seen in Roman rural sites in this area of Cambridgeshire. Further evidence comes from the ratio of courseware's to finewares shows finewares to be slightly higher than on typical Cambridgeshire rural sites. However, perhaps more interesting in the results of comparing particular vessel forms. Specifically plotting the number of dishes/bowls against the number of jars, using the method described by Evans (Evans 2001; 26-36). When this site is plotted on the chart depicting Southern sites, the point is aligned alongside two villa sites, falling between rural sites, with much higher proportions of jars, and urban sites, which have much higher percentages of dishes and bowls.

This when combined with the tile evidence, certainly appears to support the view that a Roman villa in the immediate vicinity is a strong possibility. There are several other Roman buildings known in the area, including one, approximately 1km to the south (Frend, 1954). There is also evidence of some 'rich' Roman burials, including lead coffins. This site therefore adds to the wealth of evidence for relatively high status activity (for Cambridge) during the Roman period.

Appendix 26

Roman Tile (CGB:ABQ) - Katie Anderson

A large quantity of Roman tile was recovered from the watching brief, totalling 163 pieces and weighing 17174g. All of the material was examined and details of fabric and form were recorded, along with any other information deemed important.

The assemblage comprised tile of varying sizes with some very large pieces, down to small pieces, with a relatively high mean weight of 105.4g. All four major tile types were represented in varying quantities (see Table 30). Tegula were the most frequently occurring, totalling 31% of the assemblage. Imbrex, floor tiles and flue tiles were, in comparison, poorly represented. Due to the condition of the assemblage, there were a high percentage of pieces which were non-diagnostic.

The majority of the tile came from Feature 1 (see Table 31), totalling 119 pieces, weighing 12091g and in particular, the upper fill of the ditch, context [005], which

contained 93 pieces, weighing 10524g. Within the ditch, 34 tegula, seven imbrex, six floor tiles and four box-flue tiles were identified. This material was excavated alongside

Туре	No.	Wt(g)
Box Flue	4	303
Floor Tile	6	1966
Imbrex	11	1571
Tegula	51	10001
Non-diagnostic	91	3333
TOTAL	163	17174

Table 30: All tile by form

Smaller quantities of tile were recovered from eight other contexts. Context [022], a pit/well, contained 18 pieces of tile, weighing 2764g, thus with a high mean weight of 153g. This included seven tegula and ten imbrex, some of which were very large.

Context	No.	Wt(g)
5	93	10524
6	19	1179
11	7	388
16	6	529
18	3	394
20	3	121
22	18	2764
24	4	537
26	3	262
28	5	268
38	1	44
Surface	1	164
TOTAL	163	17174

Table 31: All tile by Feature

Discussion

That a relatively large quantity of Roman tile was recovered from a watching brief is somewhat unexpected. The forms represented in this assemblage suggest some form of Roman building, the most likely being a villa, although there was no evidence of any building 'footprints'. The pottery evidence from this site supports this view (see Anderson Appendix 25). Although dating of tile itself is problematic, its association with the Roman pottery suggests a broad 2nd-4th century AD date, with a more specific 3rd-4th century AD date probable.

The area of Cambridge in which the site is located is known to have a great deal of evidence for the Roman period, including a building, pits and a cemetery (Frend 1955). It is also suggested that this area forms the edge of a much larger settlement, measuring up to 7 acres (Wilkes & Elrington 1978).

Therefore, the tile evidence combined with evidence from previous excavations in the area, suggests that a later Roman building was located in the immediate vicinity. That

there were numerous large pieces of tile within the assemblage suggests that the material had not moved very far from its original location.

Appendix 27

Faunal Remains (CGB:ABQ) - Vida Rajkovaca

A small assemblage has been recovered from this site numbering 302 bone fragments. The assemblage has been scanned in order to assess the species representation with the aid of Schmid (1972) and Cambridge Archaeological Unit reference collection. It is dominated by domestic species (see Table 32); mostly large domesticates such as cattle and horse followed by ovicaprids and pigs. It is not a surprise for cattle to be the most important species, as they provide milk, horn, hide, traction and glue (from boiling the bones). As far as non meat animals are concerned, four dog specimens were recovered. In addition to that, a number of bones had gnawing marks implying the presence of dogs on the site and also the fact that the bones were deposited after they had been exposed for some time.

One fragmented bird specimen has been found which was assigned to pheasant. It is known that Romans were responsible for bringing over numerous animals for their own consumption and one of the species they introduced was pheasant. Butchery evidence demonstrated the use of cleaver and large blades to perform the action of disarticulation and bone breaking. It has been suggested that Romano-British butchers employed crude practices for carcass dismemberment. It has actually been proved that the Roman butchers used cleaver to facilitate and speed up the carcass dismemberment. Findings from this site match well with these results.

Species	NISP	% of TOTAL	MNI
Cow	33	47.1	3
Sheep / Goat	16	22.9	4
Horse	7	10	1
Pig	9	12.9	3
Dog	4	5.7	1
Pheasant (Galliformes)	1	1.4	1

Table 32: Species frequency by NISP (Number of Identifiable Specimens) and MNI (Minimum Number of Individuals)

Appendix 28

Non Ferrous metalwork (CGB:ABQ) - Andrew Hall

Coins:

F.1 <151> Sf. 500. A small copper alloy *nummus* in poor condition. Much of one side of the coin is missing; therefore an estimated diameter for the coins is 17mm. The reverse depicts a soldier spearing a fallen horseman, with the legend *FEL TEMP REPARATO*. The obverse is indistinct with a partial portrait of the Emperor *Constantius II or Constantius Gallus*. The coin was minted between 350-360AD.

- **F.1** <152> Sf. 501. A small copper alloy coin of 16mm diameter, in poor condition. The obverse portrait depicts a young Emperor with a radiate crown, but no beard, possibly *Tetricus II*. The reverse depicts a standing female figure. The coin dates to the second half of the 3rd century AD.
- **F.1** <153> Sf. 502. A silver *denarius*, measuring 18mm in diameter. The poor condition makes this a difficult coin to identify. The Emperor appears to have a laurel leaf head dress. The reverse shows a figure advancing holding items in both hands. The legend on the reverse reads VICT. *PART. MAX*. This could be a coin of *Caracalla*, 198-217AD, but it could also be a contemporary copy.
- **F.3** <154> Sf. 503. A copper alloy *nummus* of 18mm diameter in good condition. The reverse shows a standing figure holding a standard in the left hand whilst dragging a kneeling prisoner by the hair. The emporer is most likely *Valentian I* or *Valens*. The coin was minted during the period 360-380 AD.
- **F.3** <155> Sf. 504. Small copper alloy coin (*nummus*) measuring 16mm diameter. In poor condition with some wear. Portrait of Emperor with jewelled diadem, possibly depicting *Valentinian*, *Valen* or *Gratian*. Reverse shows a standing figure holding standard and shield, with the legend *GLORIANO VIS*...This coin was minted during the period 360-380AD.
- **F.6** <157> Sf. 506. A very small and worn copper alloy *nummus* of 11mm diameter. The reverse is indistinct; however a diadem head dress is evident suggesting a 4th century date.

Two additional copper alloy fragments were recovered:

- **F.1** <156> Sf.505. A heavily corroded fragment of copper alloy sheet, in numerous pieces.
- **F.1** <158> A short section of bent copper alloy rod of round section, measuring 12mm in length. Possibly a fragment of a chain link or brooch.

Appendix 29

Shellfish (**CGB:ABQ**) – Simon Timberlake

Some 3.76 kilos of oyster shell (*Ostrea edulis*) was recovered from slots cut through several Roman ditches and other features sampled as part of this watching brief. The oyster shell came from some 27 different contexts (but only 17 if contexts [005 A-H] sampled from each of the different slots is in fact all the same). All of the oyster shell recovered had evidently been prised opened, consumed, and discarded, whilst some of the shell had been broken. The animal bone accompanying this shell debris suggests that the ditch and pit fills all consisted of midden material and/or kitchen waste. Just a single broken valve of an edible mussel (*Mytilus edulis*) was found amongst the oyster shell from ditch fill [005E], suggesting therefore that this may have been an accidental inclusion amongst the shellfish collected from the oyster beds rather than simply another status foodstuff.

The large amount of oyster shell debris recovered from these midden-type deposits would seem to confirm the presence of a villa or high status dwelling nearby. The nearest harvestable oyster beds to Cambridge would probably have been at least 30 miles to the north of the Roman town, associated perhaps within some of the major tidal channels in the Fens to the north of Ely. Most likely such channels would have been linked to the Ouse or Nene, the shellfish being brought upriver in boats, perhaps within containers of saltwater.

Appendix 30

Assessment of Bulk Environmental Samples (CGB:APK) - Anne de Vareilles

Methodology

Two bulk soil samples from two Iron Age field boundary ditches were selected for archaeobotanical analysis, and processed using an Ankara-type flotation machine. Flots were collected in 300µm sieves and the remaining heavy residues washed over a 1mm mesh. Both flots and residues were dried prior to analysis. For this assessment, only heavy residue components greater than 4mm were sorted by eye. The smaller 1–4mm fractions have been stored for future reference. Sorting of the flots was carried out under a low power binocular microscope (x6–40) in the George Pitt-Rivers Laboratory, McDonald Institute, University of Cambridge. Nomenclature follows Zohary and Hopf (2000) for cereals and an updated version of Beedham (1972) for molluscs. All macro-remains are listed in Table 33.

Preservation

All botanical macro-remains were preserved through charring. The few cereal grains found are heavily puffed and fragmented and so could not be identified. Intrusive seeds, modern rootlets and the blind burrowing snail *Ceciloides acicula* suggest that the location and condition of macro-remains have probably been disturbed.

Results and Conclusion

Iron Age boundary ditches, F.1 [15] and F.2 [27]

F.1 contained three cereal grain fragments and one straw fragment from a seemingly wild grass. F.2 had one wheat glume base (*Triticum* sp.) and a few snails that suggest the ditch was only seasonally waterlogged but remained damp during dryer periods. No further comments can be made

Sample number		1	2	
Context		15	27	
Feature		1	2	
Feature type		Ditches		
Phase/Date	Phase/Date		Iron Age	
Sample volume - litres		12	10	
Flot volume - mililitres		5	7	
Flot fraction examined - %		100	100	
Charcoal				
>4mm			-	
2-4mm		-	+	
<2mm		++	++	
Vitrified pieces		-	+	
Parenchyma - undifferentiated plan	t storage tissue	-	-	
Cereal Remains				
Indeterminate cereal grain				
fragment		3		
Cereal chaff				
	hulled wheat			
Triticum sp. glume base	chaff		1	
Non cereal seeds and chaff				
small seed indet.		1		
		1		
Fresh water Mollusca		1		
Fresh water Mollusca Lymnaea truncatula		1	++	
Fresh water Mollusca		1	++	
Fresh water Mollusca Lymnaea truncatula		1		
Fresh water Mollusca Lymnaea truncatula Anisus leucostama Damp / Shade loving species Succinea sp.		1		
Fresh water Mollusca Lymnaea truncatula Anisus leucostama Damp / Shade loving species		1		
Fresh water Mollusca Lymnaea truncatula Anisus leucostama Damp / Shade loving species Succinea sp.		1	-	
Fresh water Mollusca Lymnaea truncatula Anisus leucostama Damp / Shade loving species Succinea sp. Columella edentula		-	-++	
Fresh water Mollusca Lymnaea truncatula Anisus leucostama Damp / Shade loving species Succinea sp. Columella edentula Vertigo antivertigo		-	++ - + +	
Fresh water Mollusca Lymnaea truncatula Anisus leucostama Damp / Shade loving species Succinea sp. Columella edentula Vertigo antivertigo Vallonia excentrica / pulchella Catholic species Trichia sp.		- ++	++ - + +	
Fresh water Mollusca Lymnaea truncatula Anisus leucostama Damp / Shade loving species Succinea sp. Columella edentula Vertigo antivertigo Vallonia excentrica / pulchella Catholic species Trichia sp. Ceciloides acicula —Blind		-	++ - + + ++	
Fresh water Mollusca Lymnaea truncatula Anisus leucostama Damp / Shade loving species Succinea sp. Columella edentula Vertigo antivertigo Vallonia excentrica / pulchella Catholic species Trichia sp. Ceciloides acicula —Blind burrowing snail		-	++ + + ++ ++	
Fresh water Mollusca Lymnaea truncatula Anisus leucostama Damp / Shade loving species Succinea sp. Columella edentula Vertigo antivertigo Vallonia excentrica / pulchella Catholic species Trichia sp. Ceciloides acicula —Blind		-	++ - + + ++	

Table 33: Botanical and Molluscan Remains from the Bulk Soil Samples Key: '-' 1 or 2, '+' <10, '++' 10-50, '+++' >50 items. P = present

127

Section 7

Long Road Construction Site (CGB:LRD)

Introduction

Location, topography and geology

The Long Road Construction site comprises of an open area originally planned as being 1.25 hectares in size with a further 0.97 hectares set aside as a spoiling area. The open area was subsequently reduced to 0.54 hectares. It is located on land approximately midway along Long Road, Cambridge and adjacent to the Long Road Sixth Form College. Centre of the site is NGR 545567/255541 (see Figures 5 and 31).

Site is situated on Second Terrace gravels and gently slopes up from a height of 11.7m OD at the west end to 12.4m OD at the east end.

Archaeological background

The Long Road Construction site lies in close proximity to quite substantial archaeological remains. For instance, in the fields directly to the west of the site, evaluations by the CAU (Evans, Mackay and Patten 2005) revealed evidence for a Late Bronze Age/Early Iron enclosure system and a later, Romano-British field system and two possible routeways whose orientation puts them on a trajectory towards the site. Another phase of archaeology encountered in these fields, some 225m west of the site was the discovery of military remains dating to WWII in the form of ditches, and emplacements for guns and searchlights.

An archaeological evaluation which bordered this site identified several ditches belonging to a probable Bronze Age field system directly to the south. Whilst to the west and southwest a series of possible late medieval, rectangular structures, potentially related to the breeding of rabbits, and a series of linear gravel quarries and also some later, post medieval copralite quarries were recorded (Slater 2008).

Other known sites within the vicinity include CHER 8357 located to the southwest, CHER 8339 to the southeast, and CHER 9599 to the north. Two of these have been extensively evaluated and excavated by the CAU and need not be discussed here, (for further reading on CHER 8357 see Collins, forthcoming, Armour & Timberlake 2007, Evans, Mackay & Patten 2005 and for CHER 8339 see Cessford & Mackay 2004 and Evans, Mackay & Patten 2005).

Archive

A total of 58 contexts from 15 features were excavated and recorded and a small number of finds, including pot, animal bone, flint, tile and tobacco pipe, were recovered. The documentary records and accompanying artefacts have been assembled into a catalogued archive in line with Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeology Unit offices. CHER number is ECB 2517.



Figure 31. Plan of CGB:LRD

Results

Bucket Sampling

This was carried out at six points across the site, with 90 litre samples being tested at each. Finds were recovered from three of these points, however they were small in number and consisted of a single worked flint and several post medieval brick fragments and pot sherds.

Open Area

A total of eight ditches and ditch segments, five pits and two post holes were identified during this excavation.

Several features in the northeast corner of site were dated to the Later Iron Age; these included an elongated pit F.1, two ditches, F.3 and F.6, a ditch segment, F.8 and a posthole F.11. A small quantity of pot and flint (see Appendix 31 and 33 respectively) was recovered from these features. Bulk environmental samples taken from ditches F.3 and F.6 showed significant number of molluscs (see Appendix 32) suggesting the ditches were damp or seasonally wet, not unsurprising in this low lying area. Of the other features identified on site, five were determined to be post medieval and consisted of three ditches, F.2, F.9 and F.14.and two pits, F.10 and F.15, one of which appeared to be a shallow, irregular quarry pit. The remaining five features were undated and consisted of two ditches, F.4 and F.5, two pits, F.7 and F.12 and a posthole, F.13.

Of the Later Iron Age features, ditch F.3, on a northwest-southeast orientation, cut ditch F.6 (orientated northeast-southwest) and ditch segment F.8 (orientated E-W). Ditches F.3 and F.6 probably form part of a field system, however due to its completely different alignment, meaning it is unlikely to be part of this system, the purpose of ditch segment of F.8 is unclear.

Discussion

The results of the bucket sampling exercise demonstrated that there is very limited archaeological activity within the site boundary. These results matched those of the stripped open area.

In the fields directly to the west of this site, previous evaluations have uncovered the presence of an Iron Age enclosure system (Evans, Mackay and Patten 2005). It is possible that the small number of Later Iron Age features located in the northeast corner of site are associated with them, however, it is more likely they represent the edge of a field system that was separate to that identified to the south and further to the west, due to the significant gap and lack of archaeology between them.

Several features were somewhat ambiguous as to their age, for example, ditch F.9 is on the same alignment (northeast-southwest) as the Iron Age ditches, however it was cut from very high up and was clearly visible in the subsoil layer suggesting it is much more recent. Two other features which could be from the Iron Age are the small

pit F.12 and posthole F.13. Both of these features shared very similar fills and characteristics with the other Iron Age features, however as they are some distance from these and contained no finds, it is difficult to ascertain for certain.

The only other activity noted on site was confined to the post medieval period and consisted of some possible small scale sand and gravel quarrying towards the west end of site and a series of post medieval ditches which appear to either be parallel or perpendicular to the line of the disused railway.

Overall, this site has helped confirm the rather negative results of the 2003 evaluation (Cessford & Mackay 2004) and has demonstrated the area was never intensively utilised beyond using the land for agricultural purposes. Of some note however is the small concentration of Later Iron Age features concentrated in the northeast corner which potentially could represent the edge of a previously unknown prehistoric field system.

Appendix 31

Later prehistoric pottery – *Matthew Brudenell*

One handmade sherd (4g) of Later Iron Age pottery was recovered from pit F.3, context [41]. The sherd is an everted rim with a flat lip, and is in a dense sandy fabric (fabric Q1). A date between c. 350 BC – 50 AD is likely.

Appendix 32

Assessment of Bulk Environmental Samples - Anne de Vareilles

Methodology

Two bulk soil samples from two Iron Age field boundary ditches were selected for archaeobotanical analysis, and processed using an Ankara-type flotation machine. Flots were collected in 300µm sieves and the remaining heavy residues washed over a 1mm mesh. Both flots and residues were dried prior to analysis. For this assessment, only heavy residue components greater than 4mm were sorted by eye. The smaller 1–4mm fractions have been stored for future reference. Sorting of the flots was carried out under a low power binocular microscope (x6–40) in the George Pitt-Rivers Laboratory, McDonald Institute, University of Cambridge. Nomenclature follows Zohary and Hopf (2000) for cereals, Stace (1997) for all other flora and an updated version of Beedham (1972) for molluscs. All macro-remains are listed in Table 34.

Preservation

All botanical macro-remains were preserved through charring. The samples contained very few plant macro-remains but a good assemblage of snails survived in F.3. Modern rootlets and the blind burrowing snail *Ceciloides acicula* suggest that the location and condition of macro-remains have probably been disturbed.

Results and Conclusion

Iron Age ditches, F.3 [005] and F.6 [016]

A cereal grain fragment and a single small grass seed were found in F.3 [005]. F.6 had no grains but two wheat chaff glume bases (*Triticum* sp. and *T. spelta*) and two small grass seeds. These remains are unlikely to be *in situ* and were probably being moved about on the land surface before they were buried in the ditches.

F.3 also contained quite a rich assemblage of snail shells. The latter can be split into two groups: fresh water species and species that live in damp and shady conditions. The dominant type in the first group, *Anisus leucostama*, also withstands drying. The evidence therefore suggests that the ditch was only seasonally waterlogged but remained damp and covered with vegetation for the remainder of the year.

Sample number		1	2
Context		005	016
Feature		3	6
Feature type		Boundary ditches	
		Iron	
Phase/Date		Ą	ge
Sample volume - litres		11	10
Flot volume - mililitres		5.5	12
Flot fraction examined - %		100	100
Charcoal			
<2mm		+	+
Vitrified pieces		-	-
Cereal Remains			
Indeterminate cereal grain fragment		1	
Cereal chaff			
Triticum spelta glume base	spelt wheat chaff		1
Triticum sp. glume base	hulled wheat chaff		1
Non cereal seeds and chaff			
amall Bassass indet (22mm)	small Grass Family	1	2
small Poaceae indet. (<2mm) Fresh water Mollusca	seed	1 '	2
Bithynia tentaculata		+	
Lymnaea truncatula		++	_
Planorbis planorbis		+	
Tianorus pianorus		+ '-	
Anisus leucostama		+++	-
Damp / Shade loving species			
Carychium tridentatum / minimum		+	
Succinea sp.		+	
Columella edentula		+++	+
Vertigo antivertigo		+++	
Vallonia excentrica / pulchella		++	
Cochlicopa lubrica / lubricella		++	
Oxychilus / Aegopinella			
Catholic species			
Vertigo pusilla		-	
Trichia sp.		+++	+
Ceciloides acicula –Blind burrowing snail		+	Т
Modern rootlets		Р	Р
Modern rootiets	<u> </u>	1 1	

Table 34: Botanical and Molluscan Remains from the Bulk Soil Samples Key: '-' 1 or 2, '+' <10, '++' 10-50, '+++' >50 items. P = present

Appendix 33

Flint – *Lawrence Billington*

12 worked flints weighing 81g were recovered from the excavations at CGB:LRD, both from surface deposits and the fills of cut features, the assemblage is shown by context in Table 34. The flints were recovered as finds from surface deposits or as residual material in the fills of later features.

Most of the assemblage consists of undiagnostic debitage in the form of hard hammer struck flakes struck from unprepared platforms. However, two flakes, from F.1 and F.3 have the carefully trimmed platforms typical of systematic core reduction strategies associated with Mesolithic and earlier Neolithic technologies.

Feature no.	Feature type	chip	primary flake	secondary flake	tertiary flake	end scraper	retouched flake	Total
	Surface		2			1	1	4
	Topsoil	1						1
1	ditch			1				1
3	ditch			3	3			6
	total	1	2	4	3	1	1	12

Table 35 shows recovered flint by context

The retouched component includes an invasively retouched flake, probably of Neolithic or early Bronze Age date and an end scraper, both collected from the surface of the site. The scraper was manufactured on a core rejuvenation flake that had removed knapping errors on the flaked face of a narrow flake or blade core, suggesting a later Mesolithic or earlier Neolithic date.

Section 8

Addenbrooke's Link

Introduction:

Location, topography and geology

A watching brief was carried out because of the need to cut a temporary culvert adjacent to the new Guided Busway bridge near Addenbrooke's Hospital. It was located some 100m west of the Cambridge to London railway line and centered on NGR 545712/255072, (see Figure 32 and 34). The watching brief covered an area of 309.5 m², being approximately 60.3m long on a northwest-southeast orientation (see Figure 32 and 34), and height varied from 12.72m OD at the northwest end to 13.25m OD at the southeast end.

Two open areas of excavation were carried out on either side of the Cambridge to London railway line (see Figures 32 and 33) at TL457551, approximately 100m east of the watching brief. Modern ground surface was between 11.8m and 12.2m OD to the west of the railway and 13.4m OD to the west of the line, an area artificially raised with material removed from foundation excavations from the nearby Addenbrookes hospital. The site lay upon the western periphery of the Upper Cretaceous West Melbury Marly chalk that extends from the Gog Magog hills south of Cambridge and Third Terrace gravels within the slight north-south aligned valley marking the course of the early 17th century Hobson's Brook. The underlying deposits were light brown sandy clay with high levels of loose angular gravels. To the north were increasing numbers of light grey marl patches.

Archaeological Background

The site of the temporary culvert and proposed railway bridge are in an area of high archaeological activity. Positioned 300m south of the probable route of the Roman road, and within an important prehistoric landscape (Evans, Mackay & Webley 2008) many cropmarks are visible in aerial photographs, which have been the focus of detailed study (Evans 2002). This desktop assessment considered the cropmarks and excavations within the whole area of land in and around Addenbrooke's Hospital, and identified areas of high archaeological potential to the south and south-east of the area of excavation: Immediately south of the railway bridge excavated area, a large subrectangular enclosure orientated northwest-southeast; approximately 180 x 80m (SMR 8339, TL459549) was identified, its eastern corner displaying triple ditches, which was initially interpreted as a probable Late Iron Age settlement, but after radiocarbon analysis was reclassified as a triple ditched Middle Bronze Age enclosure (Evans, Mackay & Webley 2008). This lay within a network of co-axial ditches that were seen as a contemporary associated field system. 800m to the south at Great Shelford (SAM Cam 57, *ibid*), a similar cluster showed similarities in form to this but with a larger series of cropmarks which also included a probable droveway as well as several small potential hut-circles. Further probable Late Iron Age occupation is suggested by a series of rectilinear enclosures, probably paddocks, to the south-east of the site (TL462549).

The dating of the crop-marks identified immediately adjacent to the excavated areas has been reliant on several phases of evaluation and excavation. Evaluation trenches dug either side of the railway line in advance of the Guided Busway (Cessford & Mackay 2004) demonstrated a distinct contrast between the two sides in the density of archaeology revealed. The western side of the railway produced very few features: T16 the closest trench to the excavation showed a single, undated, wide, east-west aligned ditch [605] with flat base and steeply sloping sides (*ibid*). In contrast, the evaluation on the eastern side of the railway revealed more features: The closest trench to the eastern area of excavation (T21) revealed four north-south orientated and one northeast-southwest orientated ditches.

A series of evaluation trenches were opened within the fields immediately north and south of the excavated areas, in advance of the '2020 Land' development (Evans & Mackay 2005). These allowed a closer examination of the cropmarks south of the excavated site previously identified as Late Iron Age enclosures and their associated field systems to be made: The double ditch visible as the southeast side of the rectilinear enclosure produced 27 sherds of middle and late Iron Age pottery (Brudenel in Evans & Mackay 2005).

Further archaeological material was uncovered 420-750m west of the areas excavated during evaluations and excavations at Clay Farm. This work revealed more linear features associated with visible cropmarks, representing probable Iron-age and Romano-British field systems.

A large Iron Age enclosure was identified in the late 1960's 750m to the west of the site (Cra'ster 1969, Hutton 2007), now below the central car-park of Addenbrookes hospital (TL465551),

Methodology

Following the marking out of the proposed bridge foundations, a tracked machine with a 1.8m wide ditching bucket removed topsoil and/or overburden to expose the geological deposits and any underlying archaeological features. This was carried out under constant archaeological supervision.

The two open areas were cleaned, a grid inserted and planned immediately at a scale of 1:50. All features apart from obviously modern disturbances were half sectioned and 1m slots were excavated in less physically bounded features and ditches. Excavation was carried out by hand and all finds were retained. The recording followed a CAU modified MoLAS system (Spence 1994); assigning feature numbers, F., to stratigraphic events, and numbers, [fill] or [cut], to individual contexts. Base plans were drawn at 1:50, sections at 1:10. All features not identified as being of a post-medieval or modern date were environmentally sampled. All work was carried out in strict accordance with statutory Health and Safety legislation and with the recommendations of SCAUM (Allen and Holt 2002), extra emphasis on safety was adhered to when crossing the railway. The site code for both the watching brief and open areas was CGB:ABL.



Figure 32. Plan of CGB ABL07 and watching brief

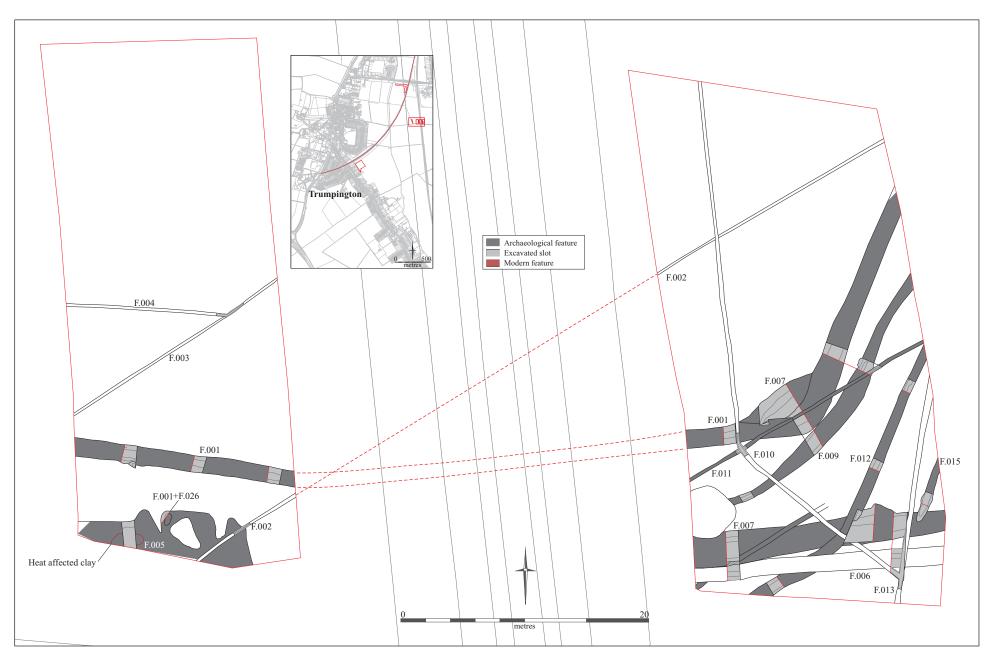


Figure 33. Plan of CGB:ABL



Figure 34. Plan of watching brief CGB:08

CGB:ABL (watching brief)

with David Webb

Archive

A total of 6 contexts from 3 features were excavated and recorded and a small quantity of pot was recovered. The documentary records and accompanying artefacts have been assembled into a catalogued archive in line with Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeology Unit offices, CHER number is 2519.

Results

The three features identified during the watching brief (see Figures 32 and 34) were all ditches. F.1 and F.2 were on a northeast-southwest orientation and appeared to be generally parallel, with F.2 diverging away slightly, and F.3, which was cut by both, on a northwest-southeast orientation. F.3 is potentially the same feature as F.1 within the open areas as both correspond well to a ditch present in Tr.16 of the Guided Busway evaluation (Cressford & Mackay 2002). This trench was located approximately midway between the watching brief and open areas.

A small quantity of residual, degraded Neolithic pot was recovered from F.1 but no other dating evidence was recovered from any of the features. However, the profile, fill types and presence of prehistoric pot would suggest these features predate the medieval period.

CGB:ABL (open areas)

with Adam Slater

Archive

A total of 98 contexts from 13 features were excavated and recorded and a small number of finds, including pot, bone, brick, glass and metal objects were recovered. The documentary records and accompanying artefacts have been assembled into a catalogued archive in line with Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeology Unit offices. CHER number is the same as the watching brief, ECB 2519.

Results

A total of fifteen features were revealed within the areas either side of the railway line, dating from the Prehistoric and Post-Medieval periods. Five of the features were revealed to the west and ten to the east of the railway line, two of these features could be seen on both sides of the railway. Two ditches; F.9 and F.15 were undated, although several animal bone fragments were recovered from F.1 (see Figure 32 and 33).

Prehistoric

Ditch, F.7, was identified as being potentially prehistoric due to the presence of residual Neolithic pot sherds and several unworked pieces of antler. Stratigraphically, F.7 was cut by ditches F.12 and F.15. It is possible that F.1 is also prehistoric due to the presence of similar Neolithic pot recovered during the watching brief phase some distance to the west.

Post Medieval

The most conspicuous evidence of post-medieval activity on the site was, of course, the Cambridge to London railway line, constructed in 1843 and running in a north-south direction between the two areas of the site. Its position allowed several features to be dated as pre-1843: three probable land-drains, F.2, F.3, F.4, were recorded as continuing across both sides of the railway, containing fragments of post-medieval ceramics, two more, F.8 and F.10, were directly associated with them and could be dated to the same phase of activity. The single silty fill of these drains, without the large amount of stones and gravels associated with field drains in use for prolonged periods, suggests that they were only used for a single purpose, probably associated with ground drainage carried out prior to the construction of the railway itself.

Ditch F.12 also contained post medieval pot, as well as two brooches dating from the 1st to 3rd century. It is unclear how two Romano-British brooches made their way into this ditch but most likely they were deposited unintentionally during the backfilling of this ditch.

Modern

Underlying the topsoil on the eastern excavation area of the site was a thick deposit of light to mid grey silty marl-clay with frequent large sub angular stones and modern building detritus. This represented the deliberate dumping of material excavated to form the foundations of Addenbrookes Hospital in the 1960's. A single ditch, F.6, was seen to represent recent activity on the site; it cut a Prehistoric ditch, F.7, Romano-British ditch F.12, and post-medieval drainage gully F.8. The cut was not seen within the hospital foundation deposit and therefore presumably predated it, whilst the fill corresponded with the topsoil within areas where no later dumping took place.

The most recent activity on the site was of two narrow, deep gullies, F.10 and F.13 within the eastern side of the railway. These were seen to cut the Addenbrookes deposits and were of dimensions likely to have been dug by a narrow ditching bucket on a mechanical excavator because of the obviously modern nature of these gullies, and the risk of encountering modern services they were not excavated independently, but only recorded when they appeared in a section of a separate feature (eg. F.7). A large circular disturbance, again cutting through the 1960's detritus and filled with large angular stones and loose gravels was identified on the western edge of the site, immediately adjacent to the railway.

Discussion

Paucity of archaeological material during previous excavations/evaluation in the immediate vicinity of the western excavated area is emphasised by the revelation of a single feature (F.1) excavated in the area immediately west of the railway. This single, east-west orientated ditch corresponds with a single ditch identified 25m to the west (Cessford & Mackay, 2002; T16, [605]) and to one recorded during the watching brief (F.3). The contrast between this area and the relatively high density of archaeological material on the eastern side of the railway certainly conforms to the pattern already identified during earlier evaluation and excavations in the area; with a distinct thinning of features between the clusters of ditches to the east and west of the site. This suggests that the excavated areas mark the western periphery of an eastern zone of agricultural activity, with a short gap with very little land development before a second zone begins, and continues to the west. The excavation revealed features not previously identified by aerial photography, especially on the eastern side of the railway tracks, which had been covered with modern construction detritus since the late 1960's.

The revealed features correspond with general northwest-southeast, southwest-northeast alignment of the cropmarks. However, without further work many of these features cannot be definitively dated. The presence of a possible substantial Roman enclosure and field system just to the north (Collins 2009a, *forthcoming*) raises the possibility several of these ditches are connected to a much wider, Late Iron Age/Roman system. The absence of finds from excavated slots and the negative results from the environmental samples (see Appendix 34) does certainly suggest the features here were some distance from any settlement or other intensive activity. Whereas the presence of large numbers of molluses within the ditches points towards a damp or seasonally wet environment, and indicates the ditches were open long enough for significant colonisation to take place.

The archaeological features excavated further add to our understanding of the multiperiod activity in the Addenbrookes area of Cambridge, demonstrating that the area was divided into at least two distinct zones of agricultural activity with a distinct gap between them.

Appendix 34

Assessment of Bulk Environmental Samples - Anne de Vareilles

Methodology

All ten bulk soil samples taken on site were processed using an Ankara-type flotation machine at the Cambridge Archaeological Unit. The flots were collected in a $300\mu m$ mesh and the remaining heavy residues washed over a 1mm mesh. The flots were dried indoors and remain to be scanned for the presence of charred plant macro remains and other ecofacts.

Sorting and identification of macro remains were carried out under a low power binocular microscope. Seed identifications were made using the reference collection of the George Pitt-Rivers Laboratory, McDonald Institute, University of Cambridge. Nomenclature follows Stace (1997) for plants and Beedham (1972) for molluscs.

Preservation

All ten samples contain good local environmental indicators thanks to the excellent preservation of molluscs. However, a total of only two seeds were found, both carbonised, and a little charcoal, most of which is vitrified thereby indicating very hot and/or long burning fires.

Results and Conclusion

The only cereal grain was extracted from F.12 [47] (wheat or barley – *Triticum/Hordeum*), and the only wild plant seed from F.9 [42] (Cleavers – *Galium aparine*).

Although the samples were not processed specifically for the recovery of snail shells many were recovered by flotation, and provide a diverse assemblage of fresh-water and land specimens. Juveniles are present as well as adults, suggesting that a vibrant community inhabited the ditches. No obvious change in molluscan assemblage is visible within and between features so that all samples indicate the same general environments. The only striking difference between samples is the absence of any *Trichia* species in F.7 [35] when they are one of the most abundant taxa in all other samples; the significance of this point is unclear since *Trichia* live in a wide range of habitats.

The two depicted environments are:

- 1) A wet ditch interior with standing hard water which appears to have fluctuated, sometimes to below the ditch depth as is suggested by the very common *Anisus leucostama* that resists drying. The ditches appear to have contained lots of vegetation, creating a moist, often wet, shady environment, seemingly undisturbed and ideal for molluscs as well as other fauna.
- 2) Some of the snails, such as *Vertigo*, *Cepaea* and *Helix*, probably lived on the ground surface. Environmental indicators for the ground surface are less clear though both dry and damp conditions prevailed, probably more as a reflection

of local hydrology than seasonal variants. The vegetation is likely to have been grassland, wet meadow or perhaps even open woodland; however, the lack of woodland species indicates that the area was not densely populated with trees.

Section 9

Shelford Road Construction Site (CGB:SRC)

Introduction

Location, topography and geology

The site was an open area excavation covering 1.16 hectares and was located on land off Shelford Road, Cambridge in a field close to the line of the Guided Busway (see Figures 5 and 35). Centre of the site is NGR 544983/254453. The site slopes upwards slightly from a height of 15.83m OD in the east corner to 17.10m OD along the west edge of the excavation. The geology is uniform Second Terrace gravel.

Archaeological background

The area surrounding this site has been subject to extensive study by the CAU over the preceding few years and includes a number of desktop assessments (Appleby 2004, Dickens 2002), evaluations (Cessford & Mackay 2004, Evans, Mackay & Patten 2005) and excavations (Timberlake 2007) and their relevant findings are detailed below.

An aerial photographic survey of the area showed a dense pattern of crop-marks, including a possible trackway and several rectangular enclosures clipping the eastern edge of this site and expanding north and east for some distance (see aerial photo Figure 38). Subsequent evaluations in 2004 and 2005 (Cessford and Mackay 2004, Evans, Mackay & Patten 2005) identified these crop-marks as dating primarily to the Late Iron Age and Roman periods and probably a small rural settlement and its associated in-field system. Just to the east a CAU excavation (Timberlake 2007) revealed scattered Bronze Age burnt pits along with Late Iron Age and Roman outfield paddocks, Roman horticultural beds and drove-ways/tracks. Several similar concentrations of crop-marks are also visible slightly further afield, such as SAM 4461 some 600m to the southeast, and evaluation of the eastern fields of Clay Farm and the fields around Addenbrookes hospital has shown a pattern of Prehistoric and Roman field-systems and settlement.

Evidence for activity between the end of the Roman period and the post medieval period is quite sparse within the immediate area and comprises of some Saxon settlement activity identified at the Hutchinson site at Addenbrookes, some 1500m to the northeast (Evans, Mackay & Webley 2004) and, more recently, at the MRC site which lies adjacent to the Hutchinson site (Collins *forthcoming*). The locality does however contain ample evidence for medieval/post medieval cultivation in the form of ridge and furrow systems and later drainage ditches and field boundaries, (Timberlake 2007).

The area around this site was utilised as part of an agricultural showground throughout the 1950's and 60's and the possibility exits for this activity to have affected or disturbed the potential archaeology of this site.

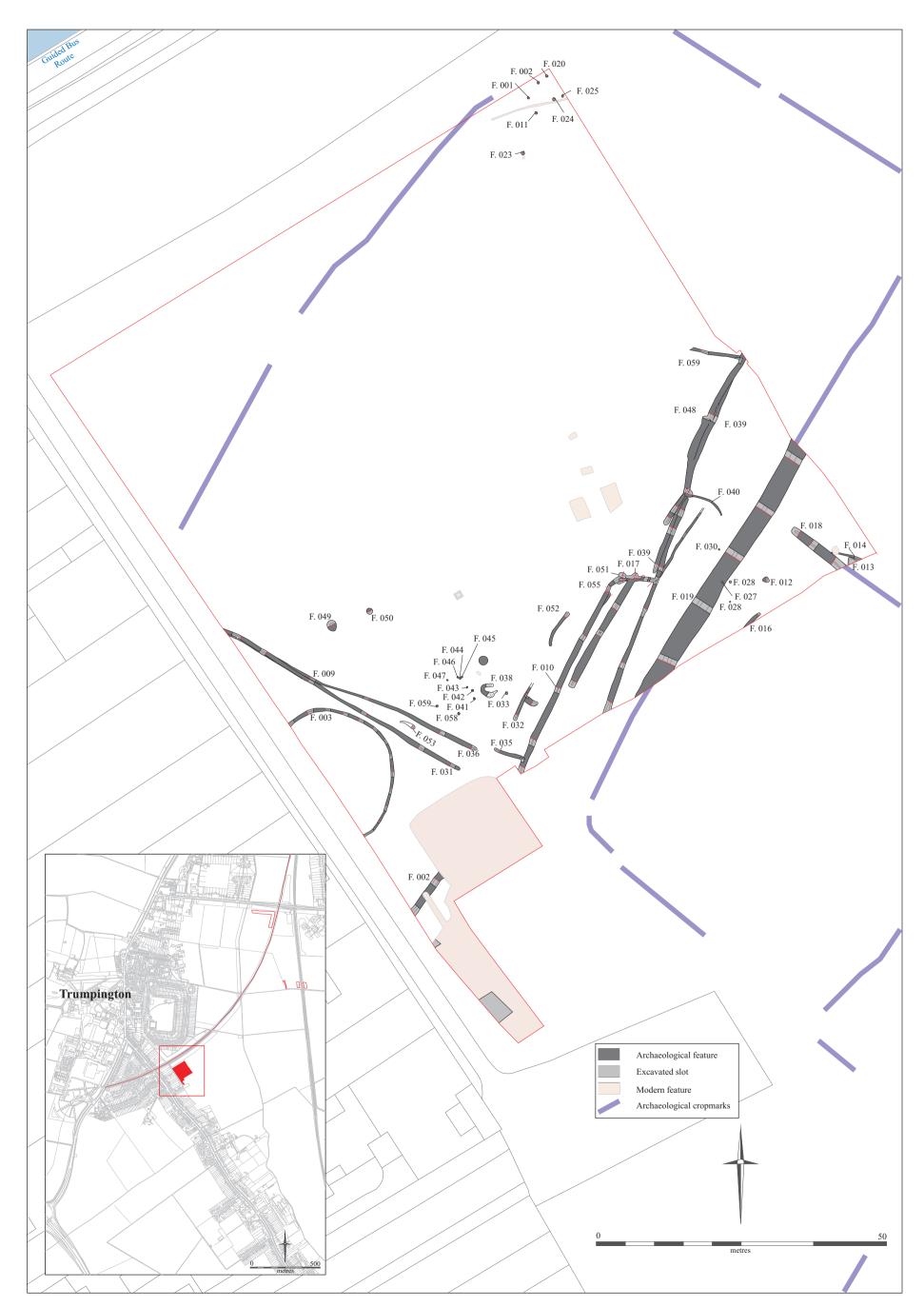


Figure 35. Plan of CGB:SRC

Methodology

An open area totalling 1.16 hectares in size was excavated by tracked 360° machine using a 2.20m wide toothless ditching bucket. Topsoil and underlying deposits were removed under archaeological supervision and the exposed archaeological features were subsequently metal detected, planned and thoroughly sampled. Due to poor weather and soil conditions, top and subsoil deposits from the eastern half of site were redeposited onto the western half after it had been dealt with archaeologically, leaving c.0.52ha open.

Excavation of archaeological features was carried out using hand tools. The recording followed a CAU modified MoLAS system (Spence 1990); whereby feature numbers, F. were assigned to stratigraphic events, and numbers [fill], or [cut] to individual contexts. The open area plans were drawn at scale 1:50 and sections at 1:10. A representative number of environmental samples were taken and a digital photographic archive was compiled. All work was carried out in strict accordance with statutory Health and Safety legislation and with the recommendations of SCAUM (Allen and Holt 2002). The site code is CGB:SRC.

Archive

A total of 344 contexts from 62 features were excavated and recorded and a significant number of finds, including pot, animal bone, worked animal bone, flint, burnt flint, burnt stone, worked stone, burnt clay and worked clay were recovered. The documentary records and accompanying artefacts have been assembled into a catalogued archive in line with Appendix 6 of MAP2 (English Heritage 1991), and are being stored at the Cambridge Archaeology Unit offices. CHER number is ECB 2518.

Results

The Shelford Road Construction site revealed a significant amount of archaeology which was concentrated within the eastern half of site. The western half was almost completely devoid of archaeological activity, with only some modern postholes identified in the northwest corner, (see Figure 35). Two primary phases of archaeology were present here and most features could be attributed to either the Late Bronze Age/Early Iron Age or the Late Iron Age/Early Roman periods) see phased plan Figure 36). Many features contained no dating evidence, but on the basis of fill type, feature profile, location and in the case of undated ditches, their alignment compared to that of other, dated ditches, were ascribed to a particular phase. Some background Mesolithic and Neolithic activity clearly took place in the area as evidenced by the small number of recovered worked flints (see Appendix 38); however no features could be associated with these periods. A number of post medieval/modern features, including a substantial modern rubbish pit were also present.



Figure 36. Plan of CGB:SRC

Late Bronze Age/Early Iron Age

The most prominent feature dated to this period was ditch F.19 (Figure 37). This substantial northeast-southwest orientated boundary ditch had a width averaging 3.42m and depth 1.25m. It crossed the site and crop mark evidence appears to suggest that towards the southeast it turns 90 degrees to a northwest-southeast orientation (partially visible on aerial photograph, Figure 37) and to the northeast carries on for some distance before potentially doing another 90 degree turn to a northwestsoutheast alignment. It is probable this ditch is the same as one excavated during work for the Addenbrookes Link Road some distance to the southeast, which was dated by radiocarbon analysis to between 1380 – 1120BC (Timberlake 2007). To the northwest of site and just outside the excavation area a trench evaluation carried out by the CAU (Evans, Mackay & Patten 2005) exposed this ditch and of note within the subsequent slot were the remains of an adult human and small quantities of Early Iron Age pot. The five excavated slots within the excavation area all appeared to show deposits of weathered natural and other material along the southeast edge which were not present on the opposing side. This suggests a bank may have been present on this side, and material from it weathered back into the ditch.

Ditch F.18, whilst not containing any direct dating evidence, was also placed within this phase. This was because not only were its fill types very similar to F.19, its northwest-southeast orientation was almost directly at 90 degrees to F.19 and did not appear to match the alignments of later ditches. Ditch F.18 terminated approximately 4m away from F.18. It also cut small ditch F.14, although this again contained no dating evidence. Both of these features appeared in section to have been cut by Late Iron Age pit F.13

Two postholes from a small cluster (F.37 & F45) and two treethrows (F.34 & F.38) yielded a small number of pot sherds and worked flint suggesting this group of features date to this period. The postholes from this cluster shared common fill types and profiles and their form does suggest they formed some kind of structure, possibly a roundhouse. The presence of wheat/grain from bulk environmental samples taken from both the postholes and treethrows certainly does suggest food preparation and processing took place here supporting the view of a domicile. Some of these postholes were quite shallow and it is very likely, due to the shallow nature of the overlying top and subsoil several were lost through ploughing and other disturbances.

Late Iron Age/Early Roman

The main emphasis of this phase was a series of fairly narrow, shallow ditches either orientated northwest-southeast, F.8, F.9, F.35, F.54, F.55 and F.59, or northeast-southwest, F.2, F.10, F.15, F.17, F.39 and F.48. Also dated to this period were two curvilinears, F.26 and F.40, three pits F.12, F.13 and F.61. Ditches F.15, F.39, F.40 and F.48 were dated through pot recovered from them, whilst the others were dated to this period because of their respective alignments and relationships with the dated features. Only F.15 contained significant quantities of pot with the seven excavated slots yielding 213 sherds (see Appendix 36).

Truncation, probably by post medieval ploughing techniques, was evident in quite a number of the ditches dated to this period. F.32 and F.52 were probably the same

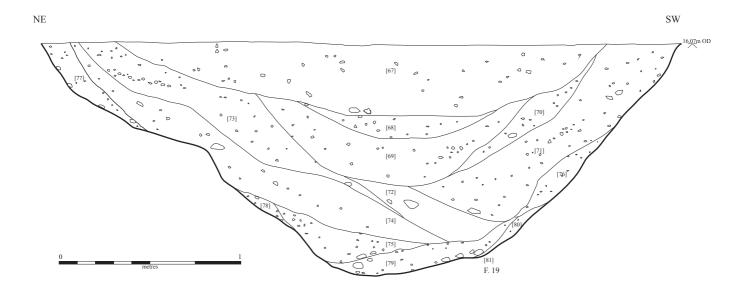




Figure 37. Section and photograph of ditch F. 19 (CGB:SRC)



Figure 38. Aerial Photograph of CGB:SRC. Several cropmarks are clearly visible outside of the excavation area

feature as were F.35 and F.36. Both of these two pairs of ditches have been truncated away at either the northeast and southwest ends, or in some cases both. F.40, a curvilinear gully containing 37 pot sherds of which 36 were from a single Late Iron Age jar (Appendix 36) was also heavily truncated and only a small remnant remained. Finally, ditch F.59 towards the northern edge of excavation was truncated away at the southwest end.

Ditch F.2 was also severely truncated, although in this case it was by a massive modern rubbish pit that dominated the southern end of site. Its alignment suggests it is the same feature as ditch F.10.

Of the three pits that could be dated to this period, only F.13 contained any significant remains. It was quite broad and shallow and appeared in section to cut earlier ditches F.14 and F.18. A small assemblage of Late Iron Age pot was recovered, along with a group of unworked burnt flints. A bulk environmental sample taken from it showed poor preservation, but the highest concentration of environmental remains from the whole site. These included a significant amount of charcoal along with wheat and possibly barley along with a significant number of wild floral species, (Appendix 39).

Curvilinear gully F.22 bordered the southwest edge of site. Just over half of this feature was visible, with the remainder going outside the area of excavation. It had a diameter of 22m, and 13 one meter slots were excavated into it. Despite the number of slots however, no dating material was recovered and its inclusion in this phase is only tentative, and is based on parallels within the surrounding landscape, for example those located at the Hutchinson site at Addenbrookes Hospital to the northeast (Evans, Mackay & Webley 2008). Bulk environmental samples were quite sterile also, although some charcoal was recovered and future work should include attempting to date this feature through C14.

Post medieval/modern

The southern tip of site was dominated by a substantial modern rubbish pit, the content of which pointed towards a 1950's or 60's date. It cut ditch F.2 and a machine excavated slot revealed its depth to be greater than 1m, so any archaeology that was present here would not have survived underneath. Other modern features were less intrusive and consisted of a cluster of shallow, rectangular, sand filled pits of indeterminate purpose lying towards the centre of site, a group of clearly modern postholes clustered at the northern tip of site, F.11 and features F.20-F.25, and a small rectangular pit that cut gully F.14.

Discussion

Unfortunately no evidence for a bank associated with ditch F.19 remains other than the weathered natural deposits within the ditch itself. This is in no doubt due to the shallow nature of the topsoil and subsoil here leading to it being readily ploughed out over the centuries. However the probable presence of an internal bank to this ditched enclosure is certainly worth noting and further work within the landscape should help to clarify its presence. The ditches were clearly open for some time, as evidenced by the large number of weathering/slumping deposits. Also the presence of Middle Iron

Age pottery in the lower fills and Late Bronze/Early Iron Age in the upper fills (Appendix 35) supports the view this ditch was in use for a significant period of time. Substantial Bronze Age/Early Iron Age enclosures are certainly known within this landscape, for instance a large triple ditched enclosure which was apparently established in the Middle to Late Bronze Age was identified some distance to the northeast during an archaeological evaluation for the 2020 Lands, (Evans, Mackay & Webley 2008). The purpose of this enclosure, other than clearly marking out a boundary is unknown at this stage, and a future emphasis should aim to uncover whether it is related to settlement or agricultural activity. The presence of a possible roundhouse with a similar Late Bronze Age/Early Iron Age date just outside it though would appear to suggest its use may not have been as a settlement boundary.

Ditch F.18 potentially terminated where it did due to the presence of the bank associated with boundary ditch F.19. Alternatively, if a bank was not present it would probably have formed an entranceway between two fields. Either way, it is likely that F.18 formed an internal subdivision within an enclosure formed by the much more substantial F.19.

The series of northwest-southeast and northeast-southwest orientated ditches dated to the Late Iron Age and Early Roman periods clearly form part of a field system that cropmarks and other archaeological work within the area (Evans, Mackay & Patten 2005, Timberlake 2007) suggest stretch across quite a wide area. Some evidence suggests settlement associated with this field system may be located just outside the excavation area to the east. For example, environmental evidence from pit F.13 which bordered the edge of the excavation area suggested food preparation and/or processing may have taken place very close by. The concentrations of pot and animal bone deposited in some ditches, such as F.15, suggests they may have been used as places to dispose of domestic rubbish again insinuating settlement activity close by.

The large ring gully located on the southwest edge of the excavation area could represent either a roundhouse or circular structure. Similar buildings defined by a single gully were present at the Hutchinson site at Addenbrookes; however the largest diameter for a structure here was only around 10m. This suggests that either the gully, with a diameter of 22m, represents a particularly large and potentially impressive building or it had another purpose, for instance as an animal pen. Further work and closer examination of the bulk environmental results may help to clarify this feature.

The northwest half of site was curiously devoid of archaeology, despite being slightly higher (up to 17.10m OD) and, presumably in this low lying area, quite desirable land. This could be a result of intensive plough action removing any archaeological evidence; a theory backed up by the fact a linear crop mark (shown on Figure 35) was clearly visible from aerial photographs towards the northwest end of site but was not present once the overburden had been removed. Also it was evident from many of the ditches on the eastern half of site, truncation, probably by plough action, has certainly been a factor here. An alternative reason could simply be this area represents a gap or open field system between different settlements and their related activities.

Pottery evidence from this site suggests the Late Iron Age/Early Roman phase may have been relatively short-lived, and the lack of proper Roman wares does suggest the site was not occupied beyond the 50s AD (Appendix 36). Also the lack of imported or

fine wares suggests the site was part of a low status rural settlement. A similar pot assemblage was seen during the Link Road, Site 3 excavations just to the southeast (Timberlake 2007). This site also appeared to have been in use for a relatively short time, although the discovery of South Gaulish Samian ware dated 60-100 AD suggested it fell out of use slightly later.

It is important not to view this site as an isolated entity but rather as an integral part of a much larger archaeological landscape and further work could perhaps help to place the activity here more thoroughly into this wider context.

Appendix 35

Later prehistoric pottery – *Matthew Brudenell*

47 sherds (408g) of handmade later prehistoric pottery were recovered from the excavations dating from the Late Bronze Age or Early Iron Age (c. 1100 BC - 350 BC) though to the Late Iron Age (c. 50 BC - 50 AD). The pottery was recovered from a total of 11 contexts (not including the surface), relating to 8 separate features (Table 36)

Feature	No. Sherds	Wt. (g)	MSW	No. Vessels	Fabrics present
10	2	21	10.5	-	GQ1
19	10	58	5.8	2	F1, QF1, S3
32	3	7	2.3	-	FQ2, Q
36	1	3	3	-	Q3
40	28	311	11.1	1	G4
45	1	2	2	-	F2
52	1	5	5	1	FQ1
55	1	1	1	-	F
TOTAL	47	408	8.7	4	

Table 36: Assemblage breakdown by feature

Fabrics

Group S, Shell (4 sherds, 14g, 3% of assemblage by weight)

S3: Moderate to common medium and coarse shell (4 sherds, 14g)

Group F, Flint (7 sherds, 18g, 4% of assemblage by weight)

F1: Common medium and coarse flint (3 sherds, 7g)

F2: Moderate medium and coarse flint (1 sherd, 2g)

FQ1: Moderate medium and coarse flint in a dense sandy clay matrix (1 sherd, 5g)

FQ2: Moderate to common fine and medium crushed flint in a dense sandy clay matrix (1 sherd, 3g)

F: Small sherds with flint temper (1 sherd, 1g)

Group G, Grog (30 sherds, 332g, 81% of assemblage by weight)

G4: Common coarse grog (28 sherds, 321g)

GQ1: Sparse medium and coarse grog, and very rare coarse flint in a dense sandy clay matrix (2 sherds, 21g)

Group Q, Sand (6 sherds, 44g, 11% of assemblage by weight)

Q: Small sherds in a sandy fabric (2 sherds, 4g)

Q3: dense sand with shell flecking (1 sherd, 3g)

QF1: Dense quartz-sand with rare medium or coarse flint (3 sherds, 37g)

The assemblage was dominated by small abraded body sherds with a mean sherd weight (MSW) of 8.7g. Overall, 66% of the sherds were classified as small (measuring under 4cm in size), 30% were classified as medium (measuring between

4-8cm in size) and 4% were classified as large (measuring over 8cm in size). A further 7g of pottery crumbs were noted in the assemblage, but are not commented upon in this report. These comprised sherds weighing under 1g.

Based on the total number of different rims and bases identified, the assemblage contained fragments of a minimum of 4 vessels (2 different rims, 3 different bases: one rim and base belonging to the same vessel) with a combine estimated vessel equivalent (EVE) of 0.25. Only one of these vessels was sufficiently intact to assign to form. As a result, the dating of the pottery in this assemblage is primarily based on the character of the fabrics and their comparison to larger groups from the surrounding region.

Feature assemblages

Ditch F.10

Ditch F.10 yielded two sherds (21g) of pottery from its surface (1 sherd, 8g) and context [58] (1 sherd, 13g). Both sherds were in grog tempered fabric GQ1, and are of Late Iron Age date (c. 50 BC – 50 AD)

Ditch F.19

Ditch F.19 yielded 10 sherds of pottery (58g), which varied in fabric and potentially date. Pottery was recovered from contexts [68] (1 sherd, 3g), [138] (3 sherds, 37g), [168] (2 sherds, 4g) and [176] (4 sherds, 14g). The sherds from contexts [68] and [168] contained burnt flint temper (fabric F1) and are likely to be of Late Bronze Age or Early Iron Age date (c. 1100-350 BC). The three sherds from context [138] also contained some flint, but were on the whole quite sandy (fabric QF1). Although this group included a base sherd, the pottery cannot be closely dated. Similar fabrics to those from context [138] are common to Early Iron Age assemblages (c.800-350 BC), but also sporadically appear in the Middle Iron Age (c. 350 – 100/50 BC). Finally, context [83] yielded four shelly sherds in fabric S3. These are potentially of Middle Bronze Age date (c. 1500 – 1100 BC), though a Later Iron Age origin cannot be ruled out. Overall, the ditch contained a mixture of pottery from the later Bronze Age through potentially to the Iron Age. The absence of sherds in grog or dense sandy fabrics is probably significant, and suggests that the ditch might have silted prior to the Late Iron Age (c. 50 BC – 50 AD), or perhaps even the Middle Iron Age (c. 350 BC – 100/50 AD). A later Bronze Age origin for this feature is therefore possible. However, the ceramic assemblage is probably too small and fragmentary for reliable dating.

Ditch F.32

Ditch F.32, context [130] yielded three sherds of pottery (7g), in a fabrics Q (2 sherds, 4g) and FQ2 (1 sherd, 3g). The later is probably of Late Bronze Age or Early Iron Age date (c. 1100 – 350BC), whilst the former is only assignable to the Iron Age generally (c. 800 BC - 50 AD)

Ditch F.9/36

Ditch F.9/36, context [164] yielded a single sherd of pottery (3g) in fabric Q3. The sherd cannot be closely dated, but the fabric is typical of the Later Iron Age (c. 350 BC – 50 AD).

Gully F.40

Gully F.40, context [208] yielded 28 sherds of grog tempered Late Iron Age pottery in fabric G4 (c. 50 BC – AD 50). With the exception of one sherd (3g), all the pottery derived from a single round bodied vessel with a flat, externally expanded rim. Four of these sherds could be refitted to construct a partial profile of the pot.

Posthole F.45

Posthole F.45, context [221] yielded a single flint tempered sherd (2g) in fabric F2. This fabric is typical of the Late Bronze Age and Early Iron Age (c. 1100 - 800 BC).

Gully F.52

Gully F.52, context [280] yielded a single base sherd (5g) in fabric FQ1. This type of fabric is common to Early Iron Age assemblages (c.800-350 BC), but also sporadically appears in the Middle Iron Age (c. 350 - 100/50 BC).

Ditch F.55

Ditch F.55, context [321] yielded a single sherd (1g) in a flint tempered fabric (fabric F). These inclusions are typical of Late Bronze Age and Early Iron Age ceramics (c. 1100 – 800 BC).

Discussion

The earliest later prehistoric pottery from CGB:SRC may date to the Middle Bronze Age (c. 1500 – 1100 BC), and comprises the small group of shell tempered body sherds recovered from ditch F.19, context [073]. The other sherds recovered from this boundary ditch consisted of a mixture of Late Bronze Age and possibly Iron Age wares, making it uncertain as to which sherds may or may not be residual. However, given the absence of grog tempered fabrics from this large feature, a pre-Late Iron Age date for its construction and infill is certainly plausible.

Very little of the pottery from the other features at the site can be closely dated. The presence of sherds with flint and sand-and-flint tempered fabrics (fabrics F1, F2, FQ1, FQ2, F, QF1) - including F.19, F.32, F.45, F.52 and F.55 - suggests a Late Bronze Age and/or Early Iron Age (c. 1100 – 350 BC) presence in the landscape, even if most of this material can be considered residual. Only ditch F.10 and gully F.40 can be assigned to the Late Iron Age (c. 50 BC – 50 AD) with confidence. These both exclusively yielded grog tempered sherds; F.40 containing the partial profile of a round bodied bowl

Recommendations: The partial profile of the bowl in F.40 should be illustrated for publication.

Appendix 36

Roman Pottery - Katie Anderson

A total of 341 sherds of pottery, weighing 2791g and representing 3.05 EVEs, were recovered from the site. All of the pottery was examined and details of fabric, form (based on Thompson 1982 form codes), decoration, surface treatment, usewear, EVE and date, where possible, were recorded.

Pottery was recovered from just six different features across the site (see Table 37). The assemblage was dominated by small to medium sized sherds, many of which were abraded. This is further reflected in the low mean weight of the assemblage which is just 8.1g.

Feature Analysis

Feature	No.	Wt(g)	EVEs		
12	1	67	0.1		
15	213	1922	1.99		
39	77	267	0.32		
40	37	322	0.1		
48	2	3	0		
61	11	11 210			
TOTAL	341	2791	3.05		

Table 37: All pottery by Feature

F.12 A single sherd of pottery was collected from Feature 12, consisting of a Late Iron Age jar/bowl (form B1).

F.15 The largest quantity of pottery was recovered from Feature 15, comprising 213 sherds, weighing 1922g and representing 1.99 EVEs. The pottery came from nine different contexts as well as the surface. Context [049] contained 16 sherds weighing 141g. The sherds were generally small and fragmented and although one rim and one base sherd were recovered, no vessel forms could be determined. However, the fabrics suggest most of the pottery is Late Iron Age in date, with some transitional LIA/ER sherds.

Context [60] contained 84 sherds weighing 365g, of which the vast majority (78 sherds, 344g) were from a single vessel, an early Roman sandy, beaded rim jar. The remaining sherds in this context included some Late Iron Age sherds. 46 sherds weighing 224g were recovered from context [189]. All of the sherds are Romanising, and included 31 sherds (60g) from a jar/bowl with a everted, beaded rim, as well as 13 sherds (151g) from a beaded rim jar which was rilled and burnished.

Context [241] contained 30 sherds weighing 797g, thus with a much greater weight than for the other contexts in this feature as well as the assemblage as a whole. The pottery was all LIA/ER in date and included a minimum of four different vessels.

These comprised one rilled jar one cordoned jar and one other jar, as well as one butt-beaker (18 sherds, 531g). This context stands out as having a much higher mean weight of 26.6g compared to the Feature mean weight of 9g Context [251] contained just two sherds, both of which were Romanising in date.

Finally a further 23 sherds weighing 244g were recovered from the surface of this feature, which included seven sherds from a rilled jar, one other example of a rilled jar and six different bowl/jars. All of the pottery recovered from the surface was LIA in date.

This feature is a northwest-southeast running ditch and generally contained just a single fill, although in one slot, there were two fills. Therefore the variation in the date of the pottery from different features is arbitrary and is not a case of the LIA material located below ER pottery. This is however, still of interest since it does support the view that the site was occupied for a relatively short period of time and that pottery in the LIA tradition was used alongside wheel thrown, Romanising and ER vessels.

F.39 77 sherds, weighing 267g were recovered from Feature 39. Context [191] contained the majority of sherds, 68 in total weighing 219g. This included nine sherds (39g) from a handmade jar/bowl with burnished decoration, dating LIA. 55 sherds (122g) were collected from a wheel-thrown jar with a cordon on the neck, dated Romanising. There were also two sherds, weighing 29g from a rilled jar, dating LIA/ER.

F.48 Two Burnished body sherds were recovered from this feature, dating to the Late Iron Age.

F.15 and **F.48**, both cut the earlier F.39, however, there is no apparent difference in date between the pottery recovered from each of the three features. This suggests either that the features were all dug within a short period of time, or else material may have been redeposited as a result of the digging of new features.

F.40 This feature yielded a total of 37 sherds, weighing 322g. 36 sherds came from a single vessel, a LIA jar (type C1-4), in a sand and grog fabric.

F.61 11 sherds weighing 210g were recovered from this feature. Seven of which were from a single vessel, a LIA/ER jar. Two Romanising jars were also recovered, both of which were necked with small beaded rims. This feature was a small pit which cut into F.40, and the pottery shows a difference in date between the two, with the earlier gully (F.40) containing solely Late Iron Age pottery, while the later pit contained LIA/ER and Romanising vessels.

Assemblage Composition

The assemblage consisted primarily of small to medium sized sherds, many of which were abraded and fragmented, with a mean weight of just 8.1g. However, there were several instances of refitting sherds, or at least sherds from a vessel, recovered from a single context. This suggests that in these cases, the pottery had not moved far from

where it had been broken, although the overall pattern suggests much of the assemblage had been on the surface for some time before being deposited.

Sandy fabrics dominated this assemblage (see Table 38), although these fabrics often incorporated other inclusions such as grog and flint. This is expected from an assemblage from this area of Cambridgeshire, although it is interesting to note that a site of the same date at Longstanton (REF CGB LMD07) had shell-tempered fabrics, which are absent from this assemblage, suggesting the two sites had access to different trade networks and that local wares may have been very local.

Fabric	No.	Wt(g)
Sandy greyware	55	122
Grog and sand	49	562
Sand	17	189
Sand and calcareous	8	168
Sand and flint	22	179
Sand and Iron	3	24
Sand and mica	183	1499
Sand, grog and flint	4	48
TOTAL	341	2791

Table 38: All pottery by fabric

Within the assemblage there were no examples of imported wares and also no established Roman wares. Although the assemblage is not vast, this is likely to be a reflection on the date of the site, which appears to from the Late Iron Age to the beginning of the Roman period (up to AD50). Occupation is therefore short lived and the absence of fully developed Roman wares indicates the site did not continue beyond the mid 1st century AD.

There were limited vessel forms in this assemblage, largely due to the small size and high levels of fragmentation of the majority of the assemblage. 30 different vessels were identified, comprising 18 jars, 11 jar/bowls and one butt beaker. The range of jars was limited to plain, everted-rim necked jars and beaded rim jars with prominent internal thickening. As seen with the fabrics, there are not fully developed Roman forms and an absence of any typical early forms such as platters, cups and flagons. The butt-beaker is the best example of a vessel which is made outside of the indigenous tradition.

Vessels in the assemblage were made using the three different techniques; handmade, wheel-turned and wheel-thrown. Chart 2 shows wheel-thrown vessels were the most commonly occurring within the assemblage, with handmade and wheel-turned representing similar proportions. The division of the three manufacturing techniques is a reflection on the date of the site, demonstrating its occupation between the LIA and Early Roman periods.

Discussion

Although relatively small, the assemblage is very useful in providing information about the site. The most significant detail is regarding the date of occupation at the

site which is short lived, but more importantly spans the period between the end of the Late Iron Age and the beginning of the Roman period (see Table 39).

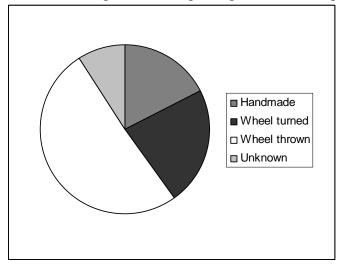


Chart 2: All pottery by manufacturing technique

Date	No.	Wt(g)
LIA	117	1588
LIA/ER	41	451
Romanising	105	408
Early Roman	78	344
TOTAL	341	2791

Table 39: All pottery by date

An assemblage of this date is potentially very important in understanding the transitional period in this area of Cambridgeshire. The site lies c. 3 miles south of the main town, yet within an area known to be well occupied. Therefore it is crucial to compare the assemblage with material collected from the surrounding area.

There are several large sites in the area, which also have occupations dates in the LIA/ER period. The first of these is the Hutchinson site (Evans et al 2004), located approximately 1.5km to the northeast of this site. This site was much larger and in occupation for a longer period. However, in terms of ceramics it is still comparable since both sites were occupied in the transitional period. The ceramics show vast differences between the sites, with the larger, Hutchinson site having imported wares in the early Roman period, as well as making its own pottery, which was Belgic and Romanizing in style. Although the size an functions of the two were completely different, it does demonstrate that this site could have had access to wider trade networks and that earlier imported wares and local 'Roman' wares could have been obtained. There are two probable explanations for this. The first is that this area was used for farming, rather than being the main foci of the settlement. Therefore the pottery may not be a true reflection of the sites status and wealth. With this in mind it is perhaps important not to place too much emphasis on the pottery.

The second explanation is that this site was utilised for only a very short period of time, at the time of the conquest, and not much longer either side of this date. For example, if the site had been occupied into the 50s AD and beyond, there would be more 'true' Roman wares, even if imports and established wares remained absent.

Instead, the Roman component of this assemblage comprises what are, at most, 'Romanising' vessels. As the other sites in the area show, there was accessibility of Roman wares, thus the lack of real Roman vessels, is perhaps an indication that this site did not survive much beyond the conquest and had gone out of use by the time that Roman ceramic traditions had become common place in rural Cambridgeshire (by AD 50-60).

It also suggests the status of this site, with a rich early Roman cremation located some 875m to the north showing some wealth in the area (Anderson in Evans et al 2006), though not obvious within this assemblage, of course this is likely to be primarily due to the sites function.

More recently an excavation took place approx. 100m to the south of this site (Timberlake 2007), which appears to be part of the same site. The pottery recovered supports this view as it is of exactly the same date, with just a single Samian vessel suggesting occupation beyond the mid 1st century AD. It therefore appears that this whole site had gone into disuse by the last quarter of the 1st century AD. Further work on this landscape may help to answer how and why. It is possible that there was movement further towards the river system with evidence of a 2nd-4th century AD settlement next to the River Cam approximately one mile to the west (Brudenell 2006). It may also be that the site relocated towards the large Hutchinson site, which was flourishing from the mid to late 1st century AD.

It is also worthwhile comparing this assemblage with other known assemblages of this date in Cambridgeshire. In particular to see how it relates to rural sites north of Cambridge. Unusually one other site in the Guided Busway scheme produced an assemblage of the same date. This site is located in Longstanton, approximately nine miles to the north and five miles from Cambridge. This site produced nearly twice as much pottery (891 sherds, 9409g), but again appears to have only been occupied from the end of the Late Iron Age to the beginning of the Early Roman period. Although many of the vessels forms were similar, and follow the general trend seen in Cambridgeshire, the fabrics were different. Sandy fabrics also dominated this assemblage, but shell-tempered wares feature more prominently. This therefore suggests pottery procurement was very local.

The fabrics and forms present in this assemblage may also be a reflection of the status of the site and although this site does not appear to be the primary foci of the settlement, the pottery suggests a relatively impoverished site, which had access, solely to locally made wares. This is not unusual for the time however, and the lack of any imports and finewares is most likely to be due to the period of occupation, which was before these types of vessels became more common and easier to acquire.

Overall the pottery has a lot to offer in terms of dating the site and giving ideas to its function and status. However, as discussed above it is its date that is most significant and would be worthy of further study, in regards to its role in the landscape and how it interacted with other sites in the area, particularly in terms of trade networks. Finally a larger scale investigation could help to answer why this site fell into disuse by the end of the 1st century AD and how the area changed as it progressed into the Roman period.

Appendix 37

Faunal remains – *Vida Rajkovaca*

Introduction

An assemblage of animal bone was recovered from the Shelford Road construction site during excavations carried out in 2007. The assemblage elicited 452 fragments. Faunal remains were hand collected: the material from bulk soil samples was not included. This report provides a brief outline of the results following zooarchaeological analyses of the material.

The majority of bone comes from linear ditches, four gullies and one pit dated to Late Iron Age/Roman period. The excavation that took place approximately 100m to the south of this site (Addenbrooke's Link Road-site 3; Timberlake 2007) appears to be part of the same site. Also, one of the sites in the area with the similar dates (LIA/ER) is the Hutchinson site (Evans et al 2004) which is circa 1.5km to the northeast of this site.

Methodology

The zooarchaeological investigation followed the system implemented by Bournemouth University with all identifiable elements recorded (NISP: Number of Identifiable Specimens) and diagnostic zoning (amended from Dobney & Reilly 1988) used to calculate MNE (Minimum Number of Elements) from which MNI (Minimum Number of Individuals) was derived. Ageing of the assemblage employed both fusion of proximal and distal epiphyses (Silver 1969) and mandibular tooth wear (Grant 1982). Identification of the assemblage was undertaken with the aid of Schmid (1972) and reference material from the Cambridge Archaeological Unit, Grahame Clark Zooarchaeology Lab, Dept. of Archaeology, Cambridge. Where possible, measuring data was taken (von den Driesch 1976). Taphonomic criteria including indications of butchery, pathology, gnawing activity and surface modifications as a result of weathering were also recorded when evident.

Preservation

The majority of the material demonstrated preservation that ranged from 'Moderate' to 'Poor' indicating that weathering and other erosive damage had occurred to the bone. The bone assemblage showed quite poor overall preservation: of 47 contexts involved in the analyses, only five showed quite good preservation. This indicated bones with minimal or no weathering or bone damage. In contrast, 19 contexts demonstrated 'moderate', 17 'quite poor' and 6 contexts were poorly preserved. If we look at the actual figures that correspond to these categories only 49 fragments demonstrated quite good preservation, compared to 403 fragments with bone damage or signs of weathering. Very low percentage of bones identifiable to species is due to the high fragmentation of the material.

Results

Species representation

In total 449 fragments were analysed from the site with 321 (71.5 %) identifiable to element and only 115 (25.6 %) further identified to species (Table 40). The low percentage of fragments identifiable to species is due in part to the relatively high numbers of fragmented limb bones which could only be assigned to a size category (Large, Medium or Small Mammal). This was compounded by a generally quite poor level of preservation. Of the identifiable elements the majority were assigned to livestock species with only one evidence of wild fauna on the site (roe deer antler portion). Cow accounted for the greatest portion of the assemblage, followed by sheep/goat, pig and roe deer (Table 41).

Species	NISP	% NISP
Cow	86	74.8
Sheep/Goat	20	17.4
Pig	8	7
Roe deer	1	0.8
UUM	2	1.5 (Σ=126)
ULM	134	65.6 (Σ=204)
UMM	67	32.8 (Σ=204)
USM	3	1.6 (Σ=204)

 Table 40: Species frequency by NISP (Number of Identifiable Specimens)

Key: USM, UMM & ULM = Unidentified Small, Medium and Large Mammal / UUM = Unidentified Fragment. NB: Species percentages are out of 115. These differ from the unidentified counts as these are calculated on the basis of element identification (for USM, UMM & ULM) and total fragments (for UUM).

Species	MNI	% MNI
Cow	5	50
Sheep/Goat	2	20
Pig	2	20
Roe deer	1	10

Table 41: Species frequency by MNI (Minimum Number of Individuals)

Cattle dominate the assemblage within the context of both NISP (86 specimens) and MNI (five individual animals) (Table 40; Table 41). This was followed by ovicaprids with 20 fragments (MNI: 2) and pig with 8 fragments (MNI: 2). The presence of roe deer was evidenced by only one specimen (antler portion) giving the MNI count for one individual animal.

The level of preservation has undoubtedly affected the likelihood of recognising taphonomic modifications. For example, of the 86 cow elements recorded, 44 where either fragmented, eroded or fragmented and eroded. One cow specimen was burnt. Eleven butchery records were noted, six of which were on cow elements. Butchery evidence recorded on cow elements indicate signs of skinning (astragalus), disarticulation (humerus) and meat removal (humerus and radius). Some of the bones were split axially (metatarsal and scapula). Other signs of butchering noted on unidentifiable elements were indicative for bone breaking and bone splitting probably

for marrow removal. Carnivore gnaw damage was noted on a pig ulna, ovicaprid tibia and on an unidentified large mammal radius.

In addition to the butchery, two worked bone fragments were recovered in **F.19** which is a substantial NE-SW orientated ditch. One of them had been worked very roughly into a scraping bone tool ([168], <071>) and the other one had been worked into an awl or a borer, after being split axially ([197], <098>).

Cattle portion of the assemblage elicited more identifiable bones than all other species combined. The cattle assemblage was equally represented by both carcass portions and mandibular elements present on the site which might implicate local slaughter and consumption. Being both the main providers of meat and a multipurpose animal, it is not surprising they were the most abundant livestock species. The occurrence of distal extremities such as phalanges, skull and mandibular elements would indicate that whole animals were transported to the site 'on the hoof' and processed as needed. Furthermore, the butchery evidence from one cow astragalus indicated skinning, supporting the hypothesis that animals were brought in as livestock to the site.

Age range, obtained from mandibular tooth wear (Grant 1982) and epiphyseal fusion data (Silver 1969) are indicating the presence of juvenile (30%), young adult (50%) and old adult (20%) animals with a predominance of young adult animals. As it has already been mentioned above, cattle being multipurpose animal might have been kept for milk and traction. It is likely that this has resulted in this kind of age profile.

Sheep/goat category is represented with only 20 specimens and the majority are carcass portions (humeri, radii, tibiae and scapulae). None of the ovicaprid bones were butchered and two were recorded as eroded. Mandibular tooth wear (Grant 1982) and epiphyseal fusion data (Silver 1969) are demonstrating the presence of juvenile and young adult animals on the site. Sheep would also have been kept for milk, wool and meat. The attempt to differentiate sheep from goat had been made, but there were not enough elements to bring any positive conclusions.

Pig is poorly represented with only eight elements identified, three of which were either fragmented, eroded or fragmented and eroded. Ageing data obtained from one unfused pig tibia (Silver 1969) is giving the age of a juvenile to young adult animal (0-2 yrs).

The only evidence of exploiting wild fauna is a single portion of a roe deer antler. This was an impoverished assemblage in terms of the range of species present. Small mammals were evidenced from either limb bone fragments or ribs, but not identifiable to species.

Discussion

Although relatively small, this has proved to be an interesting assemblage. As mentioned above, the presence of both young and old cattle would suggest that the animals were kept for traction. However, several juvenile mandibles were recorded. Furthermore, fusion data is indicating the presence of 5 young adult animals (3-4 yrs) on the site with the complete absence of senile animals. Cattle being an important

provider of meat were thus probably culled before they reach maturity. While both cattle and ovicaprids would have been significant for secondary products, the potential use of cattle for traction would have made it the more important species economically.

High fragmentation has largely affected recording of any of the taphonomic activities. However, the conclusion one can make is that the majority of the bone were split axially probably for marrow extraction. Although dominated by the range of domestic animals, there was no evidence of canids on the site, except for carnivore gnaw damage. This was noted only on three elements and may imply presence of dogs on the site.

It would be inappropriate to over analyse an assemblage of this size, especially as there was insufficient data to plot mortality profiles or attain metrical estimates. However, contemporary sites in the area (Rajkovaca in Timberlake 2007; Swaysland in Evans *et al.* 2004) are demonstrating similar patterns of exploitation of local fauna. In the cases of large assemblages dominated by livestock species, it would be of great importance to clarify age structures and kill off patterns from the material with a more in depth analysis of toothwear and fusion data. Also, metric data are much needed particularly if specific cattle types were present on the site. Although the evidence for exploiting the wild species is poor, future research should be more focused on the environmental aspects of zooarchaeological analyses.

Appendix 38

Flint – *Lawrence Billington*

An assemblage of 56 worked flints (570g) and 18 unworked burnt chunks (667g) were recovered from the CGB:SRC excavations (see Table 42. The assemblage is dominated by flint working waste in the form of unretouched flakes and cores. There are indications of Mesolithic or earlier Neolithic activity in the form of blade products from ditches F.10 and ditch F.19 together with a soft hammer struck narrow flake from F.54. A narrow flake core with carefully trimmed platform edges from tree throw F.53 also belongs to later Mesolithic or earlier Neolithic flint working technologies. The bulk of the debitage, however, reflects later activity, a casual approach to core reduction geared towards the expedient production of flakes is evidenced by the majority of waste flakes and the flake cores recovered from surface deposits, ditches F.54, F.57 and posthole F.11. These products probably represent later Neolithic and Bronze Age flint working.

Only two retouched forms were recovered. A crudely retouched flake from ditch F.8 was made on a blank struck from a multiplatform core and is probably of Bronze Age date. A finely retouched and backed flake knife from treethrow F.38 is of Early Bronze Age form. Although the bulk of the assemblage is composed of residual material found in the fills of later features the finds from tree throws could broadly date the infilling of these features although they could equally represent older material being incorporated into the features from surface deposits. A notable concentration of 11 chunks of burnt flint weighing 201.7g was recovered from pit F.13.

Feature no.	Feature type	unworked burnt chunk	chunk	primary flake	secondary flake	tertiary flake	blade	flake knife	retouched flake	core	Total
	surface				2						2
	subsoil			1	5	1				1	8
8	ditch		1			1			1		3
10	ditch				2		1				3
11	posthole									1	1
13	Pit	11			1	1					13
15	ditch					2					2
17	ditch				4					1	5
18	ditch			1	2	1					4
19	ditch	2		1	5	2	1				11
26	gully				3						3
32	posthole					1					1
34	treethrow				1						1
38	treethrow	4						1			5
40	gully				1						1
42	posthole	1									1
49	Pit					1					1
53	treethrow									1	1
54	ditch				4	2				1	7
55	ditch				1						1
	Total	18	1	3	31	12	2	1	1	5	74

Table 42: shows recovered flint by context.

Appendix 39

Assessment of Bulk Environmental Samples - Anne de Vareilles

Methodology

Ten bulk soil samples from nine features of Bronze Age and Iron Age/Romano-British dates were selected for archaeobotanical analysis, and processed using an Ankara-type flotation machine. Flots were collected in 300µm sieves and the remaining heavy residues washed over a 1mm mesh. Both flots and residues were dried prior to analysis. For this assessment, only heavy residue components greater than 4mm were sorted by eye. The smaller 1–4mm fractions have been stored for future reference. Sorting of the flots was carried out under a low power binocular microscope (x6–40) in the George Pitt-Rivers Laboratory, McDonald Institute, University of Cambridge. Nomenclature follows Zohary and Hopf (2000) for cereals, Stace (1997) for all other flora and an updated version of Beedham (1972) for molluscs. All macro-remains are listed in Tables 43 and 44.

Preservation

All botanical macro-remains were preserved through charring. Charcoal does not abound in any of the samples and is mostly smaller than two millimetres thick. Most of it is also vitrified as a result of long and/or intensive fires, conditions which appear to have affected all botanical remains. Some of the grains show signs of vitrification and all are heavily puffed and distorted. Intrusive seeds and the blind burrowing snail *Ceciloides acicula* show that bioturbation is a problem across the site.

Results and Discussion

The results for archaeobotanical remains are presented by feature date and type. Molluscs are discussed separately.

Bronze Age tree-throw, F.38 [187]

Some charcoal, a hulled wheat grain (*Triticum* sp.), a possible rye grain (cf. *Secale cereale*) and two grain fragments were the only archaeobotanical remains from this sample.

Bronze Age posthole, F.42 [215]

Four hulled wheat grains, 11 grain fragments, two hulled wheat glume bases and a few wild grass seeds were found. These remains are probably remnants of cooking and eating activities that took place in this apparent round-house.

Gully, F.3 [185], possibly Iron Age

A single unidentified seed and some charcoal make up the plant macro-remains.

Iron Age pit, F.13 [45]

This pit contained the largest assemblage of plant remains. Unfortunately the preservation is poor; most of the cereal grains are heavily fragmented and quite a few of the small seeds could not be identified. Hulled wheat and possibly barley were found, along with some wild plant seeds that are commonly described as arable weeds. This assemblage probably represents crop processing waste, suggesting that people lived and farmed nearby.

Iron Age ditches, F.2, F.15, F.17, F.18 and F.19

Only features 2, 15 and 17 had any plant macro-remains other than charcoal. A hulled barley grain (*Hordeum vulgare sl.*) and a few grass seeds were recovered from F.2, whilst F.15 and F.17 each contained one small indeterminate seed.

The molluscan assemblages

Only three features revealed significant molluscan assemblages. The Bronze Age pit F. 38 contained a high concentration of *Carychium tridentatum/minimum* and very few of two other species (excluding *Ceciloides acicula*). These findings, though tentative, point to a damp and shady pit environment in an otherwise open landscape. Nine species of snails were recovered from the L.I.A/E.R boundary ditch F.2. They suggest that the ditch was damp and covered in leaf litter or its own vegetation. The combination of *Ena obscura*, and *Clausilia* sp. with *Pupilla muscorum* suggest there

may have been a hedge around the ditch which lay in an otherwise open landscape. Another possibility is that the area was more like open woodland. There is no evidence for woodland or hedges from ditch F.19, and also less signs of an open, dryer surrounding landscape. F.19 appears to have been very damp and even occasionally flooded for periods long enough to support fresh water species.

Conclusion

The distribution of archaeobotanical remains is very poor. It seems that most of the macro-remains are not *in situ* but were surface debris randomly moved around on site. Conversely, those from F.13 were probably intentionally discarded into the ditch after charring, but at such temperatures that the surviving remains are badly damaged. As a whole the finds do suggest that the site was inhabited.

Snail shells show that F.38 and F.2 were damp, whereas F.19 was actually wet for some of the year. They may also point to a hedge around ditch F.2, though interpretations are only tentative until further samples along the ditch can be obtained. The near absence of snails from six of the samples is puzzling. It is possible that the features were dug and filled or covered before vegetation could accumulate (thus creating an environment attractive to snails), or that waste within these created a medium hostile to snails, as might a cesspit.

Recommendations

Future excavations of the site should adopt a sampling strategy specifically for molluscan analysis. The preservation of snails is good and their description, as well as presence or absence in certain features, should enable a detailed environmental description.

Appendix 40

Worked Stone – Simon Timberlake

<044> F.19 [079]. Possibly the square edge of a former saddle quern. The sandstone fragment (50mm x 40mm x 30mm thick)has been extensively burned and is now crazed and cracked and extremely friable with a brown iron-coloured patina on the exterior and a soft interior with fire reddening. Originally this stone would have been much harder; slight de-calcification and weakening of the natural cement may have been caused by the immersion of the hot rock fragment in water. Because of this friability little in the way of any worked surface survives. However, the angle this (potentially upper grinding) surface makes with the vertical side (approx. 100°) is very typical of hand querns. The white ortho-quartzitic sandstone is probably of Lower Greensand (Cretaceous) or Lower Tertiary age, the quern perhaps manufactured from a small sarsen boulder.

<137> F.10 surface find. Part of a small oval-shaped sandstone disc (45mm x 30mm x 7mm), the flat surfaces of which are possibly natural, but the rounded edges of

which have been clearly worked. Although it might appear so there is no clear evidence of a central perforation, the shape of the interior being defined by a more recent break. The object was provisionally identified as being part of a spindle whorl. However, the asymmetric outline and absence of perforation makes this quite unlikely. The rock is composed of a fine grained Mesozoic laminated sandstone. It has been subjected to considerable weathering and a subsequent patina has developed.

Worked Clay

<097> F.19 [196]. A small fragment from the exterior of what is probably a poorly fired clay loom weight (45mm x 30mm x 27mm thick). The rounded external surface has been hand moulded and is orange-red indicating the oxidising conditions within the kiln or open hearth in which it was fired. The clay fabric is tempered with flint grit and sand and is probably of very local origin.

<005> F.10 [32]. This object does not appear to be of worked clay and may in fact be natural. One possibility is that this is composed of completely decalcified fossil bone, perhaps the uppermost edge of a broken *Icthvosaur* centrum.

<030> F.15 [60]. A lump of burnt clay or daub which has been quite heavily fired, perhaps accidentally, within a reducing fire. The outer surface has a pale buff grey patina and there is evidence here of an original flat base. It is quite possible that this may have been part of a loom weight. The original identity of this however is now difficult to determine. The dark fired interior of this hard and contains numerous very small inclusions of charcoal.

Discussion

All of the artefacts described above are typical of Late Prehistoric (Late Bronze Age – Iron Age) to Roman settlement and are probably of local manufacture. Their presence suggests the existence of hut dwellings associated with or close to these enclosures.

Sample number	Sample number		9	8	1	2	3	10	5	4	6
Context		187	215	185	45	5	51	310	107	79	174
Feature		38	42	3	13	2	15	17	18	19	19
		Tree-					•	•	•	Boundary /	
Feature type				Gully	Pit	ı	Field boun	dary ditche	S	enclosi	ure ditch
Phase/Date			B.A.	I.A?		-	•	Iron	Age	_	•
Sample volume - litres		8	5	10	7	12	9	4	10	10	10
Flot volume - mililitres		9 100	9	4	9	10	5	4	<1	9	5
Flot fraction examined - %			100	100	100	100	100	100	100	100	100
Charcoal											
>4mm		-	+		-			-			(+)
2-4mm		++	++	+	++	++		+		+	+
<2mm		+++	+++	+++	+++	+++	+++	++	++	+++	+++
Vitrified pieces		+	++	+	++	++		+		++	+
Parenchyma - undifferentiated plant storage tissue		+	+	-	+++	+		+			+
Cereal Remains											
Hordeum vulgare sensu lato	hulled barley grain					1					
Triticum sp.	hulled wheat grain	1	4		9						
Hordeum / Triticum	barley or wheat grain				7						
cf. Secale cereale	possible rye grain	1									
Indeterminate cereal grain fragment		2	11		37						
Cereal chaff											
Triticum sp. glume base	hulled wheat chaff		2		1						
Non cereal seeds and chaff											
small Chenopodium sp	goosefoot				3						
small Rumex sp.	small-seeded dock type				1						
Vicia / Lathyrus	Vetches / Wild Pea				1						
large Poaceae indet (>4mm)	large Grass Family seed		1								
small Poaceae indet. (<2mm)	small Grass Family seed				1						
Poaceae fragment indet.	wild/cultivated grass seed frag.		6		9	4					
seed indet.			1	1	7		1	1			
Poaceae culm node	wild grass chaff		1								

Table 43: Botanical and Molluscan Remains from the Bulk Soil Samples

Key: '-' 1 or 2, '+' <10, '++' 10-50, '+++' >50 items. () indicate items found in the >4mm residues

Sample number	7	9	8	1	2	3	10	5	4	6
Fresh water Mollusca										
Anisus leucostama		-							++	-
Bivalvia: Pisidium / Sphaerium									-	
Damp / Shade loving species										
Carychium tridentatum / minimum	+++	-			+++				+++	++
Succinea sp.									-	
Vallonia excentrica / pulchella					+++				+++	+++
Cochlicopa lubrica/lubricella					++				+	-
Clausilia sp.					-					
Ena obscura					++					
Oxychilus / Aegopinella	+				+++				+++	+++
Open country species										
Pupilla muscorum	-			-	++				+	
Catholic species										
Euconulus fulvus				-					+	-
Cepaea sp.					+				-	
Trichia sp.		-	-	-	+++		+		++	+++
Ceciloides acicula – Blind burrowing snail	+++	+++	+++	+++	+++	++	+	++	++	+
>2mm bone				-						
<2mm bone	+	-		++			+	-	-	+
Intrusive algae oogonia	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++
Modern intrusive seeds	+	+	+	+	-	-	-	+	-	-

Table 44: Molluscs

Key: '-' 1 or 2, '+' <10, '++' 10-50, '+++' >50 items.

General Discussion

The c. 25km of the Guided Busway cut through many different archaeological landscapes, several of which have been the focus of detailed study as part of other major projects. Most notable among these are the areas around Longstanton, Arbury and Addenbrooke's all of which have seen intense scrutiny in recent years.

The work on the Guided Busway has exposed glimpses into elements of these landscapes, in some instances (e.g. the Shelford road site) making an important contribution to the existing body of data. In the case of Longstanton and Addenbrooke's, however, the scale of the work that will take place as part of these other projects will be the basis of future interpretation of these landscapes, rather than the minor contributions from the Guided Bus data.

In other landscapes the Guided Busway findings constitute significant discoveries: specifically this would apply to the two Swavesey sites, LEM D and the Arbury intrack monitoring site. Prior to the work at Swavesey no Iron Age/Romano British remains were known within several hundred metres. This work has expanded the known area of activity in that period right down to the northern edge of the island and will begin the process of a reinterpretation of the extent of that activity. The irony is that the site was designated for mitigation because of its proximity to the medieval Priory, yet very little relating to that period was found. This is not dense early settlement, but there are indicators that settlement is, perhaps, not that far away.

The site at LEM D is, again, a new find; the nearest known archaeology is more than 300m away. This site demonstrates that while there is a dramatic fall off of activity down slope onto the more clay, and presumably wet, land to the west (as shown by LEM C and the 2003 evaluation) on the higher ground there is much going on. Again this is not quite within settlement, but the finds indicate that settlement is nearby. This is a site that hadn't shown itself in aerial photography, and neither did the geophysics survey indicate the nature of what was actually there. This seems to be an extensively occupied and utilised and there is potential here particularly for contribution to the debate on the local abandonment of settlement in the period immediately following the Roman conquest. Combined with the isolated survival of the Middle Iron Age cremation down on the track (c. 800m east) this would seem to be the first glimpse into a hitherto 'missing' part of the landscape.

The finds at Arbury, specifically those from the in-track monitoring, reopen a facet of this area that has taken something of a back seat in recent times. Because of the nature of what was being found, and the focus on the Arbury Camp ringwork at the west end of the land-block, the recent focus in this area has, correctly, been on the Iron Age, although aspects of the later Roman landscape have also been recorded (Evans & Knight 2002, Evans & Knight 2008). The Roman component has seen more focussed investigations in the past (Frend 1955, 1956, 1959; Alexander *et al* 1966, 1967, 1968, 1969), but with the exception of the 1990s re-investigation of the King's Hedges Villa site in 1995 (unpublished), most of the more recent work with a notable Roman element has been on a very small scale (e.g. Evans 1991).

The quantity of finds from the limited number of features seen at the in-track location, together with the coins and building material indicates the very close

presence of a significant building. Unfortunately no work was done or finds recorded from the nearby lakes (created during construction of the A45 Cambridge Northern Bypass, now the A14, in 1977) so the full extent of any complex may never be known. Casual observation of the lake edges during recent low water levels, however, showed that there is material evident, including pottery and tile (D. Webb pers. comm.). It is possible that there are building remains surviving beneath the small patch of woodland immediately to the south of the in-track find and around the eastern shore of the lake. The nature of such a building can at present only be hinted at, but the quantity of material from such a small area suggests it may have been substantial.

Given the diverse nature of the landscapes traversed and the finds made along the Guided Busway, there is not really one overarching conclusion to be drawn. As an exercise in mitigating the impact of construction then the project has been entirely successful. The combination of preservation *in situ* and by record has created a substantial body of data, yet generally avoided 'meaningless keyhole interventions' into larger sites. As noted above the definitive statements on the archaeology of the areas around Addenbrooke's, Arbury and Longstanton/Northstowe will come from other projects, but the Guided Busway has still added data to that body of knowledge. It is in the new discoveries, notably at Swavesey, LEM D by the Over Road bridge and the Arbury building, the former two particularly in areas where it is difficult to envisage archaeological investigations being likely to take place, that the real archaeological value of this project lies.

Acknowledgements

The work on the Cambridgeshire Guided Busway was co-ordinated on behalf of BAM Nuttals Ltd by Steve Haynes of Arup and was monitored for the County Council Archaeology Office (CAPCA) by Andy Thomas, Senior Development Control Archaeologist.

Cambridge Archaeological Unit staff involved in the project are as follows:

Project Manager: Alison Dickens.

Site Supervisors: Matthew Collins, Duncan Mackay, Adam Slater and David Webb

Site staff: Tony Baker, Kirsty Bones, Rachel Causier, Ben Davenport, Kathy Grant, Tonko Rajkovaca, Emma Rees, Hayley Roberts, David Strachen, Martin Toresson, Virginia Vargo, Tim Vickers.

Surveyor: Donald Horne.

Graphics and Illustrations: Bryan Crossan and Vicki Herring.

Site plan digitisation: Ian Forbes and Bryan Crossan.

References

Alexander, J., Trump, D., Hull, R. and Farrar, R. 1966. *Arbury Road Cambridge,* 1965 - 1966. *A Preliminary Report on Excavations at Sites AR I, II, III, IV and V.* Cambridge Board of Extra Mural Studies.

Alexander, J., Trump, D., Hull, R. and Farrar, R. 1967. *Excavations in Cambridge 1964-7: A Preliminary Report on Excavations at Mount Pleasant and Arbury Road.* Cambridge Board of Extra Mural Studies, 8.

Alexander, J., Trump, D., Hull, R. and Farrar, R. 1968. *Arbury Road, Cambridge, 1968. A Preliminary Report of Excavations*. Cambridge Board of Extra Mural Studies.

Alexander, J., Trump, D., Hull, R., Farrar, R. and Kinner, I. 1969. *Excavations in Cambridge 1969: A Preliminary Report on Excavations at Arbury Road*. Cambridge Board of Extra Mural Studies.

Allen, J.L. and A. Holt. 2002. Health and Safety in Field Archaeology. SCAUM.

Appleby, G. 2004. Glebe Farm, Trumpington: An Archaeological Desktop Assessment. CAU Report No. 669.

Armour, N. 2007. Archaeological Investigations at the Babraham Research Campus, Cambridgeshire 2005-2007, CAU Report No. 763.

Arup 2003 SuperCAM: Archaeological and Built Heritage Assessment. Arup Ref No. 56259/03

Beedham, G.E. 1972. *Identification of the British Mollusca*. Bath: Pitman Press.

Boessneck, J. 1969. Osteological differences between sheep (Ovis aries) and goat (Ovis hircus), in Brothwell, D & Higgs, E, S (eds), *Science in Archaeology*, 2nd Edition: 331-358. London: Thames and Hudson.

British Geological Survey. 1975. *Huntingdon*. England and Wales Sheet 187.

Brudenell, M. 2007. 'Later Prehistoric pottery'. In Brudenell, M and Evans, C. *Rhee Lakeside South. Archaeological Excavations at Colne Fen, Earith.* CAU Report No. 776.

Brudenell, M. 2008. 'Later Prehistoric pottery'. In Armour, N. Knobbs Farm, Somersham. Phase 5B Investigations. CAU Report No. 815.

Cambridgeshire County Council. 2001. *Cambridgeshire Extensive Urban Survey: Swavesey*. Draft Report 15/01/2001.

Cessford, C. & Mackay, D. 2004. Cambridge Guided Busway, A Series of Archaeological Evaluations. CAU Report No. 591.

Cohen, A., & Serjeantson, D. 1996. A manual for the identification of bird bones from archaeological sites, revised edition. London: Archetype Publications Ltd.

Collins, M. 2009a. Forthcoming. Excavations at MRC, Robinson Way, Cambridge. CAU.

Collins, M. 2009b. Forthcoming. Womb Farm, Chatteris, Cambridgeshire: An Archaeological Evaluation. CAU.

Cooper, S. & Spoerry, P. 1997. Late Saxon and Medieval activity at Barwells Engineering Site, Blackhorse Lane, Swavesey. Cambridge County Council Archaeological Field Unit Report No. 136.

Cooper, S. & Kenney, S. 2001. *Medieval Remains at Priory House, Swavesey. An Archaeological Evaluation*. Cambridge County Council Archaeological Field Unit Report No. A193.

Cra'ster, M 1969. *The New Addenbrooke's Iron Age Site, Long Road, Cambridge*. Proceedings of the Cambridge Antiquarian Society 54:22-46.

Crummy, N. 1983. *The Roman Small Finds from Excavations in Colchester 1971-9*. Colchester Archaeology Report No. 2. Colchester.

Davis, S.J.M. 2003. In Evans, C. Power and Island Communities: Excavations at the Wardy Hill Ringwork, Coveney, Ely. CAU. East Anglian Archaeology Report 103: 122-131.

Dickens, A. 2002. Clay Farm, Trumpington Cambridge; An Archaeological Desktop Assessment. CAU Report No. 506.

Dickens, A. 2006. A Specification for Archaeological Mitigation and Built Heritage Recording on the CGB Route, Cambridgeshire. CAU Specification Document.

Dickens A. forthcoming Built and Railway Heritage Recording on the route of the Cambridgeshire Guided Busway CAU Report.

Dickens, A. & Evans, C. 2002. Longstanton New Settlement, Cambridgeshire. Archaeological Desktop Assessment. CAU Report No. 489.

Dobney, K. & Reilly, K., 1988. 'A method for recording archaeological animal bones: the use of diagnostic zones,' *Circaea* (2): 79-96

Elrington, C.R. 1978. *The Victoria History of the County of Cambridgeshire and the Isle of Ely*, volume VII. Oxford University Press.

Elrington, C. R. 1989. *The Victoria History of the County of Cambridge and the Isle of Ely*, volume IX. Oxford University Press.

English Heritage, 1991. Exploring our Past: Strategies for the Archaeology of England.

- Evans, C. 1990. Archaeological Investigations at Swavesey. CAU Report No. 4.
- Evans, C.1991. Arbury East: The Archaeology of the Arbury Environs, Part II: The Unex Lands and Gypsy Ditches Site. CAU Report No.11.
- Evans, C. 2002. *The Archaeology of Addenbrooke's Environs: A Desktop Essay*. CAU Report No. 497.
- Evans, C. 2003. Power and Island Communities: Excavations at the Wardy Hill Ringwork, Coveney, Ely. CAU. East Anglian Archaeology Report 103.
- Evans, C. & Hutton, J 2007. NCP Car Park, Addenbrooke's Hospital, Cambridge: Archaeological Investigations. CAU Report No.778.
- Evans, C. & Mackay, D. 2005. *Addenbrooke's, Cambridge; the 2020 Lands. Archaeological Evaluation Fieldwork.* CAU Report No. 671.
- Evans, C. and Knight, K. 2002. 'A Great Circle: Investigations at Arbury Camp, Cambridge' *PCAS* 91: 23-54.
- Evans, C. & Knight, M. 2005. Excavations at Arbury Camp: The Eastern Entrance. CAU Report No. 657.
- Evans, C. and Knight, K. 2008 'Further Investigations at Arbury Camp, Cambridge: The Eastern Entrance A Monumental Architecture' *PCAS 97: 7-30*
- Evans, C., Mackay, D. & Webley, L. 2004 Excavations at Addenbrooke's Hospital: the Hutchinson Site, CAU University of Cambridge Report no. 609.
- Evans, C, Mackay, D. & Webley, L. 2008. *Borderlands: The Archaeology of the Addenbrooks Environs, South Cambridgeshire*. CAU Landscape Archives: New Archaeologies of the Cambridge Region (1).
- Evans, C. & Mackay, D. 2005. Longstanton, Cambridgeshire: A Village Hinterland (1). CAU Report No.696
- Evans, C. Mackay, D. & Patten R. 2005. *The Archaeology of Clay and Glebe Farms, South Cambridge*. CAU Report No. 708
- Evans, C, Appleby, G, Mackay, D and Armour, N. 2006. *Longstanton, Cambridgeshire A Village Hinterland II, The 2005 Evaluation*. CAU Report No. 711.
- Evans, J. 2001. 'Material approaches to the identification of different Romano-British site types'. In James, S and Millett, M (Eds.). *Britons and Romans: Advancing an Archaeological Agenda*. Council for British Archaeology Research Report 125.
- Frend, W. H. C. 1955. A Romano-British Settlement at Arbury Road, Cambridge. PCAS, Vol. XLVIII.

Frend, W. H. C. 1956 'Further Roman-British Burials found at Arbury Road, in 1953' *PCAS 49: 25-27*.

Frend, W. H. C. 1959 'Further Finds on the Arbury Road Estate' PCAS 52: 69-72.

Grant A. 1982. 'The use of tooth wear as a guide to the age of domestic animals', in B. Wilson, C. Grigson and S. Payne, (eds.), *Ageing and sexing animal bones from archaeological sites*.

Greig, J.R. 1991. 'The British Isles'. In Van Zest, W., Wasylikowa, K. and K-E. Behre (eds.), *Progress in Old World Palaeoethnobotany*. Brookfield and Rotterdam: A.A. Balkema, 299-334

Hall, D. 1996. The Fenland Project, Number 10: Cambridgeshire Survey, Isle of Ely and Wisbech. East Anglian Archaeology Report No. 79.

Halstead, P., Collins, P., &, Isaakidou. V. 2002. 'Sorting the sheep from the goats: morphological distinctions between the mandibles and mandibular teeth of adult *ovis* and *capra'*, *J. Archaeol. Sci.* 29, 545-533.

Hanf, M. 1983. *The Arable Weeds of Europe with their seedlings and seeds*. BAFS United Kingdom Limited

Hattatt, R. 2007. A Visual catalogue of Richard Hattatt's Ancient Brooches. Oxford: Oxbow Books.

Haynes, S. 2005. Cambridgeshire Guided Busway: Archaeological and Built Heritage Written Scheme of Investigation Arup. Ref No. 116597-65.

Hayward, G. 2001. 'Worked Stone' specialist report in Lucas, G. & Whittaker, P. 2001. *Vicar's Farm, Cambridge: Post Excavation Assessment Report Vol.1*, CAU Report No. 425.

Hillson, S. 1999. Mammal Bones and Teeth: An introductory Guide to Methods of Identification. University College of London: Institute for Archaeology

Hinman, M. 2001. 'Ritual Activity at the Foot of the Gog Magog Hills', Cambridge. In Bruck (ed), *Bronze Age Landscapes: Tradition and Transformation:* 33-40. Oxbow

Hounsell, D. 2002. *Apollo Way, Church Centre, Cambridge. An Archaeological Excavation*. Interim Site Narrative. Hertfordshire Archaeological Trust, Report No. 1001

Jones, M. 2006. *Cambridge Guided Busway: Soil Profiling Test Pits*. Cambridgeshire County Council Archaeological Field Unit Report No. 903.

Lisboa, I. 1995. Excavations at King's Hedges Primary School, Cambridge. Tempus Reparatum. Interim Report.

Lucas, G. & Whittaker, P. 2001 Vicar's Farm, Cambridge: Post Excavation Assessment Report Vol. 1, CAU Report No. 425.

Murrell, K. 2007. Land Adjacent to Covells Drain, Swavesey, Cambridgeshire. CAU Report No. 767.

Patten, R. 2004. *Archaeological Investigations at Striplands Farm West, Longstanton.* CAU Report No. 648.

Patten, R. & Evans, C. 2005. Striplands Farm. West Longstanton, Cambridgeshire. An Archaeological Excavation. CAU Report No. 703.

Payne, S, 1985. 'Morphological distinction between the mandibular teeth of young sheep *Ovis* and goats *Capra*', *J. Archaeol. Sci.* 12: 139-147.

Peacock, D.P.S 1987 'Iron Age and Roman quern production at Lodsworth, West Sussex', *Antiquaries Journal 47*: 61-65.

Peacock, D.P.S. 1998 The Archaeology of Stone, English Heritage 1998, 61pp.

Rajkovaca, V. 2007. 'Animal bone'. In Timberlake, S. *The Addenbrooke's Access Road, Clay Farm, Trumpington, Cambridge. Site 3.* CAU Report No. 803.

Ravensdale, J.R. 1984. 'Swavesey, Cambridgeshire. A fortified Medieval Planned Market Town', *Proceedings of the Cambridge Antiquarian Society* 72, 55-58.

Roberts, J. 1998. *Iron Age and Medieval activity at Blackhorse Lane, Swavesey*. Cambridge County Council Archaeological Field Unit Report No. 151.

Schmid, E. 1972. Atlas of animal bones. Amsterdam: Elsevier.

Silver I. A. 1969. 'The ageing of domestic animals', in D. Brothwell and E. Higgs E. S. (eds.), *Science in archaeology*, 2nd edition: 283-301. London: Thames and Hudson.

Slater, A. 2007. King's Hedges Triangle, Histon Road, Cambridge. CAU Report No.758.

Slater, A. 2008. Further Evaluations at Clay Farm, South Cambridge. The 2008 Green Corridor Evaluation. CAU Report No. 826.

Spence, C. 1990. Archaeological Site Manual. Museum of London.

Spoerry, P.1996. Late Saxon and Medieval Activity and Ditch systems between School Lane and Blackhorse Lane, Swavesey. Cambridge County Council Archaeological Field Unit Report No. 130.

Spoerry, P. 2005. 'Town & Country in the Medieval Fenland'. In Giles, K & Dyer, C (eds) *Town & Country in the Middle Ages – Contrasts, Contacts & Interconnections* 1100-1500. Leeds Maney Publishing.

Stace, C. 1997. New Flora of the British Isles. Cambridge: Cambridge University Press.

Stevens, C. 2003. 'An investigation of agricultural consumption and production models for prehistoric and Roman Britain'. *Environmental Archaeology* **8**(1), 61–76.

Swaysland, C. 2004. Faunal Remains. In Evans, C. et al. Excavations at Addenbrooke's Hospital, Cambridge. *The Hutchinson Site-assessment Report*. CAU Report No. 609.

Swaysland, C. 2006. Faunal remains. In Evans, C., Appleby, G., Mackay, D. and Armour, N. *Longstanton, Cambridgeshire-A Village Hinterland II, The 2005 Evaluation*. CAU Report No. 711.

Taylor, A. 1998. Archaeology of Cambridgeshire, Vol. 2: Southeast Cambridgeshire and the Fen Edge. March: Cambridgeshire County Council.

Timberlake, S. 2006. An Archaeological Evaluation at 19, Mere Way, Cambridge. CAU Report No. 745.

Timberlake, S. 2007. The Addenbrooke's Access Road, Clay Farm, Trumpington, Cambridge. Site 3, CAU Report No. 803.

Tipper, J. 2003 Elective Care Facility, Addenbrooke's Hospital, Cambridge. An Archaeological Evaluation. CAU Report No. 578.

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

Watson, K. and Hinds, S. 1992. *South Cambs Village Earthwork Survey*. Unpublished document. CHER 10292.

Webb, D. and A. Dickens 2005. *The Cambridge Guided Bus System: Archaeological Monitoring of Geotechnical Test Pits between St. Ives and Cambridge.* CAU Report No. 704

West, S., 1985 West Stow The Anglo-Saxon Village: Volumes 1 & 2, East Anglian Archaeology Report No. 24, Suffolk County Planning Department.

Whittaker, P. 2001. *An Archaeological Evaluation at 24 Taylor's Lane, Swavesey, Cambridgeshire*. CAU Report No. 415.

Zohary, D. and Hopf, M. (2000). *Domestication of Plants in the Old World*. Third edition. Oxford: Oxford University Press.

Appendix 41

Feature Descriptions

Section 1

Swavesey within Track Alignment (CGB:SIT)

- **F.1** Crossing keeper's cottage; Three test pits were excavated.
- **F.2** NE-SW orientated quarry pit. Cut [023], fills [015-022]. Sides were almost vertical, base was only reached by auger. Length 12m, width 2.85m, depth 1.60m. Fills varied between yellowish brown redeposited sandy silt and soft brownish grey sandy silt. Upper fill contained brick/tile.
- **F.3** Small pit related to posthole F9. Cut [026] had steep sides leading to a rounded base. Length 1.79, width 0.56m, depth 0.29m. Fills [024-025] varied between greyish brown silty sand with occasional small stone inclusions and reddish brown silty sand with common small stone inclusions.
- **F.4** Circular posthole for a telegraph pole. Cut [012] had vertical sides leading to a tapered base. Diameter 0.53m, depth 0.56m. Fill [011] was mid brown sandy silt with occasional small stones.
- **F.5** Circular posthole. Cut [014] had quite steep sides leading to a slightly rounded base. Diameter 0.45m, depth 0.14m. Fill [013] was mid reddish brown slightly clayey sandy silt.
- **F.6** NE-SW orientated quarry pit. Cut [042] upper slope was almost vertical and the lower was undercutting. Length 12m, width 2.2m, depth 1m. Fills [035-041] varied between mid reddish and mid greyish brown sandy silt with occasional small gravel inclusions. Upper fill contained brick/tile.
- **F.7** Slightly curving N-S orientated ditch. Truncated by quarry pit F.2 leaving 4m visible. Two slots, [026] and [028], were excavated but no finds were recovered. It was slightly more substantial to the south being 0.56m wide and 0.29m deep compared with 0.41m and 0.16m respectively towards the north. Cut was moderate to steep sides leading to a rounded base. Fills [024-025] and [027] were natural silting and consisted of mid reddish and mid greyish brown sandy silt.

F.8 Same as F.7

- **F.9** Circular posthole for a telegraph pole, related to pit F.3. Cut [010] had vertical sides leading to a tapered base. Diameter 0.54m, depth 0.60m. Fill [009] was mixed yellowish grey sandy silt with common small gravel inclusions. Partial post was still in place.
- **F.10** Circular posthole cut by posthole F.11. Cut [044] had steep sides leading to a rounded base. Diameter 0.40m, depth 0.29m. Fill [043] was mid grey silty sand rare gravel and charcoal inclusions. Contained brick.

- **F.11** Circular posthole. Cut [046] had steep sides leading to a rounded base. Diameter 0.41m, depth 0.13m. Fill [045] was mid grey sandy silt with occasional small gravel inclusions.
- **F.12** Small, circular pit that cut ditch F.13. Cut [050] had steep sides leading to a rounded base. Diameter 0.96m, depth 0.46m. Fills [047-049] were mid grey to orangey grey sandy silt with common gravel inclusions. Contained brick.
- **F.13** NE-SW orientated ditch that crossed the site and had a partially visible length of 20m. It was truncated by quarry pits and cut by pit F.12. Two slots, [052] and [063], were excavated and were very similar with width averaging 1.14m and depth 0.43m. Moderate to steep sides led to a rounded base. Fills [051] and [063-64] were natural silting and consisted of pale to mid yellowish grey sandy silt.
- **F.14** NE-SW orientated ditch that crossed the site and is still visible as an earthwork in the field to the south. Ditch F.15 runs parallel to this one and shares the same upper fills. It is truncated by a quarry pit leaving 5.50m visible. Two slots, [058] and [074], were excavated and were very similar with width averaging 1.65m and depth 0.95m. Moderate to steep sides led to a rounded base. Lower fills [054-055], [069-071] and [073] were natural silting and consisted of pale to mid greyish brown sandy silt whilst upper fills [053], [056], [066-068] and [072] were backfill and consisted primarily of top soil derived mid greyish brown sandy silt.
- **F.15** NE-SW orientated ditch that crossed the site and is directly parallel to ditch F.15 and shares the same upper fills. It is truncated by a quarry pit leaving 5.50m visible. Two slots, [057] and [075], were excavated and were very similar with width averaging 1.45m and depth 0.38m. Uneven sides led to a slightly rounded base. Fills were the same as the upper fills of F.14 and primarily consisted of top soil derived backfill consisting of mid brownish grey silty sand.
- **F.16** Small rectangular pit that cuts quarry pit F.17. Cut [060] had vertical sides leading to a flat base. Length 1.10m, width 0.60m, depth 0.20m. Fill [059] was mid grey sandy silt with orange sand mottling and occasional small stones.
- **F.17** NE-SW orientated quarry pit cut by pit F.16. Cut [062] had very steep sides and base was not reached. Length 8.75m, width 2.75m. Fill [061] was mid grey silt with occasional small gravel inclusions. Contained animal bone.
- **F.18** Circular posthole for a telegraph pole with associated rectangular pit. Cut [077] had vertical sides leading to a tapered base. Width 0.60m, depth 0.63m. Fill [077] was dark brownish grey silty sand mixed with yellowish redeposited natural. Contained tile and coal.
- **F.19** NW-SE orientated ditch that was truncated by quarry pits and visible for 7m. One slot was excavated. Cut [080] had steep sides leading to a narrow rounded base. Width 0.70m, depth 0.35m. Fills [078-079] varied from orangey brown sandy silt to dark grey sandy silt with occasional charcoal. Contained animal bone and brick.
- **F.20** NW-SE orientated ditch that crossed site, cut a treethrow and was truncated by quarry pits. Visible length of 15m. Two slots, [085] and [089], were excavated and a

small quantity of pot was recovered. Both slots were very similar with width averaging 2.03m and depth 0.49m. Uneven sides led to a slightly irregular, rounded base. Fills [081-084] and [086-088] were natural slumping and silting and consisted of redeposited sands and mid grey sandy silts

- **F.21** NW-SE orientated possible ditch terminus with a visible length of 2.50m. Cut [092] had steep sides leading to a narrow rounded base. Width 1.10m, depth 0.85. Fills [090-091] was mid yellowish to mid reddish brown sandy silt with occasional small gravel inclusions.
- **F.22** Treethrow cut by gully F.23. Cut [095] had quite steep sides led to a flattish base. Length 0.86m, width 0.62m, depth 0.12m. Fills [093-094] varied between light yellow and mid reddish brown sandy with occasional small gravel inclusions.
- **F.23** NE-SW orientated gully that cut treethrow F.22 and was truncated by quarry pits. Cut [098] had steep sides leading to a narrow rounded base. Width 0.21m, depth 0.12m. Fills [096-097] were pale brownish yellow silty sand with occasional small gravel inclusions.
- **F.24** NW-SE orientated ditch that crossed the site and had a visible length of 18m. It was truncated by quarry pits and ditch F.25 and cut pit F.53. Three slots, [108], [111] and [164], were excavated. Ditch was quite regular with width averaging of 1.04m and depth 0.39m. Steep sides led to a narrow, rounded base. Fills [106-107], [109-110] and [161-163] were natural silting and consisted of pale to mid greyish sandy silt. Cut [164] contained pot.
- **F.25** NE-SW orientated ditch that terminated to the southwest and had a visible length of 16.50m. It was truncated by quarry pits and ditch F.26 and it cut ditch F.24. Four slots, [118], [121], [122] and [170] were excavated. It narrows and shallows off significantly towards the southwest terminus from a width of 1.47m and depth of 0.60m to 0.68m and 0.20m respectively. Sides were moderately steep leading to a rounded base. Fills [116-117], [119-120], [122-123] and [169] were slumping and natural silting consisting of pale to mid brownish grey sandy silts.
- **F.26** NW-SE orientated ditch that crossed the site and had a visible length of 17m. It was truncated by quarry pits and cut ditch F.25 and possible ditch/gully terminus F.39. Three slots, [126], [166] and [245] were excavated. It gets slightly narrower and shallower towards the northwest, from a width of 1.45m and depth of 0.27m to 0.70m and 0.19m respectively. Sides were moderately steep leading to a slightly rounded base. Fills [125], [127], [165] and [244] were natural silting and consisted of pale to mid grey sandy silts. Cut [166] contained pot and animal bone.
- **F.27** NE-SW orientated quarry pit that cuts pit F.28. Cut [100] had almost vertical sides base not reached. Length 9.10m, width 3.30m, depth >0.18m. Fill [099] was mid greyish brown sandy silt with occasional small gravel inclusions.
- **F.28** Small rectangular pit that was cut by quarry pit F.27 and cuts pit F.29. Cut [102] had very steep sides leading to a flat base. Length 0.95m, width 0.48m, depth 0.22m. Fill [101] was dark greyish brown sandy silt with occasional small gravel inclusions.

- **F.29** Small oval pit that was cut by pit F.29. Cut [105] had near vertical sides leading to a rounded base. Length 0.80m, width 0.58m, depth 0.33m. Fills [103-104] varied between redeposited yellowish orange silty sand and dark brownish grey sandy silt with occasional small gravel inclusions.
- **F.30** NE-SW orientated ditch that crossed the site and had a visible length of 17m. It cut the terminus of similar sized ditch F.31 and was truncated by quarry pits and a posthole for a telegraph pole. Two slots, [113] and [152] were excavated. It becomes narrower and shallower towards the southwest, from a width of 0.80m and depth of 0.30m to 0.52m and 0.18m respectively. Steep sides led to a narrow, rounded base. Fills [112] and [151] were natural silting and consisted of dark grey sandy silt.
- **F.31** Terminus of NE-SW orientated ditch that is parallel to and cut by ditch F.30. Cut [115], had moderately steep sides leading to a slightly rounded base. Width 0.52m, depth 0.13m. Fill [114] was pale to mid grey sandy silt with common small gravel inclusions and rare charcoal flecks.
- **F.32** Small oval pit. Cut [129] had moderately sloping sides leading to a slightly rounded base. Length 2.04m, width 0.90m, depth 0.18m. Fill [128] was pale yellowish brown sandy silt with occasional gravel inclusions.
- **F.33** NE-SW orientated ditch that cut ditch F.47 and is truncated by quarry pits and ditches F.63 and F.66.. Two slots, [160] and [226] were excavated and showed quite steep sides leading to a broad flattish base. Width widened towards the southwest from 2.08m to 2.52m and depth changed from 0.56m to 0.69m. Fills [130] and [219-225] varied between redeposited pale yellowish grey silty sand and mid to dark grey sandy silt with dark organic remains.
- **F.34** Circular pit cut into the corner of curving ditch F.35. Cut [134] had steep sides leading to a probable rounded base. Diameter 2.0m, depth 0.65m. Fills [131-133] were primarily mid brownish grey sandy silt with occasional small gravel inclusions.
- **F.35** Curving ditch whose alignment shifts from a NE-SW alignment to a more E-W one. Pit F.34 cuts the corner of this ditch and quarry pits have truncated much of it. Two slots, [146] and [150] were excavated and showed steep sides leading to a flattish base with width narrowing from 1.25m to 1.80m and depth averaging 0.55m. Fills n[139-145] and [147-149] varied from pale yellowish brown silty sand to mid greyish brown silty sand.
- **F.36** Slightly oval posthole. Cut [155] had almost vertical sides leading to a rounded base. Width 0.30m, depth 0.26m. Fills [153-154] varied from mid brownish grey to mid dark grey sandy silt with occasional small gravel inclusions and charcoal flecks.
- **F.37** Circular posthole. Cut [157] had very steep sides leading to a rounded base. Diameter 0.30m, depth 0.15m. Fill [156] was pale to mid grey sandy silt with common small gravel inclusions and very rare small charcoal flecks.
- **F.38** NW-SE orientated possible ditch terminus/elongated pit. Cut [159] had moderately sloping sides leading to a slightly rounded base. Width 1.10m, depth

- 0.25m, Fill [158] was pale yellowish grey sandy silt with frequent small gravel inclusions.
- **F.39** NW-SE orientated probable ditch terminus. Cut [168] had moderately steep sides leading to an undulating base. Width 1.50m, depth 0.27m. Fill [167] was light grey silty sand with frequent small gravel inclusions.
- **F.40** NE-SW orientated ditch that appeared to turn to a more northwest-southeast orientation along the edge of site. It cuts ditch F.48 and gullies F.68, F.71 and F.72 and is cut by ditches F.63 and F.66. Three slots, [203], [293] and [302] were excavated showing moderately steep sides leading to a rounded base with width averaging 1.12m and depth 0.39m. Fills [201], [291-292] and [300-301] were natural silting consisting primarily of mid greyish orange and mid grey sandy silts.
- **F.41** Amorphous, vaguely rectangular, probable pit that has been truncated by quarry pits. Cut [177] had steep sides leading to a slightly rounded base. Width 2m, depth 0.61m. Fills [173-176] varied between pale to mid grey sandy silt to mid greyish brown sandy silt with frequent small to medium sized gravels, common oxidised concretions and rare charcoal flecks.
- **F.42** Circular posthole. Cut [179] had almost vertical sides leading to a slightly rounded base. Diameter 0.30m, depth 0.25m. Fill [178] was mid grey sandy silt with common small gravel inclusions and very rare charcoal flecks.
- **F.43** N-S orientated ditch terminus/elongated pit. Cut [181] had quite steep sides led to a rounded base. Width 1.30m, depth 0.47m. Fill [180] was pale to mid grey sandy silt with occasional small gravel inclusions and very rare charcoal flecks.
- **F.44** Small oval pit. Cut [187] had gentle sides leading to a rounded base. Length 0.60m, width 0.40m, depth 0.06m. Fill [186] was brown sandy silt with frequent small gravel inclusions.
- **F.45** Medium sized pit only partially visible at the edge of site. Cut [189] had almost vertical sides, base not reached. Width 1.44m, depth >0.30m. Fill [188] was dark blue/grey clay with occasional small gravel inclusions. Contained brick.
- **F.46** NE-SW orientated ditch terminus. Cut [185] had quite steep sides leading to a rounded base. Width 1.50m, depth 0.64m. Fills [182-184] varied between mid brownish clayey sandy silt with frequent small gravel inclusions and mid brownish grey sandy silt with rare small gravel inclusions and rare charcoal inclusions. Contained animal bone.
- **F.47** NW-SE orientated ditch that crossed the site. It was truncated by quarry pits and cut by ditch F.33. Two slots, [191] and [248] were excavated and showed moderately steep sides leading to a rounded base with width narrowing to the southeast from 1.85m to 1.46m and depth averaging 0.52m. Fills [190] and [246-248] were natural silting varying from pale orangey grey silty sand to mid grey silty sand.
- **F.48** NW-SE orientated ditch that crossed the site and appeared to be turning northeast along the northern edge of excavation. It was truncated by ditches F.40,

- F.63, F.66 and cut buried soil F.67. Four slots, [206], [240], [273] and [289] were excavated with moderate to very steep sides leading to a narrow rounded base. Much wider towards the northwest, being 2.90m wide which narrowed to 1.85m and depth was consistent at 0.88m. Fills [204-205], [239], [269-272] and [279-288] varied between mid to dark grey sandy silts with some blackish, almost peat like sandy silt.
- **F.49** Small, slightly oval pit. Cut [193] had quite steep sides leading to a rounded base. Width 0.53m, depth 0.23m. Fill [192] was mid grey sandy silt. Contained flint.
- **F.50** Small circular pit. Cut [195] had quite steep sides leading to a rounded base. Diameter 0.50m, depth 0.20m. Fill [194] was pale to mid grey sandy silt.
- **F.51** Small circular pit. Cut [197] had almost vertical sides leading to a rounded base. Diameter 0.47m, depth 0.33m. Fill [194] was pale to mid grey sandy silt with rare charcoal flecks. Contained pot and flint.

F.52 Number not used

- **F.53** Large, probably circular pit that is cut by ditch F.24 and pit F.56. Cut [231] had steep sides leading to a flat base. Length 3.0m, width 2.0m, depth 0.62m. Fills [227-230] varied between mid reddish brown, slightly clayey, sandy silt and light grey sandy silt with common small gravel inclusions.
- **F.54** Small, circular stakehole. Cut [208] had steep sides leading to a rounded base. Diameter 0.15m, depth 0.07m. Fill [207] was dark grey sandy silt with occasional charcoal flecks
- **F.55** Small. Circular stakehole. Cut [210] had steep sides leading to a rounded base. Diameter 0.17m, depth 0.06m. Fill [209] was dark grey sandy silt with occasional charcoal flecks.
- **F.56** Small oval pit that was cut into pit F.53. Cut [236] had gentle sides leading to a flattish base. Length 0.70m, width 0.60m, depth 0.20m. Fill [235] was mid grey sandy silt with common small gravel inclusions and rare charcoal flecks.
- **F.57** Circular posthole. Cut [212] had steep sides leading to a rounded base. Diameter 0.25m, depth 0.12m. Fill [211] was dark grey sandy silt.
- **F.58** Circular posthole. Cut [214] had steep sides leading to a rounded base. Diameter 0.23m, depth 0.13m. Fill [213] was mid grey sandy silt.
- **F.59** Circular posthole. Cut [216] had almost vertical sides leading to slightly rounded base. Diameter 0.25m, depth 0.19m. Fill [215] was mid to dark grey sandy silt with very occasional charcoal flecks.
- **F.60** Circular posthole. Cut [218] had almost vertical sides leading to a slightly rounded base. Diameter 0.25m, depth 0.18m. Fill [217] was mid grey sandy silt with rare small gravel inclusions and charcoal flecks. Contained pot.

- **F.61** Circular posthole. Cut [238] had almost vertical sides leading to a rounded base. Diameter 0.30m, depth 0.25m. Fill [237] was mid grey silty sand with rare charcoal flecks.
- **F.62** Possible beam slot. Cut [250] had almost vertical sides leading to flat base. Length >0.53m, width 0.28m, depth 0.13m. Fill [249] was orangey grey sandy silt with occasional small gravel inclusions.
- **F.63** NW-SE orientated ditch still visible as an earthwork in the field to the south. It was cut by parallel ditch F.66 and cut ditches F.33, F.40, F.48 and buried soil F.67. Four slots, [268], [278], [295] and [297] were excavated with moderately steep sides leading to a rounded base, with width averaging 0.82m and depth 0.20m. Fills [267], [277], [294] and [296] were backfill consisting of blue/grey clay.
- **F.64** NE-SW orientated ditch that cut pit F.65 and well F.76 and was truncated by ditch F.68. Two slots, [260] and [328] were excavated, showing steep sides leading to a rounded, slightly uneven base. Width varied between 0.80m and 1.20m and depth averaged 0.32m. Fills [256-259] and [327] varied between pale yellowish grey silty sand to black, almost peat-like silty sand to mid brownish grey sandy silt.
- **F.65** Small pit that is cut by ditch F.64. Cut [262] had moderately steep sides leading to a rounded base. Width truncated by F.64, depth 0.12m. Fill [261] was mid greyish brown sandy silt occasional small gravel inclusions and charcoal flecks.
- **F.66** Heavily truncated ditch that is parallel to and cut F.63. It also cut ditches F.33, F.40, F.48 and buried soil F.67. Two slots, [268] and [276] were excavated showing moderately steep sides leading to a broad, flat base with width varying between 0.90m and 1.30m and depth between 0.06m and 0.16m. Fills [265] and [275] were backfill consisting of dark brownish grey clay silt and bluish grey clay silt.
- **F.67** Buried soil deposit. Contained flint
- **F.68** Small NW-SE orientated curving gully that was cut by ditch F.40 and cut gully F69 and cut across the top of well F.76. Three slots, [304], [322] and [332] were excavated and showed moderately steep sides leading to rounded base with width averaging 0.55m and depth 0.20m. Fills [303], [321] and [329-331] were mid to dark grey sandy silt.
- **F.69** Small NW-SE orientated curving gully segment that was cut by gully F.68. Two slots, [306] and [324] were excavated, one at each terminus, and showed moderately steep sides leading to a rounded base with width averaging 0.32m and depth 0.11m. Fills [305] and [323] were pale grey silty sand.
- **F.70** Circular posthole cut into ditch F.48. Cut [308] had very steep sides leading to a rounded base. Diameter 0.25m, depth 0.12m. Fill [307] was dark brownish grey silty sand with occasional charcoal flecks. Contained flint.
- **F.71** Small NW-SE orientated gully that was cut by ditch F.40 and F.73. Two slots, [312] and [318] were excavated and showed moderately steep sides leading to a

slightly rounded base with width averaging 0.34m and depth 0.11m. Fills [311] and [317] were pale to mid orangey grey sandy silt.

- **F.72** Terminus of small NW-SE orientated gully that is cut by ditch F.40. Cut [314] had moderately steep sides leading to a rounded base. Width 0.15m, depth 0.09m. Fill [313] was light grey sandy silt.
- **F.73** Small gully terminus that was cut by gully F.74.
- **F.74** Small NE-SW orientated ditch that terminates to the northeast and cut gully F.73. It was truncated by well F.76. Two slots, [320] and [326] were excavated and showed moderately steep sides leading to a rounded base with width averaging 0.77m and depth changing from 0.12m to 0.21m. Fills [319] and [325] were mid greyish brown sandy silt.
- **F.75** Pit that cuts well F.76 but is heavily truncated by ditch F.68. Cut [334] had steep sides leading to a rounded base. Width truncated, depth 0.42m. Fill [333] was mid grey sandy silt with orange sand mottling and occasional small gravel inclusions.
- **F.76** Oval shaped well that was cut by ditches F.64, F.68, F.77 and pit F.75 and cut ditches F.74. Cut [338] had vertical sides that levelled off to the north to form a step before becoming vertical again, base was rounded. Length 2.16m, width 1.60m, depth 1.05m, Fills [335-337] were mid grey sandy silt with occasional blue/grey clay patches and occasional small gravel and charcoal inclusions. Contained pot, animal bone and flint.

F.77 Same as F.64

Swavesey Kiss and Ride (CGB:SKR)

- **F.1** Small oval pit. Cut [002] had almost vertical sides leading to a flattish base. Length 1m, width 0.45m, depth 0.45m. Fill [002] was dark grey, slightly clayey, silty sand with frequent small gravel inclusions and occasional roots and charcoal flecks. Contained glass and brick, (discarded).
- **F.2** Large, rectangular quarry pit. Cut [045] had vertical sides leading to a flat base. Length >2.35m, width 1.80m, depth 1m. Fills [058-061] varied from a pale to mid greyish brown sandy silt with rare small gravel inclusions which changed to a firm, dark brownish grey sandy silt with common dark brown/black fibrous organic inclusions towards the base. Contained pot.
- **F.3** NE-SW orientated ditch that has been truncated away at the SW by a series of quarry pits. Remaining visible length is 12.5m. This feature also cuts ditch F.5. Three slots, [026], [097] and [109] were excavated and tobacco pipe and tile was recovered. Ditch profile varied little with moderately steep sides leading to a flattish base with width averaging 1.08m and depth 0.23m. Lower fills [022-025], [095] and [107] was natural silting consisting of pale to mid yellowish brown sandy silt whilst fills [030], [096] and [108] were backfill consisting of dark brownish grey silty sand and blue/grey clay silt.

- **F.4** NE-SW orientated ditch only visible in the northern baulk section. Cut [029]. Width truncated by F.3, depth 0.60m. Fills [027-028] were pale to mid greyish brown sandy, slightly clayey, silt with occasional small gravel inclusions.
- **F.5** NW-SE orientated recut of ditch F.32 that traversed the site and had a visible length of approximately 30m. It was truncated by several features, including ditch F.3 and quarry pits F.25 and F.33. It had also been recut by ditch segment F.21. Contained animal bone, pot and a millstone grit quern fragment. Six slots, [21], [39], [116], [156], [164] and [179] were excavated showing moderately steep sides leading to a slightly rounded base. Depth was quite consistent, averaging 0.40m and width varied from 1.40m towards the southeast before widening to 2.05m and then narrowing to 1.64m towards the northwest. Fills [19], [037-038], [115], [155], [162-163], [176-179] were primarily mid to dark greyish brown, slightly clayey, sandy silts.
- **F.6** NW-SE orientated ditch with a visible length of 3.5m. Cut of SE terminus [041] had moderately sloping sides leading to a relatively flat base. Width 1.05m, depth 0.19m. Fill [040] was pale to mid bluish grey sandy silt with rare small gravel inclusions.
- **F.7** Circular posthole. Cut [035] had moderately sloping sides leading to a rounded base. Diameter 0.30m, depth 0.07m. Fill [034] was mid blue grey clay silt.

F.8 Layer

- **F.9** Large sub-oval quarry pit. Cut [044] had steep sides, not bottomed. Length 6m, width 3.40m, depth >0.90m. Fills [042-043] were quite distinct and consisted of redeposited fine yellowish sands and small gravels with mid grey silty sand capping this off.
- **F.10** Large, rectangular quarry pit. Cut [46] had vertical sides leading to a flat base. Length 2.25m, depth 1.70m, depth 1.15m. Fills [052-057] varied from pale to mid greyish brown sandy silt with rare small gravel inclusions which changed to a firm, dark brownish grey sandy silt with common dark brown black fibrous organic inclusions towards the base. Contained tile.
- **F.11** Large, rectangular quarry pit. Cut [047] had vertical sides leading to a flat base. Length >1.25m, width 2m, depth 0.90m. Fills [048-051] varied between redeposited orange sand and fine gravels and firm dark brownish grey sandy silt with common dark brown/black fibrous organic inclusions towards the base. Contained pot, including ceramic ware.
- **F.12** Large, rectangular quarry pit. Cut [094] had very steep sides leading to a flat base. Width >2.10m, depth 0.73m. Fills [087-093] varied between redeposited mid yellowish brown silty sands with frequent small gravel inclusions to very dark brownish grey silt with common black, rotted organics and rare small stones. Contained flint.
- **F.13** Large, rectangular quarry pit. Cut [071] had vertical/undercutting sides leading to a flat base. Width 1.70m, depth 0.93m. Fills [068-070] varied between faintly

- reddish brown silty sand with occasional small stones to dark grey, slightly clayey, sandy silt with frequent black rotted organic flecks and rare small stones. Contained pot and tile.
- **F.14** Large rectangular quarry pit. Cut [086] had very steep sides leading to a flat base. Width >1.80m, depth 0.68m. Fills [079] and [083-085] varied between mid brownish orange sandy silt with frequent small gravel inclusions and dark greyish brown, slightly clayey, silt. Upper fill [079] was also visible in quarry pit F.18.
- **F.15** Quarry pit that truncates Roman ditch F.5. Cut [033] had vertical sides leading to a flattish base. Width 1.06m, depth 0.42m. Fills [031-032] were mid yellowish brown sand with very frequent small gravel inclusions.
- **F.16** Quarry pit (box section). Cut [101] had almost vertical sides, base was not exposed. Box size: Length 1m, width 0.60m, depth >0.45m. Fills [098-100] varied from bright brownish orange silty sand with frequent small gravel inclusions to mid brownish grey sandy silt with common small gravel inclusions.
- **F.17** Large, rectangular quarry pit. Cut [078] had almost vertical sides leading to a flat base. Width >1.80m, depth 1.08m. Fills [072-077] varied between pale yellow redeposited sand with frequent small gravel inclusions and dark brown sandy silt with frequent small gravel inclusions.
- **F.18** Large, rectangular quarry pit. Cut [082] had steeply sloping sides leading to a flat base. Width >1.78m, depth 0.77m. Fills [079-081] varied between pale to mid brownish orange silty sand with frequent small gravel inclusions and dark grey, slightly clayey, sandy silt with rare small gravel inclusions.
- **F.19** Circular posthole. Cut [103] had moderately sloping sides leading to a flat base. Diameter 0.38m, depth 0.14m. Fill [102] was mid to dark greyish brown silty clay with common small gravel inclusions.
- **F.20** Large sub-oval quarry pit (box section) that truncated ditch F.3. Cut [112] had very steep sides, base not exposed. Length >1m, width >1m, depth >0.70m. Upper fill [110] was mid greyish brown sandy silt and lower fill [111] was pale yellow redeposited sand with frequent small gravel inclusions.
- **F.21** Sausage-shaped ditch segment that is a recut of F.5. Overall length was 3.20m and was truncated by ditch F.3. Cut [114] had steep sides leading to a rounded base. Width 0.60m, depth 0.29m. Fill [113] was mid orangey brown sandy silt with common small gravel inclusions.
- **F.22** Large, rectangular quarry pit that truncated quarry pit F.23. Cut [120] had very steep/undercutting sides, base not exposed. Length 3.80m, width 2.0m, depth >0.55m. Fills [117-119] and [123] varied between an upper mid blue/grey clay with very rare small gravel inclusions and pale-mid brownish orange silty sand with frequent small gravel inclusions. Contained pot, ceramic, tobacco pipe, tile/brick and FE.

- **F.23** Large, rectangular quarry pit (box section) that was truncated by F.22. Cut [122] had moderate sides, base not exposed. Length >0.60m, depth >0.53m. Fill [121] was mid greyish brown, slightly clayey, silty sand with rare small gravel inclusions.
- **F.24** Large, rectangular quarry pit (slot). Cut [129] had vertical sides, base not exposed. Slot dimensions: length 3.50m, width 1m, depth >0.65m. Fills [124-129] were mid to dark greyish brown sandy, slightly clayey, silt with occasional small gravel and rare charcoal inclusions. Contained animal bone.

F.25 Same as F.15.

- **F.26** Possible NW-SE orientated ditch (only partially visible in the NE corner of site. Cut [138] had moderate to steep sides leading to a rounded base. Length/width unknown, depth 1m. Fills [134-137] were a pale to mid brownish grey sandy, slightly clayey, silt with common small gravel inclusions. Contained animal bone.
- **F.27** Irregular shaped silt hollow. Cut [140] had gently sloping sides leading to a flattish base. Length 2.20m, width 0.90m, depth 0.13m. Fill [139] was mid brownish grey sandy, slightly clayey silt with occasional small gravel inclusions. Contained animal bone.
- **F.28** NW-SE orientated gully that terminates at the NW end. Total visible length was 8.80m. Three slots [142], [170] and [172] were excavated and showed moderately steep sides leading to a rounded base. Width averaged 0.38m and depth 0.12m. Fills [141], [169] and [171] were mid brownish grey sandy silt.
- **F.29** NW-SE orientated gully that cuts one quarry pit before being truncated by another. It terminated to the southeast and had a visible length of 3.90m. One slot was excavated. Cut [144] had moderately sloping sides leading to a rounded base. Width 0.45m, depth 0.10m. Fill [143] was mid brownish grey clay silt with common small gravel inclusions.
- **F.30** Circular posthole. Cut [148] had quite steep sides leading to a rounded base. Diameter 0.40m, depth 0.19m. Fill [147] was pale to mid grey silty sand with occasional small gravel inclusions.
- **F.31** Large quarry pit (box section). Cut [153] had vertical/undercutting sides leading to a flat base. Box dimensions: Length 2.90m, width 2.50m, depth 0.90m. Fills [149-152] and [154] varied from redeposited yellowish orange sand mixed with frequent small gravel inclusions to dark greyish brown slightly clayey sandy silt with frequent black rotted organic and occasional small gravel inclusions. Contained ceramic and tobacco pipe.
- **F.32** NW-SE orientated ditch that was recut by ditch F.5 and truncated by quarry pits. Total visible length was 10m. Three slots, [159], [163] and [167] were excavated showing moderately sloping sides leading to a flattish base. Width was truncated and depth averaged 0.40m. Fills [157-158], [165-166] and [220] were primarily mid to dark orangey grey, slightly clayey sandy silt.

F.33 Large, rectangular quarry pit (box section). Cut [175] had vertical sides, base not exposed. Dimensions of box: length 1.20m, width 1m, depth 0.50m. Fills [173-174] were pale to mid greyish brown slightly clayey, sandy silt with occasional small gravel inclusions. No finds.

Section 2

Landscape and Ecological Mitigation Area (LEM) C (CGB:LMC)

F.1 Number not used

- **F.2** Small circular pit. Cut [003], fill [002]. Moderately sloping sides led to a concave base. Diameter 0.80m, depth 0.18m. Fill was brownish grey silty clay with occasional charcoal flecks and rare small gravel inclusions.
- **F.3** Treethrow. Cut [005], fill [004]. Steep irregular sides led to an uneven base. Length 1.54m, width 0.90m, depth 0.15m. Fill was pale reddish brown silty sandy clay. Contained pot and flint.
- **F.4** Small sub-circular pit. Cut [007], fill [006]. Gently sloping sides led to a slightly rounded base. Diameter 0.92m, depth 0.18m. Fill was greyish brown silty clay with rare small gravel inclusions.
- **F.5** A ditch that did a full 90° turn from a NW-SE alignment to NE-SW with a visible length of 21.0m. Five slots, [009], [011], [013], [015] and [019] were excavated and a single piece of pot was recovered. Profile was quite consistent and averaged 0.41m wide and 0.10m deep with gentle to moderately sloping sides leading to an irregular base. Fills [008], [010], [012], [014] and [018] were natural silting and consisted of mid greyish brown sandy silt.

F.6 Same as F.5.

- **F.7** N-S orientated hedge line with a visible length of 6.70m. One slot was excavated and no finds were recovered. Cut [017] had moderately sloping sides leading to an uneven, rooted base. Width 0.61m, depth 0.16m. Fill [016] was pale brown silty clay with occasional small gravel inclusions.
- **F.8** N-S orientated hedge line with a visible length of 3.35m. One slot was excavated and no finds were recovered. Cut [021] had moderately sloping sides leading to an uneven, rooted base. Width 0.52m, depth 0.08m. Fill [020] was pale brown silty clay with occasional small gravel inclusions.
- **F.9** N-S linear hedge line with a visible length of 3.60m. One slot was excavated and no finds were recovered. Cut [023] had moderately sloping sides leading to an uneven, rooted base. Width 0.53m, depth 0.10m. Fill [022] was pale brown silty clay with occasional small gravel inclusions.
- **F.10** Sub-oval clay quarry pit. Cut [025] had moderately sloping sides leading to a rounded base. Length 1.50m, width 1.25m, depth 0.25m. Fill [024] was mid brown

silty clay with occasional small gravel inclusions and rare charcoal flecks. Contained pot.

Section 3

Landscape and Ecological Mitigation Area (LEM) D (CGB:LMD)

Trenches

Trench 2

- **F.9** NE-SW orientated ditch that was a recut of ditch F.17. Cut [029] had moderately sloping sides leading to a rounded base. Width 2.30m, depth 0.64m. Fills [026-028] were mid greyish brown silty clay capped with very dark grey silty clay. Contained pot, animal bone, worked stone, flint and slag.
- **F.10** NE-SW orientated ditch that truncated F.9 and F.17. Cut [031] had moderately sloping sides leading to a flattish base. Width 0.80m, depth 0.14m. Fill [030] was mid greyish brown silty clay. Contained pot.
- **F.17** NE-SW orientated ditch. Cut [234] had moderately sloping sides leading to a concave base. Depth 0.62m. Fill [034] was light greyish brown silty clay with common gravel and flint inclusions and rare charcoal flecks. Contained pot.

Trench 3

- **F.2** NW-SE orientated ditch that was a recut of F.27 (see open area descriptions). Cut [007] had quite steeply sloping sides leading to a concave base. Width 0.90m, depth 0.30m. Fills [005] and [006] were mid to dark grey/black silty sandy clay with frequent charcoal and orange burnt clay and occasional small gravel inclusions. Contained pot and animal bone;
- **F.11** NW-SE orientated ditch. Cut [042] had quite steeply sloping sides leading to a concave base. Width 0.80m, depth 0.29m. Fills [040-041] were pale to mid greyish brown silty clay with occasional gravel and flint inclusions and occasional charcoal flecks. Contained pot, animal bone and burnt stone.

Trench 4

- **F.1** NW-SE orientated probable ditch terminus. Cut [002] had steeply sloping sides leading to a flat base. Width 1.60m, depth 0.85m. Fill [001] was dark brown silty clay. Contained pot and animal bone.
- **F.3** NW-SE orientated probable ditch terminus. Cut [009] had steeply sloping sides led to a concave base. Width 1.90m, depth 0.80m. Fill [009] was dark brown silty clay. Contained pot, animal bone and flint.

Trench 5

- **F.21** NW-SE orientated ditch. Cut [058] had steeply sloping sides leading to a concave base. Width 1.20m, depth 0.60m. Fill [057] was light reddish brown silty clay with small gravel inclusions. Contained pot and animal bone.
- **F.22** NW-SE orientated ditch. Cut [060] had steeply sloping sides leading to a concave base. Width 1.50m, depth 0.90. Fill [059] was light brown silty clay. Contained pot and animal bone.
- **F.23** NW-SE orientated ditch. Cut [062] had steeply sloping sides leading to a flat base. Width 0.70m, depth 0.30m. Fill [061] was light brown silty clay with small gravel inclusions.

Trench 8

F.15 Post medieval quarry pit. Cut [047], fill [046]. Steeply sloping sides led to a flattish base. Diameter 2.0m, depth 0.90m. Fill was dark brown silty clay with occasional gravel inclusions. Contained tobacco pipe and an iron nail.

Trench 12

- **F.7** Post medieval quarry pit. Cut [023] had steeply sloping sides leading to a flat base. Diameter 1.90m, depth 0.31m. Fill [022] was mid brown silty clay with occasional small gravel inclusions. Contained tobacco pipe and animal bone.
- **F.14** Post medieval quarry pit. Cut [045] had very steeply sloping sides leading to a flat base. Diameter 2.4m, depth 1.20m. Fills [043-044] were light to mid greyish brown silty clay with occasional charcoal flecks.

Trench 15

- **F.8** Small circular pit. Cut [025] had gently sloping sides leading to a slightly rounded base. Diameter 1.0m, depth 0.18m. Fill [024] was dark greyish brown silty clay with occasional small gravel and flint inclusions and frequent charcoal flecks. Contained pot, animal bone and a broken copper alloy ring.
- **F.12** NE-SW orientated ditch terminus. Cut [039] had steeply sloping sides leading to a flattish base. Depth 0.70m. Fills [035-038] were light to mid yellowish brown silty sandy clay with rare small gravel inclusions capped with darker greyish brown silty clay. Contained pot and animal bone.

Trench 16

F.16 NE-SW orientated post medieval ditch. Cut [049] had moderately sloping sides leading to a slightly rounded base. Width 0.60m, depth 0.39m. Fill [048] was mid orangey brown silty sandy clay with rare gravel inclusions.

Trench 18

F.6 N-S orientated ditch. Cut [021] had gently sloping sides leading to a rounded base. Width 0.87m, depth 0.25m. Fill [020] was mid brown silty clay with rare small gravel inclusions. Contained pot and animal bone.

Trench 20

- **F.4** NW-SE orientated ditch that cuts ditch F.5. Cut [014] had moderately steep sides leading to a flattish base. Width 0.85m, depth 0.40m. Fills [010-013] were mid greyish brown silty clay with rare small gravel and charcoal inclusions capped with dark greyish brown silty clay with common charcoal flecks. Contained pot.
- **F.5** NW-SE orientated ditch that was cut by ditch F.4. Cut [018] had moderately sloping sides leading to a flattish base. Width 0.95m, depth 0.38m. Fills [015-017] were light to mid orangey brown silty clay.

Open Area

- **F.2** Recut of NW-SE orientated ditch F.27. Overall length was 20.0m. One slot, [084] was excavated excluding one in evaluation trench 2, and contained a large quantity of late Iron Age pot and animal bone. A further partial slot was excavated in order to retrieve a small pot cluster [220]. Steep sides led to a rounded base with width 0.70m and depth 0.20m. Fill [083] was dark greyish brown silty clay.
- **F.13** A curvilinear ditch whose orientation changed from a predominately northwest-southeast axis to a north-south one at the southeast terminus. Overall visible length was 27.0m. This ditch had been truncated significantly, particularly towards the northwest by F.27. Three slots, [211], [229] and [246] were excavated, excluding one in evaluation trench 3, and contained pot, animal bone and burnt stone. Moderately steep sides led to a slightly rounded base with width averaging 0.55m and depth 0.28m. Fills [210], [228] and [245] were mid greyish brown silty clay.
- **F.17** A curvilinear ditch whose alignment changed from a predominately north-south axis to a northeast-southwest one towards the south of the site. The ditch continued to the north and west beyond the limits of excavation. Overall visible length was 29.0m. This ditch cut ditches F.27, F.35, F.43 and F.58 and truncated ditch F.13. In turn it was cut by ditch F.9, enclosure ditch F.29 and posthole F.56. It was partially truncated on its southeast side by gully F.10, posthole F.56 and pit F.59. Five slots, [095], [144], [150], [234], and [242] were excavated, including one in evaluation trench 2. Moderately steep sides led to a flattish base with width varying between 0.80m and 1.70m and depth between 0.30m and 0.62m. Fills [34], [93-94], [141-143], [147] and [241] were primarily backfill consisting of mid to dark greyish brown silty clay.
- **F.18** Sub oval pit. Cut [052] had gently sloping sides leading to an undulating base. Length 1.85m, width 1.10m, depth 0.30m. Fills [051-052] were light to mid yellowish brown silty sandy clay.

- **F.19** Sub oval pit. Cut [054] had gently sloping sides leading to a rounded base. Length 1.90m, width 0.80m, depth 0.15m. Fill [053] was mid pinkish brown silty clay with occasional charcoal flecks.
- **F.20** Sub oval pit. Cut [056] had moderately sloping sides leading to a rounded base. Length 1.20m, width 1.0m, depth 0.12m. Fill [055] was mid orangey brown silty clay with common small to medium sized gravel and flint inclusions and rare charcoal flecks.
- **F.24** Rectangular pit. Cut [064] had moderately sloping sides leading to a flattish base. Length 1.0m, width 0.55m, depth 0.10m. Fill [063] was dark greyish black silty sandy clay with occasional small gravel inclusions and common charcoal flecks.
- **F.25** NW-SE orientated ditch with an overall visible length of 3.50m. Cut [069] had moderately sloping sides leading to a rounded base. Width 1.30m, depth 0.56m. Fills [067-068] were mid to dark greyish brown silty clay with common small gravel and flint inclusions and rare charcoal flecks. Contained pot.
- **F.26** NE-SW orientated ditch with an overall visible length of 2.50m. Cut [072] had moderately sloping sides leading to a slightly rounded base. Width 0.50m, depth 0.25m. Fills [070-071] were light to mid yellowish brown silty clay with occasional small gravel and flint inclusions. Contained pot.
- **F.27** NW-SE orientated ditch with an overall visible length of 65.0m. This ditch emerged from the southeast baulk, traversed most of the site before looping to a more east-west axis and terminating. This ditch has been recut in places as well as truncated by several other ditches. Eight slots, [074], [086], [156], [177], [213], [223], [227] and [249] were excavated and contained pot, animal bone and burnt stone. Steep sides led to a narrow rounded base with width varying significantly between 0.86m and 2.10m and depth between 0.51m and 0.86m. Fills [006], [073], [085], [154-155], [175-176]. [212], [216-217], [216] and [221-222] were primarily natural silting consisting of pale to mid greyish brown silty clay with some top soil derived backfill consisting of dark brown sandy silt.
- **F.28** NW-SE orientated elongated pit. Cut [076] had moderately steep sides leading to flattish base. Length 2.35m, width 0.75m, depth 0.18m. Fill [075] was mid brownish grey silty clay with occasional small gravel and burnt clay inclusions. Contained pot.
- **F.29** The SE corner of a partially exposed enclose ditch. The axis of alignment shifted almost 90° from NW-SE to SE-NW with a total visible length of 10m. This ditch appeared to be the last phase of activity within this dense area of archaeology and cuts a large number of earlier ditches. Two slots, [080] and [172] were excavated and pot and animal bone was recovered. Moderately steep sides led to a broad flattish base with width varying slightly between 1.75m and 2m and depth between 0.45m and 0.60m. Fills [77-79] and [169-171] were mid to dark brownish grey clay silt
- **F.30** NW-SE orientated ditch that terminated to the southeast and was truncated at the northwest end. Total remaining length was 20m. Three slots, [082], [153] and [209]

were excavated and pot and animal bone was recovered. Moderate to steep sides led to a rounded base with width varying between 0.80m and 1m and depth between 0.21m and 0.34m. Fills [081] and [207-208] were mid to dark greyish brown silty clay.

- **F.31** Shallow NW-SE orientated ditch. Terminated at the northwest end and was truncated by ditch F.32 at the southeast end. Total visible length was 7m. Two slots, [088] and [122] were excavated including one at the terminus and showed moderately steep sides leading to a slightly rounded base with width 0.68m and depth averaging 0.08m. Fills [087] and [121] were mid greyish brown silty clay.
- **F.32** NW-SE orientated ditch that was parallel and a partial recut of ditch F.27. Terminated at the northwest end and ran under the southeast baulk. Total visible length was 29m. Four slots, [090], [120], [158] and [225] were excavated and contained pot, animal bone and burnt stone. Steeply sloping sides led to a rounded base with width averaging 1.03m and depth 0.30m. Fills [089], [119], [157] and [224] were a mid to dark greyish brown silty clay.
- **F.33** Elongated medium sized pit that was cut by ditch F.27. Cut had steeply sloping sides leading to a rounded base. Length 2.60m, width 1.0m, depth 0.40m. Fill [091] was mid reddish brown clay. Contained pot and animal bone.
- **F.34** Same as linear ditch F.17.
- **F.35** NW-SE orientated ditch that had a visible length of only 8m. It appeared to run parallel to F.17 before being completely cut by it. It was also cut by enclosure ditch F.29. Two slots, [098] and [244] were excavated and pot was recovered. Steeply sloping sides led to a rounded base with width 0.90m and depth averaging 0.52m.
- **F.36** Rectangular enclosure with an internal area measuring 13.5m by 8.5m (approx 115m²) with a 3m wide entrance on the northeast side. Eight slots, [101], [106], [116], [131], [161], [164], [166] and [202] and two further slots in the evaluation phase [004] and [009] were excavated in the main ditch, along with three further slots, [104], [108] and [257] identified as recuts, and a half section of an entranceway posthole [112]. The main enclosure ditch was dug in segments with generally steep sloping sides leading to a flattish base with width varying significantly between 0.88m and 1.30m and depth between 0.11m and 0.65m. Fills were primarily natural silting consisting of mid orangey brown sandy clays and mid to dark greyish brown silty clays.
- **F.37** Small NW-SE orientated gully. The southeast end had been truncated by the terminus of ditch F.32 leaving an overall length of 3.0m. Cut [126] had moderately sloping sides leading to a rounded base. Width 0.20m, depth 0.05m. Fill [125] was dark greyish brown silty clay with occasional charcoal flecks. Contained pot.
- **F.38** Small oval shaped pit that cut gully F.37. Cut [128] had steeply sloping sides leading to a concave base. Length 1.0m, width 0.50m, depth 0.07m. Fill [127] was orangey brown silty clay.

- **F.39** Small curvilinear gully that changed from a west-east axis to a northwest-southeast axis. The southeast end had been truncated by the terminus of ditch F.32 leaving an overall length of 3.50m. Cut [124] had moderately sloping sides leading to a rounded base. Width 0.28m, depth 0.08m. Fill [123] was mid orangey brown silty clay with rare gravel inclusions.
- **F.40** Small circular pit. Cut [133] had moderately sloping sides leading to a rounded base. Diameter 0.40m, depth 0.05m. Fill [132] was dark grey silty clay with rare small gravel inclusions and rare charcoal flecks. Contained pot.
- **F.41** Circular posthole. Cut [135] had moderately sloping sides leading to a rounded base. Diameter 0.30m, depth 0.07m. Fill [134] was light brown silty clay with rare small gravel inclusions and rare charcoal flecks.
- **F.42** Circular posthole. Cut [137] had steeply sloping sides leading to a rounded base. Diameter 0.60m, depth 0.25m. Fill [136] was mid greyish brown silty clay with rare small gravel inclusions and rare charcoal flecks.
- **F.43** NE-SW orientated ditch that has been recut by F.17. Overall visible length was 5.0m. The base of cut [159] was truncated but the sides were quite steeply sloping. Fills [148-149] were light to mid greyish brown silty clay with occasional small gravel inclusions and occasional charcoal flecks.
- **F.44** NW-SE orientated small gully that cut ditch F.27 and was cut by enclosure ditch F.29. Overall visible length was 3.75m. Cut [174] had moderately sloping sides led to a slightly rounded base. Width 0.60m, depth 0.22m. Fill [173] was mid yellowish brown silty sandy clay with occasional small gravel inclusions.
- **F.45** Same as linear ditch F.27.
- **F.46** Same as linear ditch F.13
- **F.47** Small N-S orientated gully with a visible length of 1.50m. It has been cut by post hole F.52 to the north and ditch F.13 to the south. Cut [183] had quite steeply sloping sides leading to a rounded base. Width 0.45m, depth 0.15m. Fills [181-182] were mid yellowish brown silty clay with frequent small gravel inclusions.
- **F.48** Circular posthole that was cut by pit F.52. Cut [185] had moderately steep sides leading to a flat base. Diameter 0.25m, depth 0.16m. Fill [184] was mid greyish brown silty clay with occasional small gravel inclusions.
- **F.49** Circular posthole. Cut [187] had moderately steep sides leading to a concave base. Diameter 0.41m, depth 0.90m. Fill [186] was mid brown silty clay with occasional small gravel inclusions.
- **F.50** Small sub-oval pit. Cut [189] had moderately steep sides leading to a flattish base. Length 0.50m, width 0.30, depth 0.80m. Fill [188] was dark greyish black silty clay with occasional small gravel inclusions and frequent charcoal flecks. Contained pot.

- **F.51** Small sub-oval pit that was cut by small pit F.52. Cut [191] had steeply sloping sides leading to a flattish base. Length 0.85m, width 0.40m, depth 0.33m. Fills [190] and [233] were mid greyish brown silty clay with occasional small gravel and flint inclusions.
- **F.52** Small sub oval pit that cut posthole F.48 and small pit F.51. Cut [193] had steeply sloping sides leading to a flattish base. Length 0.90m, width 0.44m, depth 0.30m. Fills [192] and [232] were mid greyish brown silty clay with occasional small gravel and charcoal inclusions. Contained pot and animal bone.
- **F.53** Small NE-SW orientated gully with a total visible length of 3.75m. Two 0.50m slots, [195] and [197] were excavated, one at the terminus and one against the baulk. The baulk slot contained pot. Moderately steep sides led to a rounded base with width varying between 0.40m and 0.57m and depth averaging 0.17m. Fills [194] and [196] were mid greyish brown silty clay.
- **F.54** NE-SW orientated ditch that terminates to the northeast and is truncated in the southwest by the corner of enclosure F.36. Total remaining length was 8.50m. Two slots [199] and [205] were excavated and pot was recovered. Steeply sloping sides led to a flattish base with width narrowing from the terminus from 0.96m to 0.80m and depth changing from 0.17m to 0.28m. Fills [198], [203-204] and [206] were primarily mid greyish brown silty clay.
- **F.55** Small sub-oval pit that cut ditch F.27. Cut [215] had moderately sloping sides leading to a flat base. Width 0.70m, depth 0.12m. Fill [214] was mid brown silty clay with common small gravel inclusions.
- **F.56** Circular posthole that cut curvilinear ditch F.17 and posthole F.42. Cut [231] had diameter 0.45m, depth 0.16m. Fill [230] was mid greyish brown silty clay with occasional small gravel inclusions and common charcoal flecks.
- **F.57** Small NE-SW orientated gully that was cut by enclosure ditch F.29 and pit F.60 and had a visible length of 2m. Cut [236] had moderately sloping sides leading to a rounded base. Width 0.32m, depth 0.15m. Fill [235] was mid orangey brown silty clay with occasional small gravel inclusions.
- **F.58** Small N-S orientated gully that was completely cut by curvilinear ditch F.17 and had a visible length of 4.70m. Cut [240] had width 0.50m, depth 0.26m. Fill [239] was mid greyish brown silty clay with occasional small gravel inclusions and rare charcoal flecks. Contained pot and animal bone.
- **F.59** Small sub-oval pit that cut curvilinear ditch F.17, pit F.60 and the terminus of ditch F.9. Cut [254] had moderately sloping sides leading to a flattish base. Diameter 1.0m, depth 0.20m. Fill [253] was dark greyish brown silty clay with rare small gravel inclusions and common charcoal flecks. Contained pot.
- **F.60** Small sub oval pit that cut gully F.60 and was cut by pit F.59. Cut [256] had gently sloping sides leading to a slightly concave base. Diameter 0.50m, depth 0.14. Fill [255] was mid to dark greyish brown silty clay with occasional small gravel inclusions and common charcoal inclusions.

Section 4

Longstanton Park and Ride (CGB:LPR)

Trenches

Trench 17

F.7 N-S orientated ditch. Cut [014] had moderately sloping sides leading to a flat base. Width 1.30m, depth 0.15m. Fill [013] was mid greyish brown silty sandy clay with occasional small gravel inclusion.

F.13 SE-NW orientated ditch. Cut [024] had sharply sloping sides leading to a flattish base. Width 0.60m, depth 0.20m. Fill [023] was light brown silty clay with occasional small gravel inclusions.

Trench 18

F.8 N-S orientated ditch. Cut [016] had sharply sloping sides leading to a rounded base. Width 1.30m, depth 0.31m. Fill [015] was light brown silty clay with occasional small gravel inclusions.

Trench 19

- **F.1** NW-SE orientated ditch. Cut [002] had moderately sloping sides leading to a rounded base. Width 0.60m, depth 0.15m. Fill [001] was light brownish grey silty clay with occasional small to medium sized gravel inclusions and charcoal flecks.
- **F.2** NW-SE orientated ditch. Cut [004] had moderately sloping sides leading to a rounded base. Width 0.55m, depth 0.10m. Fill [003] was light greyish brown silty clay with occasional small gravel inclusions and charcoal flecks.
- **F.3** Small pit. Cut [006] had shallow sloping sides and a rounded base. Diameter 0.60m, depth 0.10m. Fill [005] was light grey silty sandy clay with occasional small gravel inclusions and charcoal flecks.

Trench 21

- **F.9** NE-SW orientated ditch. Cut [026] had moderately sloping sides leading to a rounded base. Width 0.55m, depth 0.12m. Fill [025] was mid greyish brown silty sandy clay with occasional small gravel inclusions and charcoal flecks. Contained brooch.
- **F.15** Pit. Cut [030] had sharply sloping sides leading to a rounded base. Width 0.60m, depth 0.40m. Fill [029] was dark grey silty clay with occasional charcoal flecks.

Trench 22

F.14 N-S orientated ditch. Cut [028] had sharply sloping sides leading to a rounded base. Width 0.50m, depth 0.12m. Fill [027] was light grey silty clay.

Trench 23

F.5 NE-SW orientated ditch. Cut [010] had sharply sloping sides leading to a rounded base. Width 0.50m, depth 0.09m. Fill [09] was light grey silty clay.

F.6 NE-SW orientated ditch. Cut [012] had sharply sloping sides leading to a rounded base. Width 1.10m, depth 0.27m. Fill [011] was light greyish brown silty sandy clay with occasional small gravel inclusions.

Trench 24

F.10 NE-SW orientated ditch. Cut [018] had moderately sloping sides leading to a rounded base. Width 0.60m, depth 0.10m. Fill [017] was light greyish brown silty sandy clay with occasional small gravel inclusions and charcoal flecks. No finds.

F.11 Posthole. Circular in plan. Cut [020] had steeply sloping sides leading to a rounded base. Width 0.25m, depth 0.12m. Fill [019] was mid brownish grey silty sandy clay with rare small gravel inclusions. No finds.

Trench 26

F.12 NW-SE orientated ditch. Cut [022] had moderately sloping sides leading to a flat base. Diameter 0.80m, depth 0.08m. Fill [021] was light greyish brown silty sandy clay with occasional small gravel inclusions and charcoal flecks.

F.17 N-S orientated furrow. Cut [034] had gently sloping sides leading to a flattish base. Width 1.40m, depth 0.12m. Fill [033] was light orange brown silty sandy clay with occasional small gravel inclusions.

Trench 32

F.32 NW-SE orientated furrow. Cut [069] was 0.15m deep with moderately steep sides leading to a flat base. Fill [068] was mid greyish brown silty clay.

Trench 34

F.22 SW-NE orientated ditch. Cut [048] had moderately sloping sides leading to a rounded base. Width 0.85m, depth 0.22m. Fill [047] was mid grey silty clay with occasional small gravel inclusions and charcoal flecks. Contained bone.

Trench 35

F.29 NW-SE orientated ditch that was recut by F.30. Cut [081] had steep sides leading to a rounded base. Width 0.30m, depth 0.17m. Fill [080] was pale grey silty clay.

F.30 NW-SE orientated ditch that was a recut of F.29. Cut [083] had moderately steep sides leading to a rounded base. Width 0.50m, depth 0.22m. Fill [082] was pale grey silty clay.

Open area

- **F.16** NW-SE orientated furrow that crossed the entire site. Cut [032] had gently sloping sides and a flattish base. Width 0.70m, depth 0.09m. Fill [031] was light orange brown silty sandy clay with rare small gravel inclusions. Contained pot.
- **F.18** NW-SE orientated ditch that crossed the site and had a visible length of 38m. Three slots [036], [104] and [106] were excavated and had quite steeply sloping sides leading to a rounded base. Width averaged 0.75m and depth 0.25m. Fills [035], [103] and [105] were light greyish orange brown silty clay with occasional small gravel inclusions.
- **F.19** NW-SE orientated furrow that crossed the entire site. Two slots, [039] and [046] were excavated and had gently sloping sides leading to a slightly concave base. Width averaged 1.40m and depth 0.12m. Fills [037] and [044] were light orangey brown silty clay with occasional small gravel inclusions. Fills [038] and [045] were light greyish brown silty clay mixed with orange brown silty sandy clay with occasional small gravel inclusions.
- **F.20** Treethrow. Cut [043] had moderately sloping sides leading to an irregular base. Width 1.27m, depth 0.22m Fills [040] and [042] were pale to mid brownish grey silty clay with occasional small gravel inclusions and rare charcoal and burnt clay. Fill [041] was mottled greyish orange silty sandy clay with common small gravel inclusions.
- **F.21** N-S orientated ditch that terminated to the south and had a visible length of 22m. Three slots, [073], [076] and [079] were excavated with width varying between 1.19m and 1.97m and depth 0.49m and 0.71m and bone and worked flint were recovered. Fills [070-072], [074-075] and [077-078] were primarily pale to mid orangey, greyish brown silty clay.
- **F.23** Burnt pit that was circular in plan. Cut [050] had moderately steep sides leading to a rounded base. Width 0.45m, depth 0.13m. Fill [049] was mid greyish brown silty clay with frequent charcoal inclusions.
- **F.24** Treethrow. Cut [052] had irregularly sloping sides leading to an uneven base. Width 0.65m, depth 0.11m. Fill [051] was pale greyish brown silty clay with occasional small gravel inclusions and charcoal flecks. Contained bone.
- **F.25** Large sub-oval pit. Cut [056] had sharply steeply sloping sides leading to a rounded base. Length 4.20m, width 3.20m, depth 1.20m. Fill [53] was top soil derived backfill consisting of dark grey silty clay with occasional small gravel inclusions, and fills [054-055] were pale brownish grey silty clay with occasional small gravel inclusions. Contained animal skull and other bone
- **F.26** NW-SE orientated ditch that crossed the site and cut large pit F.31. Cut [058] had steep sides lading to a rounded base with width 0.70m and depth .50m. Fill [057] was yellowish brown silty clay.

- **F.27** Curvilinear ditch that is cut by pit F.32, terminated to the northwest and had a remaining length of 14m. Four slots, [60], [62], [64] and [66] were excavated showing moderately steep sides leading to a rounded base with width averaging 0.59m and depth 0.20m. Fills [59], [61], [63], [65] and [67] were primarily mid to dark brownish grey clay silt.
- **F.31** Large irregular shaped pit cut by pit F.32. Cut [085] and [087] had steep sides leading to a rounded base with depth 0.75m. Fills [084] and [086] were mid to dark grey silty clay. Contained pot and bone.
- **F.32** Large oval well that cuts pit F.31 and ditch F.29 and was recut at least once. It was 6m long, and cut [102] was 3m long by 4.50 wide by 1.94m deep. Very steep sides led to an uneven base. Fills [091-092], [098-099] and [114] were slumping and backfill of the recut [115]. Fills [094-097], [101], [111-113] were natural silting and primarily consisted of mid to dark grey clay silts and fill [090] was a topsoil derived backfill consisting of mid greyish brown, slightly sandy, clay silt.

Section 5

Landscape and Ecological Mitigation Area (LEM) I (CGB:LMI)

- **F.1** Small oval burnt pit. Cut [003] had quite steeply sloping sides leading to a rounded base. Length 0.65m, width 0.55m, depth 0.18m. Fill [001] was dark grey silty clay with very rare small gravel inclusions and common charcoal flecks. Fill [002] was pinkish red fired clay with some greyish silt.
- **F.2** NW-SE orientated gully, truncated at the NW end, with a remaining length of 8m. Two slots [005] and [019] were excavated. The gully changed significantly between slots with [5] being 0.65m wide and 0.30m deep and having moderately steep sides leading to a flattish base. [019] was 0.47m wide and 0.10m deep with gently sloping sides leading to an uneven base. Fills [004] and [018] were topsoil derived backfill consisting of mid greyish brown silty clay.
- **F.3** Small sub-oval pit that cut gully F.4. Cut [007] had steeply sloping sides leading to an uneven base. Width 0.58m, depth 0.15m. Fill [006] was yellowish brown silty sandy clay with occasional small gravel and fired clay inclusions.
- **F.4** A NW-SE orientated gully cut by pit F.3 that terminated to the northwest and had a visible length of 11.50m. Two slots [009] and [021] were excavated and demonstrated similar profiles with an average width of 0.46m and depth of 0.21m. Steep sides led to a rounded base. Fill [008] and [020] were topsoil derived backfill consisting of mid greyish brown clay silt.
- **F.5** NW-SE orientated ditch that crossed the site, cut ditch F.9 and had a visible length of 22m. Two slots [012] and [075] were excavated revealing a drainage pipe in the base and pot, tile and clay tobacco pipe were recovered. Width and depth towards the northwest were 1.66m and 0.98m respectively compared with 1.46m and 0.61m to the southeast. Ditch profile was consistent with steeply sloping sides leading to a rounded base. Fills [010-011] and [074] were pale to mid greyish brown clay silt.

F.6 NW-SE gully that terminated to the northwest and had a visible length of 9m. Two slots, [015] and [023], were excavated showing steeply sloping sides leading to a rounded base. It was more substantial towards the southeast, being 0.40m wide and 0.38m deep compared with 0.30m and 0.05m respectively. Fills [013-014] and [022] were topsoil derived backfill consisting of mid to dark greyish brown clay silt.

F.7 NW-SE orientated gully that terminated to the northwest and had a visible length of 11.75m. Two slots were excavated showing steeply sloping sides leading to a rounded base. Width and depth varied slightly and averaged 0.38m and 0.21m respectively. Fills [016] and [031] were topsoil derived backfill consisting of mid to dark greyish brown clay silt.

F.8 Circular pit. Cut [026] had moderately sloping sides leading to rounded base. Width 1.20m, depth 0.30m. Fills [024-025] were a mid to dark orangey grey silty sandy clay with rare charcoal flecks.

F.9 NW-SE ditch. That crossed the site, was cut by ditch F.5 and had a visible length of 25.0m. Two slots. [028] and [079] were excavated showing moderately gentle sides leading to a rounded base. Width and depth varied slightly and averaged 1.22m and 0.51m respectively. Fills [027] and [078] were a mid to dark orangey grey sandy silt.

F.10 NE-SW orientated ditch that cuts linear ditch F.11 and small pit F.12 and terminated to the northeast with a visible length of 50.50m. Five slots [030], [039], [042], [046] and [049] were excavated showing moderately steep sides leading to a flattish base. Width varied slightly between 0.60m and 0.88m and depth between 0.09m and 0.28m. Fills [029], [040], [041], [045] and [047-048] were mid grey clay silts.

F.11 NW-SE orientated gully that terminated to the northwest, was cut by ditches F.10 and F.14 and had a visible length of 13m. Four slots, [036], [053], [051] and [054] were excavated showing steeply sloping sides leading slightly rounded base. It was slightly more substantial towards the southeast, with a width of 0.47m and depth of 0.33m and this gradually reduced to width 0.25m and depth 0.20m. Lower fills [033-034] and [055] were natural silting consisting of pale yellowish grey silty clay, whilst fills [035], [050], [052] and [056] were topsoil derived backfill consisting of mid to dark greyish brown silty clay.

F.12 Small sub-oval pit that was cut by ditch F.10. Cut [044] had moderately sloping sides leading to a flattish base with diameter 0.65m and depth 0.10m. Fill [043] was dark greyish brown silty clay with rare charcoal inclusions.

F.13 Same as F.11

F.14 NW-SE orientated ditch that was only partially visible. It truncated ditch F.11 and had a visible length of 2.25m. Two slots, [060] and [061] were excavated showing quite steeply sloping sides leading to a rounded base with width 0.92m and depth 0.46m. Fills [059] and [062-063] were natural silting consisting of pale to mid greyish brown silty clay.

- **F.15** Curvilinear ditch that terminated to the northeast and had a visible length of 9m. Two slots [064] and [069] were excavated, including the east terminus. Pot and slag was recovered. Moderately steep sides led to a flattish base with width 0.73m and depth up to 0.21m. Lower fills [065-066] were natural silting consisting of mid orangey grey silty sand whilst fills [067] and [070] were topsoil derived backfill consisting of dark brownish grey sandy silt.
- **F.16** NW-SE ditch which crossed the southwest corner of site and had a visible length of 7.50m. One slot [073] was excavated showing steep sides leading to a flat base with width 1.40m and depth 0.45m. Fills [071-072] were pale to mid brown silty clay.
- **F.17** N-S linear gully that cuts linear ditch F.9 and is only visible in baulk section. Moderately sloping sides led to a rounded base. Width 0.45m, depth 0.25m. Fill was a mid brown clay silt.
- **F.18** Curvilinear ditch with a visible length of 8m that terminated to the southwest and was truncated by ditch F.21. Three slots, [080], [084] and [085] were excavated showing moderately steep sides leading to a slightly rounded base with width averaging 0.43m and depth 0.13m. Fills [081-082], [083] and [086-087] were pale to mid reddish grey sandy silts.
- **F.19** Truncated NE-SW ditch that was cut by gully F.17 and had a visible remaining length of 9.50m. Two slots, [089] and [093] were excavated showing moderately steep sides leading to a rounded base. Width averaged 0.79m and depth 0.25m. Fills [088] and [092] were top soil derived mid brown silty clay.
- **F.20** Circular posthole. Cut [091] had almost vertical sides leading to a rounded base with a diameter of 0.35m and depth 0.30m. Fill [090] was pale brownish grey clay silt with occasional small gravel and chalk inclusions.
- **F.21** Modern NW-SE ditch. No slots were excavated, however it was 2.50m wide, visible for 19.0m and truncated curvilinear ditch F.21.

Section 6

Arbury

Arbury Trackway (CGB:ABQ)

F.1 NW-SE orientated ditch that was partially exposed during the watching brief and had a visible length of 40m. One slot, [013] was fully excavated and a long section was tested and drawn where it was exposed in section, and several finds spots [A-H] were marked and recorded. Width was 2m and depth at least 0.7m with steep sides and a flat base. Fills [001-006] and [009-012] were primarily greyish brown silty clay with some railway related ballast pressed into the upper fill [001]. Contained significant quantities of pot, animal bone and oyster shell as well as 3 coins and 2 cu alloy fragments.

- **F.2** Possible ditch or pit (only visible in section). Cut [008] had steep sides and an undefined base. Fill [007] was greyish brown silty clay. Contained pot and animal bone.
- **F.3** Possible shallow pit that was cut by ditch F.4. Cut [015] had gently sloping sides leading to a slightly rounded base. Width was approximately 3.5m and depth 0.10m. Fill [014] was pale to mid brown sandy silt. Contained pot, animal bone and 2 coins.
- **F.4** NW-SE orientated ditch only visible in section that either terminated or turned sharply at the northwest end. It had a visible length of 10m and cut feature F.4. Cut [017] had quite steep sides and the base was not uncovered. Fill [016] was mid brown sandy clay silt. Contained pot, animal bone and oyster shell.
- **F.5** Partially visible probable pit. Cut [019] had steep sides and the base was not uncovered. Width was 1.15m and depth >0.25m. Fill [018] was mid to dark brown sandy clay silt. Contained occasional oyster shell.
- **F.6** Roman quarry pit that cuts possible pit F.7. Cut [021] had steep sides and the base was not uncovered. Width was 1.1m and depth >0.12m. Fill [020] was mid brown sandy clay. Contained pot, animal bone, a coin and an iron nail.
- **F.7** Possible pit that was cut by F.6. It had steep sides leading to a flat base. Width was 0.75m and depth 0.10m. Fill was mixed orange silty gravel.
- **F.8** Circular pit that cut F.9. Cut [023] had very steep sides leading to a rounded base. Diameter was 1.8m and depth 0.64m. Fill [022] was mid grey clay silt.
- **F.9** Circular pit that was cut by F.8 and cut F10. Cut [027] had steep sides leading to a flat base. Diameter was 1.5m and depth 0.5m Fill [026] was pale grey silty clay. Contained pot, tile and oyster shell.
- **F.10** Small circular pit that was cut by F.9. Cut [025] had steep sides leading to a slightly rounded base. Diameter was 0.9m and depth 0.36m. Fill [024] was pale to mid grey sandy clay silt. Contained pot, tile, animal bone and oyster shell.
- **F.11** Small oval pit cut by railway related quarry pits. Cut [029], fill [028]. Width was 1.2m. Contained pot, tile and animal bone.
- **F.12** Circular pit. Cut [031], fill [030]. Diameter was 0.72m. Contained pot, animal bone and oyster shell.
- **F.13** Circular pit. Cut [033], fill [032]. Diameter was 0.6m.
- **F.14** Circular pit. Cut [035], fill [034]. Diameter was 0.55m. Contained pot, animal bone and oyster shell.

Arbury Park (CGB:APK)

- **F.1** NW-SE orientated ditch that traversed the width of the site and had a total visible length of 30m. It truncated ditch F.2 and five slots, [003], [009], [014], [016] and [024] were excavated. Some animal bone was recovered. Width varied slightly along the whole length from 0.60m to 0.80m and depth varied from 0.25m to 0.40m Profile was consistent with moderately steep sides leading to a rounded base. Fills [001-002], [008], [012-013] and [015] were natural silting and consisted of mid brownish grey sandy silt.
- **F.2** NW-SE orientated ditch that traversed most of the site before terminating at the southeast end. It had a total visible length of 26m, and five slots, [005], [007], [022], [028] and [030] were excavated. Some pot was recovered. It became narrower and shallower towards the southeast terminus, from a width of 0.85m and depth 0.20m to 0.50m and 0.11m respectively. Profile was consistent with moderately steep sides leading to a rounded base. Fills [004], [006], [021], [027] and [029] were natural silting and primarily consisted of pale to mid greyish brown sandy silt.
- **F.3** Circular posthole. Cut [011], fill [010]. Almost vertical sides led to a flat base. Diameter 0.30m, depth 0.16m. Fill was mid greyish brown silty sandy clay with occasional small gravel inclusions.
- **F.4** Medium sized, oval shaped pit. Cut [020], fills [017-019]. Almost vertical sides led to a rounded base. Fills were pale to mid grey and greyish brown sandy silt with small gravel and occasional charcoal flecks.
- **F.5** Medium sized, oval shaped pit. Cut [026], fill [025]. Moderate sides led to a flattish base. Fill was a mid greyish brown sandy, slightly clayey, silt with occasional small gravel inclusions and very rare charcoal flecks.
- **F.6** NW-SE orientated ditch that traversed the width of site and was cut by F.2. It had a total visible length of 13.5 and two slots, [032] and [034] were excavated. Width varied between 0.60m and 0.80m and depth was consistent at 0.13m. Profile was moderately steep sides leading to a slightly rounded base. Fills [031] and [033] were natural silting and were pale grey yellowish brown sandy silt.

Section 7

Long Road Construction Site (CGB:LRD)

- **F.1** NW-SE orientated ditch segment with a total length of 3.50m. A slot was excavated at each terminus, [002] and [014], and worked flint was recovered. Both slots were very similar; width averaged 0.80m and depth 0.24m, with quite steeply sloping sides leading to a rounded base. Fills [001] and [013] were natural silting and consisted of mid brownish grey sandy silt.
- **F.2** N-S orientated ditch that traversed the whole site and had a visible length of 115m. It cut ditches F.6, F.8 and F.14. One slot, [004], was excavated and pot and tobacco pipe

was recovered. Width was 2.50m and depth 0.90m, with moderately sloping sides leading to a rounded base. Fill [003] was mid brown silty clay.

- **F.3** NW-SE orientated ditch that traversed across the NE corner of site, with a total visible length of 22.75m. It cut ditches F.6 and F.8. Four slots, [007], [021], [038] and [043] were excavated and pot and worked flint was recovered. Width varied slightly between 0.90m and 1.08m and depth between 0.34m and 0.43m with moderately sloping sides leading to a slightly rounded base. Fills [005-006], [020], [037] and [041-042] were natural silting consisting primarily of mid to dark greyish brown sandy silt.
- **F.4** Truncated NW-SE orientated ditch with a total remaining visible length of 16.0m. It cut ditch F.5. One slot, [010], was excavated and no finds were recovered. Width was 1.10m and depth 0.30m with moderately sloping sides leading to a rounded base. Fills [008-009] were natural silting and consisted of mid greyish brown sandy silt.
- **F.5** NW-SE orientated ditch that was cut by ditch F.4. It had a total visible length of 2.75m. One slot, [012], was excavated. Width truncated by F.4, depth 0.20m with moderately steep sides leading to a rounded base. Fill [011] was natural silting and consisted of light greyish brown sandy silt.
- **F.6** NE-SW ditch that crossed the site and had a total remaining length of 36m. It was cut by ditches F.2 and F.3. Three slots, [017], [040] and [058], were excavated. Becomes narrower and shallower towards the northeast from a width of 1.90m and depth of 0.45m to 1.05m and 0.30m respectively, with moderately steep sides leading to a rounded base. Fills [015-016], [039] and [057] were natural silting and primarily consisted of mid to dark greyish brown sandy silt.
- **F.7** Small, isolated circular pit. Cut [019], fill [018]. Quite steeply sloping sides led to a rounded base. Diameter 0.55m, depth 0.16m. Fill was dark grey silty sand with rare small gravel inclusions and occasional charcoal flecks. No finds.
- **F.8** E-W orientated gully that had been truncated at both ends leaving a total remaining length of 14.25m. It was cut by ditches F.2 and F.3. Four slots, [023], [025], [029] and [031], were excavated. Width varied slightly between 0.53m and 0.55m and depth between 0.10m and 0.19m with steeply sloping sides leading to a rounded base. Fills [022], [024], [028] and [030] were natural silting and consisted of pale to mid grey sandy silt.
- **F.9** NE-SW partially truncated ditch that traversed the site and had a total remaining length of 12.0m. Two slots, [027] and [054] were excavated and had a consistent profile with width averaging 0.75m and depth 0.40m with steep sides leading to a rounded base. Fills [026] and [053] were pale to mid grey sandy silt.
- **F.10** Medium sized, oval shaped, post medieval pit. Cut [034] had steeply sloping sides led to an irregular base. Length 2.50m, width 1.10m, depth 0.45m. Fills [032-033] were dark greyish brown silty sand with common small to medium sized gravel inclusions.
- **F.11** Small circular post hole. Cut [036] had steeply sloping sides led to a rounded base. Diameter 0.40m, depth 0.20m. Fill [035] was mid grey silty sand with rare charcoal flecks.

- **F.12** Medium sized elongated pit. Cut [045] had quite steeply sloping sides led to a flat base. Length 1.77m, width 0.55m, depth 0.16m. Fill [044] was mid greyish brown silty sand with rare small gravel inclusions.
- **F.13** Small, circular post hole. Cut [047] had steeply sloping sides led to a rounded base. Diameter 0.40m, depth 0.19m. Fill [046] was mid grey silty sand with rare small gravel inclusions.
- **F.14** E-W ditch that crossed the site and had a visible length of 22.50m. It was cut by ditch F.2. Two slots, [049] and [056] were excavated and part of an articulated animal was recovered. Width was considerably narrower towards the east, being 0.75m compared with 1.26m farther west. Depth averaged 0.15m with moderately sloping sides leading to a rounded base. Fills [048] and [055] were dark grey sandy silt.
- **F.15** A series of shallow, intercutting pits with a visible length of 4.0m and width of 2.20m probably related to quarrying. One slot, [052], was excavated which contained pot and animal bone. Irregular sides led to an uneven base with depth varying between 0.06m and 0.13m. Fills [050-051] were backfill/redeposited natural consisting of pale to mid yellowish grey silty sand.

Section 8

Addenbrookes Link (CGB ABL)

Watching brief

- **F.1** NE-SW orientated ditch that was parallel to ditch F.2. Cut [002] had very steep sides leading to a narrow rounded base. Width was 0.5m and depth 0.23m. Fill [001] was dark grey clay silt. Contained pot.
- **F.2** NE-SW orientated ditch that was parallel to ditch F.1. Cut [004] had moderately steep sides leading to a broad, flat base. Width was 1.5m and depth 0.3m. Fill [003] was dark greyish brown clay silt.
- **F.3** NW-SE orientated ditch cut by ditches F.1 and F.2. Cut [006] had moderately steep sides leading to a broad flat base. Width was 1.6m and depth 0.3m. Fill [005] was dark greyish brown clay silt.

Open areas

F.1 was a wide, ditch initially aligned from west to east, identified both sides of the railway, before turning to a north-eastern orientation. Between 1.25m and 2.15m in width, the cut of F.1 [010], [013], [038], [056], [063], was of steeply sloping sides leading to a slightly concaved base, a maximum of 0.53m in depth. Several fills were identified within the ditch; the lower fill [012], [011], [015], [039], [054], [060], was a mid to dark sandy, silty clay with high levels of charcoal and small mollusc shells and occasional loose angular gravels. An upper fill, [040], [053], [059], was mid grey silty clay with occasional small mollusc shells. On the inside (northern) side of the

curve of the turn of F.1 was an irregular shallow depression F.14, [058], 1.5m in width and a maximum of 0.22m in depth. F.14 was filled with dark grey brown, silty clay with occasional angular stones and small loose gravels.

F.2, F.3, F.8, F.11 were a series of narrow, linear gullies visible on both sides of the railway, a maximum of 0.15m in width, with straight sides and flat base a maximum of 0.40m deep. All were filled by loose silty clay with high quantities of roots and bioturbation with occasional loose angular gravels. F.2 and F.3 were shown to predate the railway and the orientation, morphology and fill suggested that they all were contemporary land drains, in use before the construction of the railway.

F.5 was a spread of a mixture of mid to grey, compacted silty clay with frequent charcoal mottling [024], compacted dark grey silty clay [025] and mid grey, compacted silty clay with occasional charcoal mottling [026]. Visible only within the area west of the railway, lying adjacent to and running parallel with the existing field drain, this material was interpreted as either up-cast from the construction of the drain itself, or as the remains of a hedgerow decommissioned by the construction of the drain. F.5 was cut by F.2, the pre-railway land drain, suggesting a pre 1843 date for its deposition.

F.6 was an east-west orientated linear ditch, exposed only on the eastern side of the railway. The cut of F.6 varied between 1.2 and 1.5m in width [031], [080] with a moderately steep, slightly concave sides leading to a slightly rounded base and a maximum depth of 0.42m. Filled with mid brown, loosely compacted peaty clay [030], [081], occasional root inclusions and infrequent charcoal mottling. Stratigraphically F.6 was one of the most recent features on the site, overlying the post-medieval land drain F.8.

F.7 was a wide, east-west aligned ditch within the area to the east of the railway. The cuts [037], [072], [090] varied between 2.3 and 3.1m in width, with a gradual break of slope at the surface which lead to moderately steeply sloping, generally straight, but intermittently slightly concaved sides, to a maximum depth of 0.68m. The lower fill throughout the length of F.6 [035], [073], [089], was a moderately compacted, light to mid to light grey-brown sandy clay with very occasional mid-brown and red clay mottling. Several fragments of unworked antler were recovered from this fill. A second fill, identified throughout the length of the ditch [034], [074], [087], was a moderately compacted, mid to light brown sandy clay with frequent loose small mollusc shells and occasional charcoal flecking. The 5m of exposed easternmost ditch also had an upper fill [075], [086], of loosely compacted dark grey sandy silty clay with high levels of charcoal and small mollusc shells probably representing a deliberate backfilling phase following a period of natural filling of the ditch.

F.9 was a narrow curved linear ditch, visible on the eastern side of the railway. Aligned east west before turning to a north-eastern orientation, F.9 varied in width between 0.55m and 1.56m. The cut [041], [049], [067] was of steeply sloping, slightly concaved sides leading to an irregular, generally flat base, a maximum of 0.36m in depth. The fills, [042], [050] and [064], was moderately compacted midgrey brown silty clay with occasional small, loose mollusc shells and gravel inclusions

- **F.10**; was a narrow, vertical sided, gully with as flat base, a maximum of 0.7m in depth, and was orientated southeast to northwest, before turning northward seemingly respecting the position of the railway. F.10 joined to F.13 a second narrow, vertical sided, flat based gully aligned north—south. Both were filled with loose light brown gravel and probably represent modern drainage ditches, stratigraphically representing the most recent activity on the site.
- **F.12** was a curvilinear ditch within the excavation area east of the railway, aligned southwest-northeast before turning to follow a north-northeastern orientation. Varying between 0.8m and 1.25m in width, the cut [048], [093], [096], had steeply sloping, concave sides with a generally flat, slightly concave base. The fill, [047], [094], [095] was moderately compacted very dark grey silty clay with occasional gravel inclusions. One fragment of Romano-British pottery, one 1st century AD Salisbury Type brooch and a 2-3rd Century AD penannular brooch were recovered from this fill. F.12 cut through the upper fill of F.7.
- **F.15** was a narrow, shallow linear feature aligned southwest to northeast, a maximum of 0.65m in width. The cut [097] was of steeply sloping, slightly concave sides leading to a flat base a maximum of 0.13m in depth. A rounded terminus with gradually sloping sides leading to a narrow concaved base was encountered at the south-western end of F.15, which cut through the upper fill of F.7.

Section 9

Shelford Road Construction Site (CGB:SRC)

F.1 Same F.3.

- **F.2** NE-SW orientated ditch truncated by a modern rubbish pit and with a remaining visible length of 8.10m. Two slots, [007] and [031] were excavated and animal bone and worked flint was recovered. Moderate to steep sides led to a rounded base with width averaging 1.92m and depth 0.73m. Fills [003-006] and [029-030] were light to mid greyish brown silty sand.
- **F.3** Curvilinear gully with an approximate diameter of 22.0m. Just over half of this feature was visible with the remainder going under the baulk. 13 Slots, [002], [009], [011], [182], [184], [186], [228], [230], [232], [234], [236], [238] and [240] were dug at 2m intervals. No internal features were identified and a small quantity of animal bone was recovered. Width varied between 0.30m and 0.67m and depth between 0.17m and 0.28m. Fills [001], [008], [010], [181], [183], [185], [227], [229], [231], [233], [235], [237] and [239] were primarily mid to dark reddish brown silty sand.
- **F.4-7** These features were initially recorded as postholes but were subsequently reevaluated as being natural.
- **F.8** NW-SE orientated ditch that truncated ditch F.8, was truncated away towards the southeast and had a visible length of 47m. Six slots, [022], [026], [121], [124], [304] and [308] were excavated and worked flint was recovered. Moderate to steep sides led to a slightly rounded base with width being 0.73m towards the northwest then

narrowing to 0.37m before widening to 0.70m, depth averaged 0.31m except where the ditch narrowed, where depth was 0.13m. Fills [020-021], [025], [120], [122-123], [303] and [307] were natural silting and consisted of mid to dark reddish brown silty sand.

- **F.9** NW-SE orientated ditch that was truncated by ditch F.8 and terminated to the southeast. It had a visible length of 47.50m and six slots, [024], [028], [163], [165], [283] and [306] were excavated. Pot, animal bone and worked flint were recovered. Moderately steep sides led to a rounded base and width was relatively constant averaging 0.39m except towards the southeast terminus where it widened to 0.89m. Depth was quite consistent and averaged 0.15m. Fills [023], [027], [162], [164], [282] and [305] were natural silting and consisted of mid to dark greyish brown sandy silt.
- **F.10** NE-SW orientated ditch that was truncated by ditches F.35 and 55. It had a visible length of 34.50m and six slots, [034], [037], [059], [105], [161] and [324] were excavated. Pot, animal bone, worked flint and burnt stone was recovered. Steeply sloping sides led to a rounded base. Width was consistent except for a slight widening towards the northeast terminus and averaged 0.89m, whilst depth increased towards the northeast from 0.27m to 0.54m. Fills [032-033], [035-036], [058], [101], [102], [103-104], [158-160], [312] and [323] were primarily natural silting consisting of light to mid orangey brown sandy silts.
- **F.11** Modern circular posthole. Cut [041] had moderately sloping sides leading to rounded base. Diameter 0.40m, depth 0.20m. Fill [040] was dark greyish brown silty sand with rare small gravel inclusions.
- **F.12** Small oval pit. Cut [043] had moderately sloping sides leading to a rounded base. Diameter 0.95m, depth 0.23m. Fill [042] was reddish brown silty sand with common small gravel inclusions and rare charcoal flecks. Contained pot.
- **F.13** Medium sized sub-oval pit. Cut [046] had steep sides leading to a flat base. Diameter 1.90m, depth 0.48m. Fills [044-045] were dark reddish brown silty sand with rare gravel inclusions and common charcoal flecks. Contained pot and animal bone.
- **F.14** NW-SE orientated gully that was truncated by a modern pit and ditch F.18. It had a visible length of 5.50m and one slot, [048], was excavated which contained animal bone. Moderately steep sides led to a rounded base. Width 0.40m, depth 0.30m. Fill [047] was dark brown silty sand.
- **F.15** NE-SW orientated ditch that truncated ditches F.26 and F.39. It had a visible length of 39.25m and seven slots, [050], [052], [061], [095], [190], [244] and [252] were excavated and pot, animal bone, worked flint and burnt stone was recovered. Moderately steep sides led to a rounded base with width and depth being quite consistent and averaging 0.88m and 0.24m respectively. Fills [049], [051], [060], [094], [189], [241], [251] and [328] were primarily natural silting and consisted of mid brown and mid greyish brown sandy silts.
- **F.16** NE-SW orientated ditch that had a visible length of 3.75m. One slot, [054], was excavated at the northeast terminus which had moderately steep sides leading to a

rounded base. Width 0.60m, depth 0.12m. Fill [053] was mid greyish brown silty sand.

- **F.17** NE-SW orientated ditch that truncated curvilinear ditch F.54. It had a total length of 22.50m and four slots, [057], [100], [212], and [311] were excavated and worked flint and animal bone were recovered. Steeply sloping sides led to a rounded base with width averaging 1.13m and depth 0.50m. Fills [055-056], [098-099], [210-211] and [309-310] were primarily natural silting consisting of pale to mid orangey greyish brown sandy silt.
- **F.18** NW-SE orientated ditch that truncated gully F.14. It had a visible length of 10.75m and three slots [066], [109] and [293] were excavated and worked flint and animal bone was recovered. Steeply sloping sides led to a narrow, rounded base with width averaging 1.46m and depth 0.76m. Fills [062-065], [106-108], [291-292] and [296] were mid yellowish brown sandy silts.
- **F.19** Substantial NE-SW orientated ditch that was cut by posthole F.27. It had a visible length of 51.25m and five slots, [081], [137], [180], [203] and [271] were excavated and pot, animal bone, worked animal bone, worked flint and burnt stone were recovered. Steeply sloping sides led a rounded base with width averaging 3.42m and depth 1.25m. Fills [067-080], [138-151], [168-179], [193-202] and [260-270] were a combination of backfill, slumping and natural silting, primarily consisting of pale to mid greyish brown sandy silts with some redeposited yellowish sandy gravel.
- **F.20** Modern square posthole. Cut [093] had steeply sloping sides leading to a flat base. Diameter 0.30m, depth 0.35m. Fill [092] was dark brown silty sand with rare small gravel inclusions.
- **F.21** Modern circular posthole. Cut [085] had moderately sloping sides leading to concave base. Diameter 0.35m, depth 0.10m. Fill [084] was mid brown silty sand with rare small gravel inclusions.
- **F.22** Modern circular posthole. Cut [083] had moderately sloping sides leading to a concave base. Diameter 0.30m, depth 0.09m. Fill [082] was dark brown silty sand with rare small gravel inclusions.
- **F.23** Modern square posthole. Cut [091] had steeply sloping sides leading to a flat base. Diameter 0.40m, depth 0.40m. Fill [090] was dark brown silty sand with occasional small gravel inclusions.
- **F.24** Modern square posthole. Cut [087] had steeply sloping sides leading to a flat base. Diameter 0.35m, depth 0.13m. Fill [086] was dark brown silty sand with rare small gravel inclusions.
- **F.25** Modern square posthole. Cut [089] had steeply sloping sides leading to a flat base. Diameter 0.40m, depth 0.02m. Fill [088] was dark brown silty sand with rare small gravel inclusions.

- **F.26** A curving gully whose orientation changes from NW-SE to NE-SW and was cut by ditches F.15 and F.17. It had a total visible length of 18.50m and five slots, [097], [111], [205], [250] and [276] were excavated and animal bone and worked flint were recovered. Steeply sloping sides led to a rounded base with width varying significantly between 0.33m and 1m and depth between 0.33m and 0.60m. Fills [096], [110], [204], [249], [274-275] were predominantly mid to dark reddish brown and grey brown sandy silts.
- **F.27** Sub-circular posthole. Cut [113] had steeply sloping sides leading to a concave base. Diameter 0.37m, depth 0.11m. Fill [112] was dark greyish brown silty sand with occasional small flint and gravel inclusions.
- **F.28** Sub-circular posthole. Cut [115] had steeply sloping sides leading to a concave base. Diameter 0.38m, depth 0.25m. Fill [114] was dark brown silty sand with common small flint and gravel inclusions.
- **F.29** Sub-circular posthole. Cut [117] had moderately sloping sides leading to a concave base. Diameter 0.21m, depth 0.05m. Fill [116] was very dark brown silty sand with rare small gravel inclusions.
- **F.30** Sub-circular posthole. Cut [119] had steeply sloping sides leading to a concave base. Diameter 0.28m, depth 0.21m. Fill [118] was dark greyish brown silty sand with occasional small gravel inclusions and rare charcoal flecks.

F.31 Same as F.8

- **F.32** NE-SW truncated ditch that cut treethrow F.34. It had a total remaining length of 6.50m and two slots, [131] and [155] were excavated. Pot and worked flint were recovered. Moderately steep sides led to a flat base with width averaging 0.60m and depth 0.10m. Fills [130] and [154], were mid reddish brown sandy silt.
- **F.33** Modern circular posthole. Cut [133] had almost vertical sides leading to a flat base. Diameter 0.50m, depth 0.22m. Fill [132] was dark grey sandy silt with common gravel inclusions and rare charcoal flecks.
- **F.34** Treethrow that was cut by ditch F.32. Two slots, [136] and [157] were excavated due to the presence of pot and worked flint. Width was 1m and depth up to 0.24m. Fills [134] and [156] were mid grey sandy silt.
- **F.35** NW-SE orientated ditch segment that cut ditch F.10. It had a total length of 5m and two slots, [39] and [153] were excavated. Width averaged 0.36m and depth 0.10m with gentle to moderately steep sides leading to a slightly rounded base. Fills [38] and [152] were mid reddish brown sandy silt.

F.36 Same as F.9

F.37 Circular posthole. Cut [167], fill [166]. Steeply sloping sides led to a rounded base. Diameter 0.35m, depth 0.15m. Fill was dark grey silty sand with rare gravel inclusions. No finds.

- **F.38** Treethrow. Cut [188] had irregular sides leading to an uneven base. Width 1.07m, depth 0.40m. Fill [187] was dark yellowish brown silty sand with frequent charcoal flecks. Contained pot, bone, worked and burnt flint.
- **F.39** NE-SW orientated ditch that was cut by ditches F.15 and F.48 and pit F.61. It had a total visible length of 39m and five slots, [192], [244], [254], [289] and [316], were excavated. Pot and animal bone were recovered. Width averaged 0.62m and depth 0.16m with moderately steep sides leading to a rounded base. Fills [191], [243], [253], [289] and [316] were mid greyish brown sandy silts.
- **F.40** Truncated curvilinear gully that was cut by pit F.61. It had a total visible length of 6.0m and one slot, [209], was excavated showing moderately steep sides leading to a rounded base. Width and depth were 0.30m and 0.07m respectively and fill [208] was dark brownish grey silty sand.
- **F.41** Circular posthole. Cut [214]had steeply sloping sides leading to a concave base. Diameter 0.30m, depth 0.15m. Fill [213] was mid greyish brown silty sand with occasional small gravel and charcoal inclusions.
- **F.42** Circular posthole. Cut [216] had steeply sloping sides leading to a concave base. Diameter 0.35m, depth 0.22m. Fill [215] was dark greyish brown silty sand with rare small gravel and charcoal inclusions. Contained burnt bone and worked flint.
- **F.43** Circular posthole. Cut [218] had steeply sloping sides leading to a concave base. Diameter 0.21m, depth 0.05m. Fill [217] was mid greyish brown silty sand with occasional small gravel and charcoal inclusions.
- **F.44** Circular posthole. Cut [220] had steeply sloping sides leading to a concave base. Diameter 0.30m, depth 0.11m. Fill [219] was mid greyish brown silty sand with rare small gravel and charcoal inclusions.
- **F.45** Circular posthole. Cut [222] had steeply sloping sides leading to a concave base. Diameter 0.32m, depth 0.12m. Fill [221] was dark greyish brown silty sand with occasional small gravel and charcoal inclusions. Contained pot.
- **F.46** Circular posthole. Cut [224] had steeply sloping sides leading to a concave base. Diameter 0.25m, depth 0.04m. Fill [223] was mid greyish brown silty sand with rare small gravel and charcoal inclusions.
- **F.47** Circular posthole. Cut [226] had steeply sloping sides leading to a concave base. Diameter 0.27m, depth 0.07m. Fill [225] was dark greyish brown silty sand with rare small gravel and charcoal inclusions.
- **F.48** NE-SW orientated ditch that cut ditches F.39 and F.59 and was cut by pit F.68. It had a visible length of 38.5m and four slots, [246], [248], [288] and [315] were excavated. Moderately steep sides led to a rounded base with width varying from 0.70m to 1.20m and depth from 0.17m to 0.25m. Fills [245], [248], [287], [314], [325] and [326-327] were primarily natural silting consisting of light to mid orangey brown silty sand.

- **F.49** Medium sized circular pit. Cut [257] had quite steeply sloping sides leading to a rounded base. Diameter 1.50m, depth 0.45m. Fills [255-256] were pale to mid reddish grey silty sand with occasional small gravel inclusions and rare charcoal flecks. Contained worked flint.
- **F.50** Small circular pit. Cut [259] had moderately steep sloping sides leading to a rounded base. Diameter 1.0m, depth 0.19m. Fill [258] was mid reddish grey silty sand with occasional small gravel and charcoal inclusions.
- **F.51** Small sub-oval pit that cut linear ditch F.54. Cut [279] had moderately steep sloping sides leading to a rounded base. Length 0.90m, width 0.75m, depth 0.46m. Fills [277-278] were mid reddish grey/brown silty sand with occasional gravel inclusions.
- **F.52** NE-SW orientated gully that was completely truncated to the southwest leaving a total remaining length of 6.0m. One slot, [281], was excavated and pot and animal bone was recovered. Quite steeply sloping sides led to a rounded base with width 0.50m and depth 0.20m. Fill [280] was reddish grey silty sand.
- **F.53** Treethrow. Cut [295] had irregular sides leading to an uneven base. Width 0.65m, depth 0.32m. Fill [294] was mid reddish grey silty sand with rare gravel inclusions and occasional charcoal flecks. Contained worked flint.
- **F.54** Recut of NW-SE orientated ditch F.55 that was truncated by ditch F.17 and pit F.51. It had a visible remaining length of 2.50m. One slot, [298], was excavated and animal bone, worked flint and burnt stone was recovered. Moderately steep sides led to a rounded base with width 0.75m and depth 0.48m. Fill [272] was mid brown sandy silt.
- **F.55** A NW-SE orientated extension to ditch F.10 that cut ditch F.26 and was cut by recut F.54 and pit F.51. It had a visible length of 4.50m. One slot, [297], was excavated and worked flint was recovered. Moderately steep sides led to a flattish base with width 0.60m and depth 0.35m. Fill [273] was mid reddish brown silty sand.

F.56 Number not used.

- **F.57** Circular posthole. Cut [330] had moderately sloping sides leading to a rounded base. Diameter 0.25m, depth 0.08m. Fill [329] was light grey silty sand with rare gravel and charcoal inclusions.
- **F.58** Circular posthole. Cut [332] had quite steeply sloping sides leading to a rounded base. Diameter 0.35m, depth 0.20m. Fill [331] was mid reddish grey silty sand with occasional small gravel inclusions.
- **F.59** NW-SE orientated ditch that was cut by ditch F.48. It had a visible length of 9.0m. One slot, [334], was excavated and showed moderately steep sides leading to a rounded base with width 0.56m and depth 0.16m. Fill [333] was mid brown silty sand.

- **F.60** Circular posthole truncated by linear ditch F.48. Cut [338] had almost vertical sides leading to a concave base. Diameter 0.23m, depth 0.30m. Fill [337] was light brown sandy silt.
- **F.61** Sub-circular pit that truncated ditches F.39 and F.48, curvilinear gully F.40 and posthole F.62. Cut [340] had diameter 1.40m and depth 0.33m. Fill [339] was greyish brown sandy silt with common small to medium sized gravel inclusions. Contained pot.
- **F.62** Circular posthole truncated by posthole F.48. Cut [344] had moderately sloping sides leading to a concave base. Diameter 0.18m, depth 0.05m. Fill [343] was reddish brown silty sand with occasional small gravel inclusions.