Mesolithic to post-medieval activity at Bartlow Road, Linton, Cambridgeshire

Post-Excavation Assessment and Updated Project Design

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Prepared by:	Anthony Haskins (Fieldwork Project Officer) and Tom Phillips (Senior Project Manager, Post-Excavation)
Checked by:	Nicholas Gilmour (Senior Project Manager)
Edited by:	Elizabeth Popescu (Head of Post-Excavation and Publication)
Approved for Issue by:	Elizabeth Popescu (Head of Post-Excavation and Publication)
Signature:	

OA South
Janus House
Osney Mead
Oxford
OX2 0ES

t. +44 (0)1865 263 800

OA East
15 Trafalgar Way
Bar Hill
Cambridge
CB23 8SQ

t. +44 (0)1223 850 500

OA North
Mill 3
Moor Lane Mills
Moor Lane
Lancaster
LA1 1QD
t. +44 (0)1524 880 250

e. info@oxfordarch.co.uk
w. oxfordarchaeology.com
Oxford Archaeology is a registered Charity: No. 285627

Director and Chief Executive
Gill Hey, BA PhD FSA MCIfA
Private Limited Company, No: 1618597
Registered Charity, No: 285627
Registered Office: Oxford Archaeology Ltd
Janus House, Osney Mead, Oxford OX2 0ES

Mesolithic to Post-medieval Activity at Bartlow Road, Linton, Cambridgeshire
Post-Excavation Assessment and Updated Project Design

Written by Anthony Haskins BSc MSc ACIfA and Tom Phillips BA ACIfA

With contributions by Lawrence Billington PhD, Anna Booth PhD, Carole Fletcher HND BA (Hons) ACIfA, Rachel Fosberry ACIfA, Hayley Foster PhD, Nick Gilmour MA (cantab) MA ACIfA, Ted Levermore MA, Alice Lyons BA MA MCIfA, Denis Sami PhD, Simon Timberlake PhD and Ian Riddler MA. Illustrations by David Brown BA

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Summary

Between 22nd October 2018 and 22nd February 2019 Oxford Archaeology East undertook an open area excavation within a parcel of land to the south of Bartlow Road, Linton, Cambridgeshire (TL 57242 46443). The excavation area measured 1.4ha within a total development area of 4.5ha. Area 1 encompassed most of the total area (1.3ha), while Area 2, close to the river in the south of the site, was much smaller (0.1ha).

The principal discovery was several significant flint scatters of Late Mesolithic date recovered from the upper horizons of the river terrace gravels in the southern part of Area 1, with further flintwork of a similar date being recovered from deposits of colluvium on the south-facing slope of Area 1 and also from later features. Within the gravels, the interpretation is that only the base of the Mesolithic land surface had survived, the flintwork having effectively sunk into 'softer patches' of the silty gravels. Despite the truncation of the land surface, exceptionally large assemblages of worked and unworked burnt flint were recovered from the four scatters; overall, the site produced one of the largest Mesolithic assemblages ever recovered from a single phase of excavation in Cambridgeshire. Field walking of the machined level produced *c*.2,000 struck flints from the surface of the gravels, whilst test pitting produced varying quantities, from less than 10 pieces in some, up to *c*.800-1,000 struck lithics in one test pit.

Neolithic and Early Bronze Age activity was evidenced by a much smaller assemblage of struck flint, including a single leaf-shaped arrowhead and several scrapers and edge-retouched pieces, mostly recovered from the colluvial layers in Area 1. A single pit containing Early Iron Age pottery was located in the east of Area 1, with a small number of further contemporary sherds recovered as residual material in later features.

Whilst there were no definite features of Romano-British date, finds of Roman pottery, ceramic building material and quern stone were recovered, which probably come from surrounding sites. Three Anglo-Saxon sunken-featured buildings were encountered on the south-facing slope of Area 1, with which a small number of pits were thought to be contemporary. Medieval and post-medieval activity was represented by ditches and a hollow way running along different contours in Area 1, as well as quarrying in the south of Area 1.

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1 INTRODUCTION

1.1 Background

1.1.1 This open area excavation was located at Bartlow Road, Linton, Cambridgeshire (TL 57242 46443; Fig. 1). The fieldwork was commissioned by Duncan Hawkins of RPS Consulting on behalf of Abbey Homes. The work was carried out in accordance with a brief issued by Kasia Gdaniec (2018) of Cambridgeshire County Council Historic Environment Team (CCCHET) and a Written Scheme of Investigation written by OA East (Gilmour 2018). As the archaeological remains present in the southern field would be impacted by the development, the local planning authority required an archaeological excavation to be carried out (in accordance with Policy CH/2 of the adopted Local Development Framework 2007) in condition 19 of the planning application S/1963/15/OL. The excavation was carried out between October 2018 and February 2019.

1.1.2 This assessment has been conducted in accordance with the principles identified in Historic England's guidance documents *Management of Research Projects in the Historic Environment*, specifically *The MoRPHE Project Manager's Guide (2015) and PPN3 Archaeological Excavation* (2008).

1.1.3 The development area is located on the eastern edge of the village of Linton, which lies close to the south-eastern border of Cambridgeshire. The River Granta flows just to the south of the site, with the route of the A1307 further to the south.

1.1.4 At the time of excavation the site was farmland adjacent to residential development. The southern field had been used for arable cultivation but was fallow prior to the start of fieldwork.

1.1.5 The development consists of housing across land of up to 4.5 ha, with primary below-ground impact deriving from building footings, road foundations, service easements, landscaping and balancing/drainage features.

1.2 Geology and topography

1.2.1 Understanding the geology and topography at Bartlow Road is integral to understanding the sequence of archaeological deposits and features. A detailed geological study has been carried out (Boreham, Appendix C.4), which examined the development of the riverine deposits, gravel terraces and formation of the hill wash. The following is a brief summary, referencing the detailed study, other sources and on-site observations.

1.2.2 Bartlow Road sits on a noticeable south-facing slope, which extends from *c.* 50m OD along the road itself, down to *c*. 40m OD along the southern edge of the field, close to the River Granta (Fig. 1). The geology on the northern flank of the River Granta is remarkably similar to the situation at Hauxton in the River Cam valley. Bedrock comprises chalk, which was visible in the northern half of the excavation area. The British Geological Survey map (Sheet 205) shows superficial deposits of undifferentiated 1st-2nd terrace deposits (river gravels) sitting over the chalk, which on site sealed the chalk in the south of Area 1 and in Area 2, forming a well-defined

break in slope across the site where the undifferentiated terrace deposits form a relatively flat surface.

1.2.3 The stripped area has also shown a complex of valley-side runnels or gullies (extending north-east to south-west, see Plate 10) and periglacially disturbed pellet chalk with silty-sandy slopewash formed immediately to the south of Bartlow Road.

1.2.4 There is evidence for silt-filled channels running on a north-west to south-east alignment across the site, although the terrace deposits mostly comprise sands and angular gravels. There are also deposits of silt and sand forming lobate fans, which originate from the valley-side runnel systems. These deposits appear to fill a series of slight depressions on the terrace surface that relate to pools or marshy areas. The edge of the terrace is clearly defined with a further break in slope leading down to the floodplain surface.

1.2.5 Layers of colluvium (hill wash which had moved down slope) sealed the chalk in the centre of Area 1 and there was alluvium (water lain deposits relating to the River Granta) recorded in Area 2. The alluvium may have originally extended further north, into the south of Area 1, but has been affected by plough truncation.

1.3 Archaeological background

1.3.1 Previous work carried out on the site includes the production of a desk-based assessment (Gilmour 2014), a geophysical survey (Bartlett 2015) and an archaeological trial trench evaluation (Clarke 2015). The following is taken from Clarke (2015) and Gilmour (2014), with references to entries from a 1km radius search of the Cambridgeshire Historic Environment Record (CHER). Entry numbers from the CHER are listed below and are depicted in Fig. 2. A new search of CHER records, examining a wider geographical area and tailored more specifically to the results of the excavation, will be conducted at analysis stage.

Mesolithic

1.3.2 Outside of the immediate development area considerable amounts of prehistoric activity have been identified in the Cam and Granta river valleys, often represented by flint scatters recovered from either surface collection or excavation. Many of these lithic assemblages represent multi-period palimpsest sites with multiple phases of activity from the Mesolithic into the Neolithic and Bronze Age. There are several sites in the immediate vicinity of the development area that have produced lithic assemblages of Mesolithic date but these are often represented by occasional residual microlithic tools rather than by larger assemblages. There are few large Mesolithic assemblages from Cambridgeshire more generally, and those which have produced larger numbers of diagnostic pieces (*i.e.* microliths) tend to be either dominated by Early/Middle Mesolithic forms, such as the Godwin Ridge, Over (Evans *et al*. 2016) or very diverse mixtures of broad-blade and narrow-blade forms indicative of episodic activity taking place across much of the period, for example Peacock's Farm, Shippea Hill (Clark *et al*. 1935; Clark 1955; Smith *et al*. 1989). In the immediate context of the Granta Valley, the quarry site at Bourn Bridge produced a mixed assemblage of struck flint of varying date (Pollard 1995). It included three tranchet adzes and a single microlith. A single microlith was recovered as a residual find in a predominantly

Neolithic and Early Bronze Age assemblage at Granta Park, Great Abingdon (Brudenell and Dickens 2004). Excavations at the Babraham Research Campus also produced mixed assemblages of Late Mesolithic and Early Neolithic flint work from periglacial hollows (Armour 2007; Collins 2012).

1.3.3 Within the immediate environs of the site, Mesolithic activity is limited. The nearest known Mesolithic activity at Linton Village College (1.5km to the west) produced a small assemblage of struck flint dated to the Late Mesolithic or Early Neolithic period, including a scalene triangle and microlith fragment (Clarke and Gilmour forthcoming). There was no known Mesolithic activity identified during the trial trench evaluation, apart from a finely worked transverse axe or adze that dated to the Mesolithic period (Bishop 2015). It was very similar to others recovered from along the Cam Valley, including at the Hinxton Genome Complex (Bishop 2016) and at the 'Spicers' site in Sawston (Bishop in press) and it is at least feasible that these were all made by the same community.

Neolithic

1.3.4 Neolithic activity is represented within the immediate environs of the development area. A scatter of retouched flints was recovered during field walking along the A1307 route directly to the south of the site (CHER 06166A). A Neolithic cursus measuring 158m long by 62m wide was identified during an evaluation to the north of the development area and south of Horseheath Road (CHER MCB22744; Bush 2016).

1.3.5 Further Neolithic remains are known along the Granta Valley. Most relevant here is Linton Village College, where several later Neolithic Grooved Ware pits, containing large quantities of pottery and flint, were excavated (Clarke and Gilmour forthcoming).

Bronze Age

1.3.6 There is only a small amount of Bronze Age activity recorded within 1km of the development area. The probable base of a Bronze Age spearhead, was recovered *c*.500m to the south-west of the site (CHER 11850). In addition, two Early Bronze Age ring-ditches were recorded at Linton Village College, along with a large Middle Bronze Age enclosure, from which almost 1000 Later Bronze Age struck flints were recovered (Clarke and Gilmour forthcoming). A potential barrow was also identified to the north in the field to the south of Horseheath Road (CHER MCB22744; Bush 2016).

Iron Age

1.3.7 Iron Age features, including pits and ditches were found during excavations at Linton Roman Villa, *c*.150m to the south of the site (CHER 09841A). Iron Age coins have also been found at this location (CHER 09842). One of the Darmsden-Linton Early Iron Pottery type sites is located *c*.1.4km to the east of the development (Fell 1953). A later Iron Age settlement, including an inhumation burial and evidence of iron-working, was more recently excavated at Linton Village College (Clarke and Gilmour forthcoming).

Romano-British

1.3.8 Approximately 150m to the south of the development is the site of Linton Roman Villa (CHER 09841), which has been documented through aerial photographs and excavations in the 1850s and 1990s. This villa has been recently designated as a scheduled monument (NHLE 1461035). The villa was an extensive stone-built building with tessellated pavements and painted wall plaster. Several outbuildings and find scatters have been recorded within this area (*e.g.* CHER 06111a, 06166, 11492), while pits and ditches containing Roman material were found south of the river during monitoring of a gas pipeline (CHER 06197). Several burials associated with the villa have also been documented (CHER 09841 and CHER 06167). A probable Roman walled cemetery, most likely associated with the villa, is recorded in the CHER as being located within the south-eastern corner of the development area (CHER 06198). Four inhumations were uncovered in 1852. The only recorded finds were an iron spearhead and some iron nails. A large amphora, other pottery vessels and a bronze brooch were found at the same location in 1926. However, the location of this cemetery cannot be confirmed with certainty and based on the findings of the current project, is potentially located closer to the villa.

1.3.9 A barrow of possible Roman date once stood on Linton Heath, on the north side of Linton Horseheath Road (CHER 06179b), although any mound had gone by the early 20th century.

Anglo-Saxon

1.3.10 Evidence for Anglo-Saxon settlement within the area of the development is poorly represented, although a sunken-featured building (SFB), dated to the 6th century AD, was found during the laying of a gas pipeline, *c*.300m to the south of the site (CHER 06129). Evaluation of the current site (CHER MCB23014; Clarke 2015) uncovered an SFB in Trench 11. The trench excavated part of the northern edge of the building and the northern posthole. An assemblage of handmade Anglo-Saxon pottery dated to the 6th-7th century was recovered from within the fills.

1.3.11 Anglo-Saxon burials have been reported from the Linton area. These include cremation burials to the north-west (CHER 06114) and inhumation burials to the south (CHER 06111a) and north-west (CHER 06114b and MCB17059). A large inhumation cemetery, excavated in the mid-19th century, was found in association with the possible Roman barrow on Horseheath Road (CHER 06179a). More recently, a small group of burials, with evidence of decapitation, was found at Linton Village College (Clarke and Gilmour forthcoming). Of particular interest is a potential Anglo-Saxon inhumation cemetery immediately to the north of the development area (CHER MCB16249), where human bone and Anglo-Saxon metalwork are reported to have been found during the house construction. There is also a report of an iron spearhead found with a burial within the possible Roman walled cemetery (CHER 06198). This could suggest that the cemetery was re-used in the Anglo-Saxon period and that the burial was of this date. A Saxon strap fitting was found by a metal detectorist in the area of Linton Roman Villa (CHER 09841b).

Medieval

1.3.12 The current parish of Linton represents an amalgamation of Great Linton, Little Linton and Barham. Ecclesiastical manuscripts dating to the 12th and 14th centuries reference the names *Lintune* or *Lintona* in association with the Abbey of Ely, notably the *Liber Eliensis*, which indicates its existence by at least 1008. The place names of *Lintone* and *Alia Lintone* recorded in the Domesday Survey (1086) are thought to originate from the name 'flax-farm', while the manor of Barham is likely to derive its name from 'enclosure on the hill' (Reaney 1943, 109; Taylor 1998, 55).

1.3.13 The deserted medieval settlement of Barham (called Bercheham in the Domesday Book) lies *c*.300m to the south of the development (CHER 08091). There are still visible earthworks in this area. Further earthworks were ploughed away during the 1980s (CHER 06111). The site of Barham priory was situated adjacent to this lost settlement (CHER 06101). Founded in 1292 as a Priory of Crutched Friars it survived until the Dissolution in 1539; one building was turned into a private residence following the Reformation (CHER 06101a). A medieval tile kiln was also located close to this settlement (CHER 06128) and a scatter of medieval pottery has also been recorded in the vicinity (CHER 06166B). The other medieval centres of Great Linton and Little Linton lie *c*.1.1km and *c*.2km to the west respectively.

Post-medieval

1.3.14 The market at Linton continued to prosper into the post-medieval period. In the early 16th century rows of stalls were named after specific provisions such as bread and meat, whilst by the 17th century rows were dedicated to woollen and linen drapers; tanners, shoemakers and glovers also had stalls here. By the 18th century the market was mainly selling corn. However, by the 19th century it had declined completely. Linton continued to be important for local commerce. A wide range of shops existed in the 19th and 20th centuries and the annual fair at Barham was revived, which in the 19th century became the largest sheep fair in Cambridgeshire (Taylor 1998, 58-9).

1.3.15 In 1648, during the second Civil War, a skirmish that was part of a wider East Anglian Royalist uprising is known to have taken place in Linton; it was quickly suppressed by the Parliamentarian forces (Sutton 2000, 54).

1.3.16 Most of the parish's open fields, which were combined with areas of pasture, were enclosed by *c*.1840 and a railway line from Haverhill to Cambridge was opened in 1865 and later became the county boundary (*ibid.*, 56). The enclosure map of 1838 shows the development site to have been fields.

Previous fieldwork

1.3.17 Several evaluations have been carried out locally in recent years. Trial trenching was carried out at the development site by OA East (CHER MCB 23013, MCB23014; Clarke 2015) and a further evaluation was carried out on land to the south of Horseheath Road (CHER MCB22744; Bush 2016). Further excavation has previously been carried out at Linton Roman Villa and at the walled cemetery (discussed above), while small-scale investigations took place at 91 Bartlow Road in 1991 (CHER 10141), revealing only a background scatter of prehistoric, Roman and medieval finds.

1.3.18 Geophysical survey (magnetometry) carried out at the current site (Bartlett 2015; Fig. 3) revealed a number of positive findings. These included parallel linear markings from a probable former roadway, which extended east to west across the north of the site and had previously been identified in aerial photographs. In addition the survey identified enclosures which may have been of post-medieval (or earlier) date. Many of the linear features revealed by the geophysical survey correspond with ditches found during the excavation.

1.4 Original research aims and objectives

1.4.1 The original aims of the investigation were to preserve by record the archaeological evidence contained within the footprint of the development area, prior to damage by development, and investigate the origins, date, development, phasing, spatial organisation, character, function, status, and significance of the remains revealed, and place these in their local, regional and national archaeological context.

1.4.2 Based on the results of the evaluation and the recommendations of the brief, more specific aims and research questions were formulated:

- To understand the character of prehistoric occupation in this section of the River Granta.
- To understand the nature of rural riverside settlement in the Anglo-Saxon period.
- To characterise the field system in the water meadow (floodplain) and on the terrace in relation to the local Roman and Anglo-Saxon settlement in this part of the village.

1.4.3 The excavation will be used to contribute to the goals of Regional Research Frameworks relevant to this area:

- Research and Archaeology: A Framework for the Eastern counties: 1. Resource Assessment (Glazebrook 1997, East Anglian Archaeology Occasional Papers 3);
- Research and Archaeology: A Framework for the Eastern counties: 2. Research Agenda and Strategy (Brown & Glazebrook 2000, East Anglian Archaeology Occasional Papers 8);
- Research and Archaeology Revisited: A Revised Framework for the East of England (Medlycott 2011, East Anglian Archaeology Occasional Papers 24).

1.5 Fieldwork methodology

1.5.1 The excavation area was defined in the brief issued by CCCHET (Gdaniec 2018) in accordance to the Chartered Institute for Archaeologists' Standard and guidance for archaeological excavation (2014a) and local and national planning policies. The excavation strategy was defined in the Written Scheme of Investigation (Gilmour 2018). This included 10% excavation of linear features, 50% excavation of discrete features and 100% excavation of structural remains.

1.5.2 Due to ecological constraints and spoil management issues the excavation area was reduced in consultation with Kasia Gdaniec (CCCHET). Area 1 was located in the north of the development area, to the south of Bartlow Road. The eastern and southern extents of Area 1 were defined by the location of the topsoil and subsoil heaps. Area 2 was located to the south of the topsoil heap along the edge of an ecological exclusion zone. Both areas were excavated using 20 tonne 360 mechanical excavators using a

1.8m ditching bucket. A series of three trenches were machine excavated through the post-medieval gravel extraction pits during machining.

1.5.3 Machine dug trial holes were also excavated within the river terrace deposits and the post-medieval hollow way, while a further area was stripped within the colluvial deposits at the edge of the river terrace. These excavations were carried out using a 7.5 tonne 360 mechanical excavator using a ditching bucket. These were hand cleaned after excavation and recorded.

1.5.4 Due to the exceptional nature of the Mesolithic flint scatters a separate excavation strategy was used following consultation with Lawrence Billington (OA East Lithics specialist) and Kasia Gdaniec (CCCHET). Hand collection of lithic material was carried out across the colluvial deposits and the terrace gravels, initially with individual recording of find spots (*c.*500 struck and burnt flints) but subsequently altered to collection using a 5m grid pattern. A series of test pits on an approximately 10m x 10m grid pattern were excavated within the colluvial and river terrace deposits. The areas of highest concentration of flint were excavated using a chequer-board of 1m x 1m text pits. The chequer-board excavation covered four areas within the surviving terrace gravels that produced significant assemblages of struck flints (Test pit groups 1 -4).

1.6 Project scope

1.6.1 This assessment covers the post-excavation assessment of the archaeological excavation and references the results of the evaluation where necessary (Clarke 2015). It encompasses all the excavated remains within the development area.

1.6.2 Detailed assessment reports have been prepared for several artefact categories, the intention being that as much resource as possible be retained for the focus of the analysis work – the Mesolithic worked and unworked flint assemblage. The artefact categories that have been assessed in more detail than would normally be expected include the medieval and post-medieval pottery, worked stone, ceramic building material, fired clay and worked bone.

2 FACTUAL DATA: STRATIGRAPHY

2.1 General

2.1.1 The development area (totalling approximately 4.5 ha) was subject to targeted open area excavation totalling 1.4ha in size, subdivided into two areas. Area 1 encompassed most of the total area (1.3ha), while Area 2, close to the river in the south of the site, was much smaller (0.1ha). The following stratigraphic records were created during the excavation (Table 1). An abbreviated context inventory can be found in Appendix A.

Record type	Number
Context registers	12
Context numbers	482
Plan registers	3
Section registers	3
Sections	107
Sample registers	20
Soil samples	116
Pollen samples	2
Small find registers	3
Digital photographs	c.1200

Table 1: quantification of records

2.1.2 Remains dating from the Mesolithic period through to the post-medieval period were uncovered during the excavation, with the results divided into five phases of occupation as follows:

Phase 1: Prehistoric; Mesolithic – Iron Age (c.10,000 BC – AD 43)

Phase 2: Romano-British (c.AD 43 – 410)

Phase 3: Anglo-Saxon (c.AD 410 – 1066)

Phase 4: Medieval (c.AD 1066 – 1500)

Phase 5: Post-medieval (c.AD 1500 – 1750)

2.1.3 The principal discovery was several significant flint scatters of Late Mesolithic date recovered from the upper horizons of the river terrace gravels in the southern part of Area 1, with further flintwork of a similar date being recovered from lobate fans of colluvium on the south facing slope of Area 1 and also from later features. Neolithic and Early Bronze Age activity was evidenced by a much smaller assemblage of struck flint, mostly recovered from the colluvial layers in Area 1. A single pit containing Early Iron Age pottery was located in the east of Area 1, with a small number of further contemporary sherds recovered as residual material in later features. Whilst there were no definite features of Romano-British date, finds of Roman pottery, ceramic building material and quern stone were recovered, which probably come from surrounding settlement sites. Three Anglo-Saxon sunken-featured buildings (SFB) were encountered on the south-facing slope of Area 1, while a small number of pits were thought to be contemporary. Medieval and post-medieval activity was represented by ditches and a hollow way running along different contours in Area 1, as well as quarrying in the south of Area 1.

2.2 Phase 1: Prehistoric

Later Mesolithic (c.7000 – 4000 BC)

2.2.1 The main area of prehistoric activity on the site took the form of several fairly substantial flint scatters recovered from the river terrace gravels in the south of Area 1 (Fig. 4). Four separate scatters were identified and each was subjected to gridded 1m x 1m test-pitting (Test Pit Group (TPG) 1-4; Plates 2-3). The vast majority of the flintwork is of Later Mesolithic date and within TPG1, 3 and 4 appeared to be sitting in the uppermost horizon of the river terrace gravels, confined to the uppermost 0.1m in most test pits (up to 0.2m thick in two test pits). These un-differentiated 1st and 2nd terrace gravels were formed in the mid Devensian or late Devensian (App C.4). Thus, the deposits from which the flint was recovered are not contemporary with the material they contained. In the south of Area 1 (TPG3) the deposit appeared to have a very silty composition (a mix of rounded, sub-rounded and sub-angular flint nodules within a matrix of dark greyish-brown silty sand), being a waterlain river deposit. The interpretation is that only the base of the Mesolithic land surface had survived, the flintwork having effectively sunk into 'softer patches' of the silty gravels, along with other later material. This was evident from a charred nutshell from TPG3 (context 674), which returned a radiocarbon date of 635-765 cal. AD (1352 ± 30 BP; SUERC-87380; 95.4% probability), dating the shell to the Middle Anglo-Saxon period. Despite the truncation and the potential for intrusive finds, exceptionally large assemblages of worked and unworked burnt flint were recovered from the four scatters. As discussed in Appendix B.4, only a rapid scan of a sample of the lithic assemblage has been undertaken for this assessment with the quantification completed so far tabulated below (Table 2).

Test Pit Group	No of test pits	No. Worked/ burnt flint from hand-collection	% of samples wet sieved at assessment stage	No. Worked flint from samples	Weight burnt flint from samples	Estimate: total no worked flint	Estimate: total weight burnt flint
1	10	4096	5	1039	1.9kg	>20,000	>38kg
2	10	400	7.5	535	0.6kg	10,000	8kg
3	9	577	7.5	1300	0.5kg	20,000	8kg
4	15	462	14	1200	0.7kg	8,500	5kg

Table 2: Summary of worked and unworked flint quantification following rapid scan assessment

2.2.2 Further struck flints were recovered from colluvial deposits, which sealed the terrace surface on the south-facing slope in Area 1. Comprising mid to light yellowish-red and reddish-yellow silts and sands, the colluvium measured up to *c*.0.3m thick. Over 3500 flints were recovered as a result of systematic surface collection undertaken over the colluvial deposits, including *c*.500 recorded three-dimensionally, with the remainder collected from a grid of 5m x 5m collection units (Appendix B.4). Altogether, flint was collected from 115 5m x 5m units, giving an average density of some 30 flints and up to maximum of 250 per collection unit.

2.2.3 Area 2 contained alluvial deposits comprising light yellowish-grey silts and sands measuring 0.12m thick. Three test pits excavated through the alluvium produced Late Mesolithic struck flints and burnt flints. One of these produced a small assemblage of 26 flints (hand-collection), while Test Pit 687 produced over 700 worked/burnt flints and Test Pit 651 yielded 330, including three microliths. Bulk sampling of 20 litres of a total of 190 litres (a *c*. 10% sample) of sediment from Test Pit 651 produced a further 194 worked flints, and on this basis complete processing of the samples from these test pits is expected to produce an assemblage of over 5000 worked flints (Appendix B.4).

2.2.4 Several small tree throws in Area 2 (**629**, **641** and **669**), measuring up to 1.8m wide and 0.34m deep, contained burnt and struck flint (267 fragments, 3151g), although no clearly dateable finds were recovered.

Neolithic – Iron Age

2.2.5 Within the worked flint assemblage only a small number of retouched items can, with any certainty, be attributed a Neolithic or Early Bronze Age date. These include a single leaf-shaped arrowhead and several scrapers and edge-retouched pieces, largely recovered from the colluvial deposits.

2.2.6 Only a small number of prehistoric features were identified during the works. They included a small hearth or fire pit (**610**) located in the south-east corner of Area 1, 5m north of Test Pit Group 1. Measuring 0.34m wide and 0.15m deep, pit **610** contained frequent burnt flint.

2.2.7 Pit **493** in the east of Area 1 contained Early Iron Age pottery (17 sherds, 504g), while a further 15 sherds (213g) of Early Iron Age pottery were found in another two pits, one ditch, one sunken-featured-building and two layers (Appendix B.6).

2.2.8 Pit **281**, located to the north of SFB3 (Phase 3; Fig. 5), was dated as Anglo-Saxon although it contained a mixed assemblage of Early (4 sherds, 50g) and Middle (4 sherd, 26g) Iron Age pottery, as well as four sherds (25g) of Early-Middle Anglo-Saxon pottery.

2.3 Phase 2: Romano-British

2.3.1 Assemblages of Romano-British pottery, CBM, metalwork and possibly quern stone were recovered from the excavation, but there were no features dating to the period. Pottery of Late Roman date totalled 53 sherds (441g), mostly as single pieces found in features/layers of earlier or later date. The Anglo-Saxon SFBs contained approximately half of this material, with Roman pottery recovered from SFB1 (6 sherds, 30g), SFB2 (19 sherds, 92g) and SFB3 (2 sherds, 22g). Further sherds came from test pits excavated through the colluvium, as well as four sherds (23g) from the Late Mesolithic flint scatters (from individual test pits in TPG1, 2 and 3).

2.3.2 Romano-British CBM totalled 53 fragments (9184g) and included diagnostic pieces of Roman brick and tile, including fragments of *tegula*, flue tiles and possible bonding tiles or *pedalis or besalis.* Approximately one third was recovered from the Anglo-Saxon SFBs (17 fragments, 3002g), with the remainder coming from medieval or post-medieval ditches, pits or quarry pits.

2.3.3 An undecorated copper alloy Romano-British bracelet (SF58) was found within the fill of SFB1 (Phase 3), whilst a copper alloy buckle plate (SF54) dates to the very Late Roman period to the early decades of post-Roman period (Appendix B.1). Lastly, some of the quern stone fragments recovered from features dating to the Anglo-Saxon period or later, may have been Roman-British in origin (Appendix B.10).

2.4 Phase 3: Anglo-Saxon

2.4.1 Anglo-Saxon activity on the site was limited to three sunken-featured buildings (SFBs) located on the south-facing slope in Area 1, along with a small number of pits (Fig. 5). This evidence may be all that survives of a larger settlement, if the remains of post-built structures were removed by ploughing. It may also be the edge of a settlement located further upslope (to the north).

2.4.2 The most northerly and westerly building (SFB1) was initially found during the evaluation (Clarke 2015). The sub-rectangular pit was 4.14m long, 3.16m wide and 0.32m deep (Fig. 6, Section 13; Plate 4) orientated on a NNE-SSW alignment. SBF1 contained two distinct fills, a lower fill of light brown sandy silt and an upper dark greyish-brown midden-like deposit. Both the fills produced a mixed assemblage of metalwork (four copper alloy items and 16 iron artefacts) including an undecorated Roman bracelet (SF58) in the upper fill. The ironwork comprised nails and other small tools, including a complete short, hand-forged knife type conventionally dated to *c*. AD 600-700 (SF59). Hand-made Early – Middle Anglo-Saxon pottery totalled 83 sherds (1342g) and included 10 fragments that were decorated with stamped motifs (Appendix B.8). Animal bone included 207 fragments identifiable to species (nearly half of which were cattle). Fragments of one or two Anglo-Saxon loomweights were also recovered (4 fragments, 43g; Appendix B.12), along with small fragments of weathered lava quern. The SFB had two post-holes located in the centre of the northern and southern edge (**465** and **499**). The post-holes were approximately 0.5m in diameter and up to 0.6m deep.

2.4.3 SFB2 also consisted of a sub-rectangular pit, located 28m to the south-east of SFB1. SFB2 truncated the colluvium on the edge of the gravel terrace and was both the largest SFB in plan as well as the shallowest, measuring 5.8m long, 3.8m wide and 0.24m deep (Fig. 6, Section 62; Plate 5), aligned WNW-ESE. The second SFB had an identical fill pattern to SFB1, although the upper midden layer had been truncated. It produced a mixed finds assemblage of hand-made Early – Middle Anglo-Saxon pottery (19 sherds, 278g), animal bone (94 fragments identifiable to species), a possible iron fastener (SF73), residual struck flints and four worked bone objects including a pin (SF125), two combs (SF50, 55) and a pin-beater (SF128) (Appendix B.13). The fragmentary pin dates to the period *c*. AD 575 – 750 and the combs confirm that dating, with the suggestion that the double-sided composite (SF50) is a 7th-century comb. A spindlewhorl was also recovered (SF135). The SFB had single postholes located in the centre of the east and west edges (**299** and **337**), as well as three postholes along the northern edge (**411**, **413**, **485**). The postholes measured between 0.15-0.6m wide and between 0.1-0.6m deep.

2.4.4 SFB3 was the most southerly building, located 40m to the south-east of SFB2, towards the eastern edge of excavation. It was oval in shape, orientated north to south, and

measured 4.2m long, 2.2m wide and 0.52m deep (Fig. 6, Section 43; Plate 6). The SFB had a posthole along the southern edge, which had been re-cut several times (including **345**) and a posthole located close to the centre (**478**), which measured 0.4m wide and 0.16m deep within the base of the SFB. SFB3 contained the same fill sequence of two fills. Finds included hand-made Early – Middle Anglo-Saxon pottery (9 sherds, 76g), an iron rod with a hook at one end (SF119) and animal bone (37 fragments identifiable to species).

2.4.5 In terms of charred seeds, all three SFBs produced a scatter of charred cereal grains (wheat, barley, rye (*Secale cereale*) and oat) and occasional legume fragments. SFB1 also produced a tentative indicator of cess in the form of a calcitic nodule.

2.4.6 Also phased as Anglo-Saxon were a total of eight pits, some associated with the SFBs. Pit **266** was located directly to the south-west of SFB2 and contained occasional charred wheat and barley grains, while a further three pits (**363**, **369** and **408**) were located approximately 20m to the south-west. Pit **363** contained three sherds (118g) of Sandy grey ware vessel base from a Late Roman dish, which was well-used with internal wear marks. Pit **369** contained one sherd (3g) of Early-Middle Anglo-Saxon pottery and one sherd (11g) of Roman pottery, while pit **408** contained a piece of lava quern (SF98), which resembles the lower stone typology of Anglo-Saxon collared querns (Appendix B.10). Three pits (**281**, **357** and **614**) were located to the north of SFB3 (Fig. 6, Section 16). Pit **281** contained a mixed pottery assemblage (see 2.2.8 above)

2.4.7 A partial horse burial in pit **305,** located in the west of Area 1, was assigned to this phase. It consisted of an articulated spinal column, ribs and lower extremities. Pit **552** to the south-east contained the remains of a partially articulated dog.

2.5 Phase 4: Medieval

2.5.1 Medieval activity on the site included a series of narrow, shallow ditches, aligned approximately ESE-WNW (Fig. 5). The main group of ditches extended on this orientation across the north of Area 1 (**203**, **209**, **215**, **229**), along with another ditch on a north-west to south-east alignment (**349**). Measuring between 0.06-1.14m wide and 0.05-0.41m deep, this group of ditches had a 'U' shaped profile and generally single fills of sandy silt. Finds comprised one sherd of Roman pottery (13g), seven fragments of CBM (522g) including medieval tile and post-medieval brick and tile, a small amount of residual flint and animal bone (97g). These ditches formed one version of a trackway (and possibly the earliest) which was represented in the post-medieval period by a hollow way to the north (**247** and **392**; Plate 8). A separate ditch on a similar alignment (**279**) was located 22m to the south (Fig. 6, Section 16), while a further boundary ditch system extended across the southern part of Area 1 (**236**, **238**, **240**). This series of intercutting ditches produced three sherds (78g) of medieval pottery dated AD 1200-1400 and a fragment of clay tobacco pipe (4g; Appendix B.14)

2.5.2 Other medieval activity was limited to a well (**206**) and a series of quarry pits within the chalk, upslope from the river terrace (including **271**, **379**, **526** and **580** in the eastern half of Area 1 (Plate 9) and **275** in the west of Area 1). All of these contained medieval pottery; dates typically ranged between AD 1050-1500 and wares included

Early Medieval Essex Micaceous Sandy ware, Medieval Sandy Greyware, Hedingham Fineware and East Anglian Redwares (Appendix B.9). The largest single assemblage came from pit **271** in the north-east corner of the site; a total of 70 sherds (489g) were recovered. These small borrow pits appeared to be for the collection of quantities of pellet chalk, possibly to produce lime. The quarrying activity extended into the post-medieval period.

2.6 Phase 5: Post-medieval and modern

2.6.1 Extending WNW-ESE across the north of Area 1, close to the northern limit of excavation, was a trackway or hollow way (**247** and **392**; Fig. 5). It comprised a wide, shallow linear feature, measuring up to 5.3m wide and 0.39m deep, with an irregular base and evidence of metalled surface in places (Fig. 6, Section 11 and Plate 8). Originally identified during the desk-based assessment and evaluation works (Gilmour 2014, Clarke 2015), the hollow way is also visible as a minor track on a 1799 map of Linton but does not appear on the Enclosure map of 1838 (Gilmour 2014). It is also visible on aerial photographs extending south-east towards Barham Hall (Palmer, in Gilmour 2014). Its inclusion on the 1799 map suggests it may already have been of some antiquity by this date, which was borne out by the evidence on site. Pottery recovered from the hollow way was a mixture of medieval (8 sherds, 114g) and post-medieval (9 sherds, 68g) wares, the latter including Post-medieval Redwares (AD 1550-1800; Appendix B.9). The in-filled hollow way also contained approximately 16 iron nails dating between the medieval and modern periods, a horseshoe (SF71), a modern pewter button (SF62) and a fragment of lead (SF67) (Appendix B.1). Animal bone totalled 559g.

2.6.2 A further linear feature (**415**=**439**) extended north to south from beyond the northern limit of excavation before joining the main hollow way. Measuring 4.51m wide and 0.54m deep, it may also have been part of the hollow way. It was capped by a fill of redeposited chalk, which was originally thought to be the possible foundation of a building. However, excavation showed this not to be the case; in profile it had the appearance of the upper fill of feature **415**.

2.6.3 Evidence for quarrying continued into the post-medieval period, represented in particular by the large extraction pits in the south of Area 1, which truncated the Mesolithic flint scatters. The quarrying appeared to be associated with the recovery of both larger flint nodules and gravel.

3 FACTUAL DATA: ARTEFACTS

3.1 General

3.1.1 The following artefacts and ecofacts were recovered:

Material	Number	Weight
Metalwork	100	-
Brooches	2	-
Metalworking waste	1	144g
Worked and unworked flint	22139*	150kg*
Glass	2	39g
Prehistoric pottery	58	876g
Romano-British pottery	53	441g
Anglo-Saxon pottery	126	1836g
Medieval and post-medieval pottery	424	4.209kg
Worked stone	78	13.41kg
Ceramic building material	169	17.33kg
Fired clay	20	272g
Worked bone	5	-
Clay tobacco pipe	2	15g
Animal bone	3079	37kg
Mollusca	9	86g

*Table 3: artefact data. * = Quantity catalogued for assessment, not total amount*

3.2 Metalwork

3.2.1 Excavation produced a total of 100 metal artefacts consisting of 24 copper-alloy, 70 iron, 5 lead and 1 pewter items (Appendix B.1). Three coins were also recovered. The assemblage is overall poorly preserved with finds oxidised and damaged by corrosion. Only the 18% of the assemblage is in complete condition, while 82% remains unidentified at this stage.

3.2.2 The assemblage is mostly indicative of building timber construction, domestic activity and dress accessories mostly dating to the medieval and post-medieval periods. Only two finds date to Romano-British activity and it is probable that they were reused in the Anglo-Saxon period. The largest group of finds is represented by iron hand-forged nails (40%) of different size and forms.

3.2.3 A group of 23 metal finds came from the fill of three Anglo-Saxon SFBs. These are predominantly incomplete iron nails or small unidentified tools. Four copper-alloy finds are also present including an undecorated Roman bracelet (SF58), found nearly complete in the fill of SFB1. From the same feature a small and thin strip of copper-alloy (SF123) was also recovered, with clear evidence of cut marks possibly from shears or scissors. Of particular interest is buckle plate SF54, which dates from the very Late Roman period to the early decades of post-Roman period. The buckle plate was recovered from an ancient colluvium deposit (context 219) very close to SFB1.

3.3 Brooches

3.3.1 The group consists of two brooches, a Nauheim Derivative (SF78) and Langton Down brooch (SF86), both dating from the early 1st century AD into the post-Conquest period (Appendix B.2). The finds were recovered during metal detecting of the topsoil.

3.3.2 SF78 is incomplete with part of the head and pin missing and damage to the catch-plate and bow. Despite this it survives in relatively good condition with a fine green patina and only minor corrosion and damage. SF86 has damage to its head and catch-plate and is missing its pin fitting and pin. The surface of the metal is heavily corroded, obscuring the decoration on the bow.

3.4 Metal working waste

3.4.1 A single piece of iron slag from context 258 (pit **256**, Phase 4) was examined from this excavation (Appendix B.3). Its presence may suggest that secondary iron smithing (possibly Anglo-Saxon/medieval rather than post-medieval) was probably taking place in the vicinity and the remains of a small smithing hearth base formed within the bottom of a forge hearth during the process of smithing iron upon an anvil.

3.5 Worked and unworked flint

3.5.1 The excavations produced a very large assemblage of worked and burnt flint – one of the largest ever recovered from a single phase of excavation in Cambridgeshire (Appendix B.4). The material was largely collected during surface collection, hand-excavation and extensive bulk sampling of lithic-bearing buried soils/old land surfaces and colluvial deposits preserved over large swathes of the southern part of the site. The vast majority of the flintwork is of Later Mesolithic date. This impression has been reinforced by typological analysis of the retouched forms recorded during the assessment and initial characterisation of the technological traits of the assemblage.

3.5.2 At present some 22,139 worked and burnt flints (undifferentiated) weighing over 150kg have been catalogued, and it is estimated that following the completion of the wet-sieving programme the worked flint assemblage will number somewhere around 70,000 pieces. Over two thousand worked/burnt flints were recovered from the excavation of cut features, whilst over 3500 flints were recovered as a result of systematic surface collection, undertaken over colluvial deposits and buried soils covering the southern part of the site.

3.5.3 The majority of the assemblage quantified to date, over 16,000 flints, derives from the excavation of a series of 1m x 1m test pits through the buried soils and associated deposits, again across the southern part of the site. Much of the flint from the major test pit groups, and many of the 'isolated' test pits, is in fresh, sometimes very fresh/mint condition, and appears to represent if not *in situ* material, then flintwork which has been subject to minimal disturbance. Taken as a whole, the assemblage is dominated by unretouched material, with cores, irregular waste, unretouched flakes and chips all very well represented, with low numbers of retouched tools and large quantities of unworked burnt flint.

3.6 Glass

3.6.1 A small assemblage of glass (2 fragments, 39g) was recovered from evaluation backfill and an SFB (Appendix B.5). The two pieces date to the 19th or 20th centuries and include a piece of colourless ?window glass and a shard from what is almost certainly a Victorian cylindrical or similar utility vessel.

3.7 Prehistoric pottery

3.7.1 An assemblage of prehistoric and Iron Age pottery totalling 58 sherds (876g) was recovered from the excavations, displaying a mean sherd weight (MSW) of 15.1g. The pottery was recovered from a total of 15 contexts relating to nine features/interventions. The pottery largely dates from the Early Iron Age, with small quantities of later material, although several sherds could not be closely dated.

3.8 Romano-British pottery

3.8.1 A total of 53 sherds, weighing 441g, of Late Roman pottery was recovered during the excavation (Appendix B.7). A minimum of 50 individual vessels are recorded, mostly as single pieces found with later material. The pottery is significantly abraded with an average sherd size of 8g and is residual in character. Roman pottery was primarily recovered from pits, Anglo-Saxon SFBs and Test Pits, with small quantities found in other features.

3.9 Anglo-Saxon pottery

3.9.1 A total of 126 fragments (1836g) of handmade Early/Middle Anglo-Saxon pottery (*c*. AD 450-850) were recovered (Appendix B.8). The condition of the overall assemblage is good with sherds moderately abraded and with an average sherd weight of 14.5g. Most of the pottery (88.08%) was recovered from the fill of three SFBs with a few residual fragments from pits and ditches dating to the medieval and post-medieval periods. Of the pottery from the SFBs, most came from SFB1 (83 sherds, 1342g) including 10 fragments decorated with stamped motifs.

3.10 Medieval and post-medieval pottery

3.10.1 A moderately-sized assemblage of medieval and post-medieval pottery (424 sherds, 4.209kg) was recovered, representing a minimum number of 172 vessels (Appendix B.9). The condition of the overall assemblage is moderately abraded; however, the average sherd weight is low, at approximately 0.009kg.

3.10.2 A single sherd of Late Saxon-early medieval Thetford ware was recovered. By comparison, 22 sherds (0.246kg) of early medieval fabrics were recovered. The majority of the assemblage (by weight) is medieval (Phase 4, *c*.1050-1500/1550), recovered from a range of features including a well, a number of ditches, and mostly from quarry pits. The remainder, with the exception of two intrusive medieval sherds from Phase 2, was recovered from Phase 5 (post-medieval and modern *c*.1550-1900). Vessels present are domestic in nature, jars being predominant by weight and count, then bowls, with jugs well-represented.

3.11 Worked stone

3.11.1 A total of 13.41kg (x78 pieces) of stone were examined from this excavation (Appendix B.10), of which 5.34kg (x36 pieces) consisted of worked stone (the vast majority of which was identified as being Romano-British or Anglo-Saxon rotary quern or millstone (4.815 kg)), some 7.19kg (x38 pieces) of burnt stone, with just 0.87kg (x 4 pieces) of probable building stone.

3.11.2 Most of the quern examined appeared likely to be early medieval (Anglo-Saxon) in date, with at least one of these pieces (SF 98) having been found within an Early Anglo-Saxon pit (**408**).

3.11.3 A single burnt prehistoric hammerstone came from a context within a large spread 'deposit', and may be Mesolithic – Bronze Age in date. Burnt stone came from a variety of different contexts, but most of this was prehistoric in character, some having been redeposited within later features, including an Early Saxon SFB and medieval ditches.

3.12 Ceramic building material

3.12.1 Archaeological excavation recovered 169 fragments (17335g) of ceramic building material (CBM; Appendix B.11). This assemblage comprised Romano-British material (53 fragments, 9184g; including fragments of *tegula*, flue tiles and possible bonding tiles or *pedalis or besalis*), medieval to post-medieval brick and tile (66 fragments, 7027g) and undiagnostic or undated material (50 fragments, 1124g). Generally, the CBM was moderately to severely abraded (average weight 103g) and collected from disuse fills of SFBs, pits and ditches. The assemblage was recovered from all phases, with the majority concentrated in Anglo-Saxon (Phase 3) and medieval (Phase 4) contexts. It is clear that the material is residual and/or intrusive in many features, affected by post-demolition activity, such as manuring.

3.13 Fired clay

3.13.1 Excavation produced 20 fragments (272g) of fired clay (Appendix B.12). The most significant portion of this assemblage comprises fragments of one or two Anglo-Saxon loomweights, collected from SFB 1 (4 fragments, 43g) and a small spindlewhorl (SF 135) recovered from SFB 2. They are largely unabraded and indicate domestic weaving activity. The weights, although minimal in number, can be tentatively placed within the Early to Middle Anglo-Saxon periods. The spindlewhorl is probably of a similar date.

3.14 Worked bone

3.14.1 A small assemblage of worked antler and bone objects, including a pin (SF 125), three combs (SFs 50, 55 and 126) and a pin-beater (SF 128), all came from fills of Anglo-Saxon SFB2 (Appendix B.13). It is likely that all five objects were deposited around the same time. The pin and the pin-beater represent common object types of the period. The combs include two common forms but also a fragment of a more enigmatic, single-sided composite comb that is likely to be of Continental origin.

3.14.2 It is difficult to be precise about the dating of these objects. The double pointed pin-beater belongs to a type that occurs across the entire Early Anglo-Saxon period. The

fragmentary pin narrows the date range to the period *c*. AD 575 – 750 and the combs confirm that dating, with the suggestion that the double-sided composite (SF 50) is a 7th-century comb.

3.15 Clay tobacco pipe

3.15.1 During the excavation, two fragments (15g) of white ball clay tobacco pipe were recovered from a ditch and hollow way (Appendix B.14). The pipe fragments do little other than to indicate the consumption of tobacco on, or in the vicinity of, the site at any time from the late 16th century onwards.

4 FACTUAL DATA: ENVIRONMENTAL AND OSTEOLOGICAL EVIDENCE

4.1 Faunal remains

4.1.1 The assemblage of faunal remains was of a medium size, with 37kg of bone recovered via hand collection and from environmental samples (Appendix C.1). There were 594 identifiable fragments that could be assigned to a phase, 21 of which were retrieved from environmental samples. A wide variety of species were represented and bone was recovered from features dating to the prehistoric, Anglo-Saxon, medieval and post-medieval/modern periods. Material was mainly recovered from ditches, pits and SFBs. The bulk of faunal material came from the Anglo-Saxon (Phase 3) and post-medieval/modern (Phase 5) phases.

4.1.2 A total of 400 identifiable fragments were retrieved from Anglo-Saxon (Phase 3) features, predominant from SFBs (SFB1 contained the largest amount with 207 fragments retrieved). Cattle and sheep/goat dominated the Anglo-Saxon phase and there was also a partial horse burial and the remains of a partially articulated dog. Bird species represented include domestic fowl and goose and were entirely retrieved from the SFBs. There was also a rare presence of small mammals, rodents and frogs from the SFBs, retrieved via hand-collection and environmental samples.

4.1.3 A total of 162 identifiable fragments were retrieved from post-medieval/modern (Phase 5) features. Rabbits, followed by sheep/goat were the best represented species.

4.2 Environmental samples

4.2.1 A total of 114 samples were taken from layers and deposits within the excavated areas (Appendix C.2). Plant remains are present in most of the samples, mostly in the form of poorly preserved, carbonised cereal grains that are abraded and/or fragmented. Charcoal volumes are mainly low and chaff and weed seeds are extremely rare within these assemblages.

4.2.2 Samples taken from prehistoric deposits (Phase 1) include samples from test pits in the flint scatters near the river. Several of the samples contain charred plant remains, mainly as single specimens of cereal grains. It is suspected that these remains are intrusive due to alluvial or colluvial action and bioturbation. The sample with the largest assemblage of charred plant remains is Sample 80 from one of the test pits within TPG4 (661), which contains moderate wheat (*Triticum* sp.), oat (*Avena* sp.) and barley (*Hordeum* sp.) grains and occasional peas (*Pisum*/*Lathyrus* sp.). Preservation of the plant remains is extremely poor which is another indication that the material could be intrusive.

4.2.3 Samples from Anglo-Saxon features (Phase 3) were taken from the deposits of three SFBs and associated features. All three SFBs produced a scatter of charred cereal grains (wheat, barley, rye (*Secale cereale*) and oat) and occasional legume fragments. SFB 1 also produced a tentative indicator of cess in the form of a calcitic nodule.

4.2.4 Samples taken from Phase 4 deposits produced sparse charred plant remains in the form of single cereal grains and charcoal. Only one sample from Phase 5 deposits

produced a moderate assemblage of charred plant remains; poorly-preserved grains of barley and wheat were recovered from dump layer 612.

4.3 Mollusca

4.3.1 A total of 0.086kg of marine shells were collected by hand from features, including a ditch, pits, SFBs and a well (Appendix C.3). The shell recovered is all oyster, *Ostrea edulis*, from estuarine and shallow coastal waters. The shell is moderately to poorly preserved and has suffered post-depositional damage. It represents general discarded food waste and the small and fragmentary nature of the total assemblage means it is of little significance beyond indicating transportation of a marine food source to the site and the ability to access food sources outside the immediate area and surrounding hinterland.

5 STATEMENT OF POTENTIAL

5.1 Stratigraphy

The excavation record

5.1.1 The site data is of sufficient quality to address all of the project's Research Objectives and will form the basis of further analysis and targeted publication of the key features, finds and environmental assemblages.

5.1.2 A key aspect of the analysis will be the spreads of Mesolithic worked flint in the south of Area 1, which appeared to be sitting in the uppermost horizon of the river terrace gravels. As well as investigating the lithic assemblage (see 5.2.4-5 and 6.2.14), the character of the flint-bearing deposits will require interpretation, through analysis of a monolith tin collected from the flint-rich deposits in TPG1 (see 6.2.34). It should be stated however, that much of the overlying deposits have since been truncated by ploughing and there was also possible truncation of the deposits in which the lithics were found. In addition, medieval and post-medieval quarrying has truncated the Mesolithic deposits. Nevertheless, what has survived is *in-situ* and in this regard the stratigraphy has the potential to address those research questions which relate to lithics.

5.1.3 Analysis will also examine the Anglo-Saxon remains in more detail, particularly the SFBs and the artefact assemblages associated with them. Located on the south-facing slope in Area 1, the SFBs were not obviously truncated by quarrying. Although a degree of truncation may have occurred from modern ploughing, this was probably not as severe as within the Mesolithic spreads and what has survived is *in-situ*.

Condition of the primary excavation sources and documents

5.1.4 The records are complete and have been checked for internal accuracy. Written and drawn records have been completed on archival quality paper and are indexed. All paper archives have been digitised into the individual site Access database. Site drawings have been digitised in AutoCAD.

5.1.5 All primary records are retained at the offices of OA East, Bar Hill. The site code LINBAR18 has been allocated and all paper and digital records, finds and environmental remains are stored under these codes. The receiving body for this archive, Cambridgeshire County Council Stores, have also allocated an Accession Number for these records: ECB5519.

Condition of features and deposits

5.1.6 The survival of archaeological features and deposits was generally good, retaining good depth and integrity. As noted above, medieval and post-medieval quarrying occurred across the site, especially to the south.

5.2 Artefacts

Metalwork

5.2.1 This small and poorly preserved assemblage has a low potential to expand our understanding of social and economic dynamics at the site. The metal artefacts from SFB1 are of local importance as they possibly relate to some form of metalworking activity. When discussed in association with the Anglo-Saxon pottery, this group of objects can contribute to a broader narrative about the Early Anglo-Saxon period.

Brooches

5.2.2 The two Roman brooches were recovered from the topsoil together with mostly medieval and post-medieval metalwork. Therefore, these brooches offer a very low potential for answering the project objectives although they may suggest the presence of Late Iron Age/Early Roman occupation in the surrounding area.

Metal working waste

5.2.3 What can be said about this slag is somewhat limited based on one piece. The fragment is suggestive of small-scale ironworking which probably dates to the Anglo-Saxon – medieval periods rather than to the post-medieval period. Unfortunately, this is not something that can be determined from the visual examination of the slag. Due to the very small size of the assemblage, the metal working waste has no further potential.

Worked and unworked flint

5.2.4 The very large assemblage of worked flint from Bartlow Road is of considerable regional importance. The most significant, and by far the largest, component of the assemblage is the Later Mesolithic flintwork recovered from test pitting in the southern part of the site. This material appears to relate to a single period and to have come from relatively undisturbed contexts. An extensive programme of sampling and wet sieving has allowed excellent recovery of the lithic material, an essential pre-requisite for dealing with assemblages of this date.

5.2.5 Single period Later Mesolithic assemblages of any size are very rare in Eastern England and this material has the potential to make a major contribution to a series of regional research objectives (see section 6 and Appendix B.4), formulated in reference to the 2011 Regional Research Framework (Medlycott 2011); the draft updated RRF period summary (Billington 2018) and the national *Mesolithic Research and Conservation Framework* (Blinkhorn and Milner 2013). Due to site-specific factors, such as a lack of other contemporary artefacts or faunal/environmental remains, vertical truncation and truncation by later quarry pits, the assemblage is best-placed to address research questions pitched at a larger scale, with an emphasis on the contribution the site can make to understanding regional-scale questions concerning Later Mesolithic activity, and its relationship to earlier and later periods.

Glass

5.2.6 The plain and fragmentary nature of the small assemblage (two fragments) means it is of little significance.

Prehistoric pottery

5.2.7 This is a very small assemblage and only has limited potential beyond indicating prehistoric activity on the site, specifically in the Iron Age. In terms of size and significance, the key assemblage derives from pit **493**. These Early Iron Age sherds are in very good condition and are very similar in form and fabric to the pottery recovered from Hadstock Road, Linton (Fell 1953), which forms one of the type sites for the Darmsden-Linton pottery group.

5.2.8 The other Early Iron Age pottery from this excavation is all likely to be residual within later features.

Romano-British Pottery

5.2.9 The small assemblage comprises abraded, locally made Late Roman coarse wares, with a small amount of traded fine wares also found. All the Roman pottery was found in Anglo-Saxon or medieval features and is therefore residual, with the exception of one Roman vessel base that was adapted for re-use in Saxon times.

5.2.10 Although high-status Roman activity is known to have taken place nearby with the Early Roman Bartlow Hills barrow cemetery only *c*. 2km to the south and a contemporary villa (CHER 09841) and cemetery (CHER 06198) located only *c*. 150m to the south, the assemblage from Bartlow Road is in poor condition and is only useful for confirming that contemporary activity was taking place in the vicinity of the excavation.

Anglo-Saxon pottery

5.2.11 The small assemblage can only provide a chronological contribution to the site's research objectives. However, when considered on a regional basis this assemblage is useful for understanding variability in terms of fabrics, forms and decoration of hand-made Early to Middle Anglo-Saxon pottery in the county.

Medieval and post-medieval pottery

5.2.12 The phased assemblage is not large, is heavily reworked and contains little material that is primary deposition, meaning that its potential is limited to indicating the supply of pottery and the uses of ceramics, at least in part, to the nearby deserted medieval settlement of Barham.

Worked stone

5.2.13 The potential of the worked stone relates to the probable early use of quern associated with the Anglo-Saxon SFBs. Whilst the occurrence of very small amounts of burnt and weathered lava quern within such buildings (perhaps even as residual Roman material)

is not unusual, what is more significant is the suggestion of their early introduction and use.

Ceramic building material

5.2.14 The entire CBM assemblage has been affected by post-discard processes; the Romano-British material is residual within the features it was found and the later material is intrusive to the features on site. This material is likely to have been brought to the site – or moved around the site – by demolition and agricultural processes and offers little information which contributes to the interpretation of the site. Therefore, its only potential relates to highlighting the possible presence of Romano-British buildings nearby.

Fired clay

5.2.15 This assemblage provides evidence for domestic weaving activity within the use-life of the SFBs. The weights, although minimal in number, can be tentatively placed within the Early to Middle Anglo-Saxon periods. The spindlewhorl is probably of a similar date. Due to the small number and limited range of clay objects it is not possible to make many further conclusions about this assemblage. The remainder of the material is limited to the detrital remains of prehistoric to medieval domestic and craft activity.

Worked bone

5.2.16 The pin belongs to a relatively common type and might contribute to the dating of the site but does not provide much additional information. The pin-beater is also a common form but it is unusual to see a short example, and it suggests that weaving was taking place on site. The double-sided composite comb is a valuable addition to the series of these items and it adds significant information about the type and its development, even in its fragmentary state. The single-sided comb is very likely to be Continental, even if it is difficult to track down its precise origins, as yet. Overall this is a small but very significant group from the Cambridgeshire area.

Clay tobacco pipe

5.2.17 The plain and fragmentary nature of the total assemblage (two fragments) means it is of little significance.

5.3 Ecofacts

Faunal remains

5.3.1 The material is a good representation of a predominant Anglo-Saxon and post-medieval/modern domestic faunal assemblage. The data represents a good quantity of identifiable animal bone. When viewed against data from contemporary sites in the region, it can be stated that in terms of taxa representation the assemblage mostly conforms to regional patterns.

Environmental samples

5.3.2 The bulk soil samples do not have any potential for further study. The use of preserved plant remains for radiocarbon dating is considered unreliable due to the lack of deliberate deposition within well-sealed deposits.

5.3.3 The monolith tins collected on site have further potential, for determining the character of the Mesolithic flint-bearing deposits in Area 1. Further work relating to this is discussed in the method statements (Section 6.2.31).

Mollusca

5.3.4 The quantity recovered is too small to represent anything other than casual disposal of rubbish of uncertain date.

5.4 Overall potential

5.4.1 The site has produced multi-period remains, dating to the Mesolithic, Iron Age, Romano-British, Anglo-Saxon, medieval and post-medieval/modern periods. The highest potential can be attached to the Later Mesolithic flintwork recovered from test pitting in the southern part of the site, which for the East of England is a rare example of a large Later Mesolithic assemblage and one which comes from relatively undisturbed contexts. Conversely, there were no other artefact or ecofact assemblages of Mesolithic date to accompany the flintwork, and the flint-rich deposits had been truncated by ploughing and post-medieval quarrying. Nevertheless, the flintwork alone can help to address regional-level research questions concerning Later Mesolithic activity, such as the chronology of Mesolithic flint assemblages, flintworking technology, the character and temporality of Late Mesolithic occupation and the nature of activities during the Mesolithic-Neolithic transition.

5.4.2 Iron Age and Romano-British activity was very limited and beyond providing evidence of settlement in the local landscape, the evidence has only low potential for informing about past land-use. Although Romano-British pottery and CBM was recovered, it was all found as residual material, mainly in features dating to the Anglo-Saxon period.

5.4.3 The Early Anglo-Saxon remains, comprising three SFBs, are more significant. The structures are unlikely to exist in isolation and probably formed part of a larger settlement. There is only limited evidence of Early Anglo-Saxon settlement nearby, along with evidence of burials including a potential Anglo-Saxon inhumation cemetery immediately to the north of the development (MCB16249, see Fig. 2). The SFBs contained a mixed artefact assemblage, including metalwork, pottery, quern stone fragments, a spindlewhorl, at least one loomweight and items of worked bone.

6 UPDATED PROJECT DESIGN

6.1 Revised research aims

6.1.1 The updated research aims and objectives are partially based on the original research aims and objectives, with reference to the regional research agenda where appropriate (*Research and Archaeology Revisited: A Revised Framework for the East of England*; Medlycott 2011). Divided chronologically, the updated research aims and objectives are structured below as a series of sub-headings.

Mesolithic (with Lawrence Billington)

6.1.2 The limitations of the Mesolithic evidence (no faunal remains associated with the flintwork, a dearth of organic remains, vertical truncation, truncation by quarrying) are described in more detail elsewhere (see statement of potential, section 5.2 and Appendix B.4). These factors mean that the research aims and objectives outlined below are mainly focussed on regional-scale questions concerning Later Mesolithic activity.

Temporal patterns in Mesolithic population density and land-use

6.1.3 A striking aspect of the record of Mesolithic activity in Eastern England is the larger number of Early Mesolithic sites and findspots when compared to those of Later Mesolithic date (Billington 2016). It has long been speculated that the fewer Late Mesolithic findspots in parts of Eastern and Southern England may relate to reduced population levels/settlement intensity caused by changing environmental conditions during the course of the Holocene (Jacobi 1987), whilst recent work in other parts of Britain has revealed evidence for a precipitous population decline in the Late Mesolithic associated with a period of climatic deterioration (the '8.2 kyr BP event' Wicks and Mithen 2014; Waddington and Wicks 2017).

6.1.4 A major regional research question is the extent to which the reduced record for Later Mesolithic activity does attest to a reduction in occupation/population decline of this kind, or whether it may instead largely reflect biases introduced by fieldwork methodologies which do not favour the recognition and recovery of Later Mesolithic flint assemblages (Billington 2018). The Bartlow Road assemblage has the potential to make an important contribution to this issue, providing rare evidence for intensive Later Mesolithic occupation. Analysis of the depositional context and landscape setting of the Later Mesolithic scatters should allow a considered discussion of the factors affecting the apparent under-representation of material of this date from the region.

Typo-chronology of Mesolithic flint assemblages

6.1.5 There is an almost complete dearth of reliable radiocarbon dates associated with Mesolithic activity in Eastern England and the dating of sites of this date is essentially reliant on the typological classification of microliths, which can be correlated with better-dated assemblages from elsewhere in Southern Britain. A persistent problem with this approach is the chronologically mixed nature of virtually all of the larger Mesolithic assemblages from the region, which include a very diverse range of

microliths types and clearly attest to numerous episodes of activity taking place over several millennia. A large sample of microliths (48) have already been identified in the assemblage and full processing and analysis are likely to bring to the total up to well over 150. The forms recorded to date appear to almost exclusively relate to Later Mesolithic activity, and detailed typological and metric analysis of this material has the potential to make a very important contribution to typo-chronological studies in the region.

Raw material selection, flintworking technology and tool-kit composition during the Mesolithic

6.1.6 As a rare example of a large chronologically unmixed Later Mesolithic assemblage, the flintwork also has the potential to provide an important insight into the organisation of lithic technology during this period, the nature of which will allow inferences to be made regarding mobility and subsistence patterns and allow explicit comparisons to be made with Early Mesolithic and Neolithic flint assemblages from the region. This should include study of raw material selection and use, core reduction strategies and the composition and character of the tools.

The character and temporality of Late Mesolithic occupation

6.1.7 Mesolithic communities are invariably seen as exhibiting relatively high levels of settlement mobility, with individual sites representing one component of a larger network of locales occupied on a seasonal or episodic basis. On this basis, a major research issue has been to establish the nature and duration of activity at specific sites and particularly whether they relate to short-term specialised activities or longer term residential occupation. Such studies are best suited to the best-preserved high integrity sites, resulting from single or few episodes of activity, and associated with faunal/environmental remains, and in these terms the Bartlow Road assemblage's limitations should be acknowledged. Nonetheless, study of the density, distribution, composition and character of the flintwork - with quantified comparison of differences between material from different parts of the site and with assemblages from elsewhere in the region – has the potential to allow at least a broad characterisation of the character and temporality of occupation and will have important implications for our understanding of Later Mesolithic settlement dynamics in the region.

The Mesolithic-Neolithic transition

6.1.8 Recent years have seen major developments in our understanding of the chronology and character of the Early Neolithic of Eastern England (Healy *et al.* 2011) but our understanding of the transition is hampered by a lack of well-dated Later Mesolithic sites. There has traditionally been a tendency to emphasise a degree of continuity over the transition, largely on the basis of certain similarities between Mesolithic and Neolithic flintworking technologies and the widespread occurrence of palimpsest lithic scatters producing artefacts of both periods (e.g. Reynolds and Kaner 2000; Edmonds *et al.* 1999). More recently, however, discussions have tended to be more cautious – emphasising that shared site location need not imply any kind of direct continuity and that in many cases there may be centuries or millennia separating different periods of use (see Healy 2012; Billington 2016, 350-1).

6.1.9 Although it is unlikely that it will be possible to date the Bartlow Road assemblage with the kind of precision necessary to demonstrate that it represents activity immediately prior to the onset of the Neolithic, it still has the potential to contribute to ongoing debates surrounding the nature of the transition. Assessment has suggested that there is very little evidence for Neolithic activity at the site and it will be important to establish if this impression is sustained by more detailed analysis, as it implies that despite the rich record of Early Neolithic activity from the Cam/Granta valleys (see Evans *et al*. 2018, 401-418), the intensive activity witnessed here during the Late Mesolithic was not continued into the Neolithic. The rare opportunity to characterise in detail the technology and composition of a chronologically unmixed Mesolithic assemblage will also allow explicit comparisons to be made with the earliest Neolithic lithic assemblages known from the area, which will contribute to understandings of the extent of demographic, economic and social changes associated with the introduction of agriculture.

Methodological approaches for the prospection and investigation of Mesolithic sites

6.1.10 A final research objective, repeatedly highlighted in the Regional Research Frameworks, is to assess and develop methodologies and approaches used to locate and investigate Mesolithic (and earlier) sites within the framework of developer-funded archaeology. It has long been acknowledged that the lithic scatter sites that characterise the period are poorly served by conventional evaluation and excavation methods (see Bradley (ed.) 1998; Blinkhorn 2012; Jones 2013), and the Barlow Road excavations provide an important case study of a project forced to deal with extensive well-preserved lithic scatters. In particular, the extensive use of whole-earth sampling and wet sieving has rarely, if ever been employed during the excavation of lithic scatters in the region, but may be the most appropriate and efficient way to deal with Mesolithic scatters, where the analysis of the finer fraction of flintwork is essential to ensure recovery of microliths and other highly diagnostic pieces. A transparent appraisal of the logistical and methodological challenges faced, and the value of the results obtained relative to the resources of the project, should be of wide interest to curators and contractors across the region in the context of developing suitable approaches to sites of this period.

Neolithic, Iron Age, Romano-British

Understanding the character of prehistoric occupation in this section of the River Granta

6.1.11 The evidence for activity in the Neolithic, Iron Age and Romano-British periods is too limited to address any research questions at a regional level. At a site specific level the original research aim stated above remains valid.

The wider Romano-British landscape and Linton villa

6.1.12 The Romano-British material, comprising pottery, CBM, metalwork and possibly quern stone, was all either residual or intrusive within features. However, the artefacts, such as fragments of *tegula*, flue tiles and possible bonding tiles or roof tiles, are a useful indicator of Romano-British settlement in the immediate vicinity and should be referenced in relation to the villa site to the south. In addition, known Roman sites

and roads/trackways should be mapped as part of the research, as these will not only help to put the site's Roman finds into context, but are of importance in understanding the Anglo-Saxon and later geography of this part of Linton.

Anglo-Saxon

Understanding the nature of rural riverside settlement in the Anglo-Saxon period

6.1.13 A total of three SFBs were revealed across the site, all of which contained Early – Middle Anglo-Saxon pottery, metalwork and animal bone, with fragments of loomweight coming from SFB1 and four worked bone items and a spindlewhorl recovered from SFB2. The location and distribution of these structures should be considered in relation to their riverside setting. Although it is thought that the finds within the SFBs were recovered from backfills rather than primary floor deposits, the distribution of finds will be plotted to determine whether any patterning exists.

Anglo-Saxon settlement patterns

6.1.14 There appears to be plenty of evidence for Anglo-Saxon burials in and around Linton, but very limited evidence for Early Anglo-Saxon settlement. Therefore the settlement evidence at Bartlow Road can assist, to some degree, in characterising settlement patterns in the local landscape. In addition, question-led research of the HER should be undertaken to determine a clearer picture of Anglo-Saxon material and land-use in the local landscape, including along the river's edge and at sites such as Barham DMV.

Medieval and post-medieval

Development of fields and communication routes in the medieval and post-medieval periods

6.1.15 The principal medieval and post-medieval features comprised a system of ditches orientated ESE-WNW and a similarly aligned hollow way in the north of the site, adjacent to Bartlow Road. These features can assist in defining the pattern of fields and land division in the medieval and post-medieval periods, while the hollow way is clearly a pre-cursor of Bartlow Road. Historic maps should be consulted to determine the antiquity of the hollow way and archival records should be checked for references to local roads.

6.2 Methods statement

Stratigraphic analysis

6.2.1 Context, finds and environmental data will be analysed with reference to site plans and topographic data. The specialist information will be integrated to aid in dating and to complete a more detailed phasing of the site. A full stratigraphic narrative will be produced, integrating the results of specialist analysis.

Illustration

6.2.2 The existing CAD plans will be updated with any amended phasing and the evaluation trenches directly adjacent to the excavation area, together with any archaeological

features within them, will be added. Additional sections informing the site narrative will be digitised. Any finds recommended for illustration will be hand drawn and then digitised, or where appropriate photography of certain finds-types will be undertaken. Distribution plots of the medieval pottery and Romano-British material will be created.

Documentary research

6.2.3 Primary and published sources will be consulted using the CHER, historic maps, aerial photographs and comparable sites both locally and nationally, in order to place the site within in its archaeological context with respect to the revised research aims. This evidence will be collated and where relevant reproduced in the publication.

Scientific Dating

6.2.4 Thus far, a single radiocarbon determination has been obtained, a charred nutshell from the Mesolithic flint-bearing deposits (TPG3, context 674), which returned an Anglo-Saxon date of 635-765 cal. AD (1352 ± 30 BP; SUERC-87380; 95.4% probability; Appendix C.5). Whilst this gives an indication that the flint-bearing deposits are partially re-worked river terrace deposits, the single date is not enough to prove this outright. Therefore, a series of dates are required, assuming that material suitable for radiocarbon dating can be obtained from the additional processing of samples.

Artefactual and environmental analysis

6.2.5 All the artefacts and environmental remains have been assessed with recommendations for further analysis given in the individual specialist reports. Further work is detailed below.

Finds distribution plots

6.2.6 Plotting of specific finds categories will assist in addressing the research aims and answering period-specific questions. For example, the metalwork (Appendix B.1-2), mainly from the colluvial deposits, suggests a spread of material of different dates across the site. Plotting of these finds in relation to the river, Anglo-Saxon SFBs and the trackway/road is important in determining the source of these artefacts in different periods.

6.2.7 The CBM should be plotted by phase to determine any correlation with the Anglo-Saxon SFBs; in other words, was Romano-British CBM being utilised in the SFBs?

6.2.8 Plotting of the medieval and post-medieval pottery will help determine the origin and dating of the trackway in the north of the site, specifically whether it originated in the medieval period and was adapted in the post-medieval period.

Metalwork

6.2.9 X-ray analysis will help to identify artefacts with particularly thick encrustation and will advise in drawing finds. A total of 23 artefacts should be considered for x-ray (see Table 16, Appendix B.1), comprising 22 iron items and a copper alloy bracelet (SF 58).

6.2.10 A total of eight metal artefacts should be considered for illustration (Table 17, Appendix B.1). These items were all recovered from or connected to SFB1. A high-resolution photograph should be taken of copper-alloy strip SF123.

Brooches

6.2.11 No further analysis is recommended for this assemblage.

6.2.12 Drawing is not recommended for either brooch given that neither is from a secure context.

Metalworking waste

6.2.13 No further analysis is recommended for this assemblage.

Worked and unworked flint

6.2.14 In order to effectively address the research aims and objectives outlined in Section 6.1, the following additional work is recommended:

- *Sorting and cataloguing.* All of the as yet unprocessed wet-sieved residues from the main test pit groups require sorting. Following this, the entire assemblage requires full cataloguing according to a standardised techno-typological classification including appropriate typological classification of retouched forms.
- *Selected detailed analyses.* In order to characterise the character and technology of the assemblage in more detail, selected samples of unretouched removals should be subject to detailed attribute analysis (recording technological traits such as platform type, dorsal scar pattern, hammer mode) and metric analysis (cf. Pitts and Jacobi 1979). A minimum sample size of 100 complete unretouched removals >20mm in size should be selected from each of the main test pit groups for these analyses.
- *Distributional analyses.* Following completion of the catalogue, the distribution of the lithic material from the main test pit groups should be analysed, with examination of the density of flint, its vertical and horizontal distribution and the distribution of different cases of artefact such as retouched tools/by-products, cores and burnt flint.
- *Illustration*. Provision should be made for extensive illustration of the assemblage, including a large proportion of the microliths and a representative sample of other retouched pieces and cores.
- *Reporting and publication.* The most effective way to report on the assemblage will be the production of a detailed grey literature/archive report, in which the assemblage and the various analyses can be described and catalogued in detail. This report should then form the basis for an abbreviated, illustrated report on the flintwork suitable for publication as part of a journal paper. The report and publication should include detailed discussion of the assemblage in its local (Cam/Granta Valley) and regional (Eastern England) context and explicitly address the main research aims set out above in the Statement of Potential.

Glass

6.2.15 The assessment acts as a full record for the archive. No further work is required.

Prehistoric pottery

6.2.16 The assemblage has been fully recorded and no further work is recommended.

Romano-British pottery

6.2.17 No further analysis is recommended for this assemblage.

Anglo-Saxon pottery

6.2.18 Anglo-Saxon pottery sherds from the evaluation (LINBAR14) should be checked for cross-fittings, added to the below catalogue and to the discussion at the next stage.

6.2.19 Thin section analysis is recommended for six fragments (two samples for each fabric). The results of this analysis will provide a valuable contribute in visually recognisable variations within fabric groups.

6.2.20 Analysis of organic residue is recommended for four sherds (Table 35). These analyses will aid understanding of the site economy, diet, form/function of vessels and culinary processes.

6.2.21 Further comparative analysis should be considered for stamped decorations in order to investigate possible patterns of similarities or variation with regional assemblages.

6.2.22 Up to 27 sherds, consisting of rims and decoration, should be considered for illustration (Table 36).

Medieval and post-medieval pottery

6.2.23 The assessment acts as a full record for the archive. No further work is required.

Worked stone

6.2.24 Whilst this assemblage, particularly the lava quern, has been examined in some detail, uncertainties remain about the contemporary identity and use/ re-use of the quern found within some of the Early Anglo-Saxon contexts. The analysis of this material may elucidate further information about its origin.

6.2.25 Further research into the occurrence and use of lava quern from Mayen within medieval England (in particular East Anglia) is likewise desirable, the information provided here being only an introduction to this subject. It will be necessary in this instance to refer to any published recommendations within the EH Research Agenda Strategy for the Eastern Counties re. medieval archaeology and the quern industry (SEE Brown & Glazebrook 2000).

Ceramic building material

6.2.26 The material has been fully quantified and catalogued. No further analysis is required.

Fired clay

6.2.27 No further analysis is required.

6.2.28 The loomweight and spindlewhorl should be considered for photography or illustration.

Worked bone

6.2.29 No further analysis is required.

6.2.30 Four of the objects should be illustrated (the pin, two semi-complete combs and pin-beater).

Clay tobacco pipe

6.2.31 The assessment acts as a full record for the archive. No further work is required.

Faunal Remains

6.2.32 All recording has been completed. Research on comparative sites needs to be carried out and a full report needs to be completed.

Environmental samples

6.2.33 The bulk soil samples have been fully assessed and no further analysis is recommended.

6.2.34 Whilst it is thought that the flint-bearing deposit in Area 1 appears to be re-worked or disturbed river terrace deposits (S. Boreham, pers. comm.), this statement requires validation. Therefore, a monolith tin taken from the flint-rich deposits 234 and 251 in TPG1 (where the gravel deposit containing the flint was at its thickest: 0.2m) will be analysed, to determine the character of the soil in which the flints were consolidated. In addition, a monolith tin taken from TPG3 (context 635) will be assessed; in this location closer to the river the flints were within a silty waterlain deposit, thought on site to be associated with a tree throw. This deposit was also noticeable for the presence of burnt flint and potentially earlier flints. Sub-samples will be taken from each monolith in Kubiena tins, which will then be processed to produce thin section slides and subjected to micromorphological analysis.

Mollusca

6.2.35 This statement acts as a full record for the archive. No further work is required.

6.3 Publication and dissemination of results

6.3.1 Following approval of the Post-Excavation Assessment Report by CCCHET, it will be lodged with the CHER and available online at the ADS and on the OA Library (https://library.thehumanjourney.net/).

6.3.2 A full analysis report will be produced which will include detailed specialist reports for those categories of artefacts and ecofacts that require it, along with finds illustrations. This will allow for detailed and full analysis of the worked flint assemblage in particular and will accommodate extensive illustration of the flintwork as recommended in the assessment (see 6.2.10 above and Appendix B.4).

6.3.3 Following completion of the full analysis report, the intention is to publish the findings as a synthetic article in Proceedings of the Cambridge Antiquarian Society (approximately 8000-10000 words). While the archive report will detail in full the stratigraphic sequence of the excavations and the specialist work, the aim of the article will be to focus on the Mesolithic findings. Rather than concentrating heavily on the lithics data (which will be available in the analysis report), the article will instead examine the regional-scale questions posited in the revised research aims above (Section 6.1).

6.3.4 The Anglo-Saxon and medieval to post-medieval findings are worthy of a suitable publication in the same journal series, although this should be separate from an article which focusses on the Mesolithic activity.

6.4 Retention and disposal of finds and environmental evidence

6.4.1 Retention/disposal recommendations for the various finds assemblages are detailed in the respective specialist appendices and summarised below (Table 4).

Assemblage	Retain/discard
Metalwork	Retain all except modern iron or iron from topsoil
Brooches	Retain
Metalworking waste	Retain
Worked and unworked flint	Retain struck flint. Unworked burnt flint can be discarded prior to archiving
Glass	Discard prior to archiving
Prehistoric pottery	Retain
Romano-British pottery	Retain
Anglo-Saxon pottery	Retain
Medieval and post-medieval pottery	Undiagnostic post-med should be considered for discard
Worked stone	Discard burnt stone and undiagnostic fragmentary lava quern Building stone: discretionary
CBM	Discard, except any diagnostic Roman tiles
Fired clay	Retain all but amorphous fragments
Worked bone	Retain
Clay tobacco pipe	Discard prior to archiving
Faunal remains	Retain
Environmental flots	Retain
Molluscs	Discard prior to archiving

Table 4: Finds and environmental retention/discard summary

6.5 Ownership and archive

6.5.1 OA East will retain copyright of all reports and the documentary and digital archive produced in this project (unless the client has reserved copyright). OA East will maintain the archive to the standards recommended by the Chartered Institute for Archaeologists (CIfA 2014), the Archaeological Archives Forum (Brown 2011) and all standards specified by CCCHET, until it is deposited with Cambridgeshire County Council Stores. Excavated material and records will be deposited with, and curated by, Cambridgeshire County Council Stores under the Site Code ECB5519. A digital archive will be deposited with OA Library/ADS. Cambridgeshire County Council requires transfer of ownership prior to deposition.

7 TEXT RESOURCES AND PROGRAMMING

7.1 Project team structure

7.1.1 The project team is set out in the table below:

Name	Initials	Organisation	Role
Nicholas Gilmour	NG	OA East	Project management/ prehistoric pottery
Anthony Haskins	AH	OA East	Project Officer
Elizabeth Popescu	EP	OA East	Post-excavation Project Management
Tom Phillips	TP	OA East	Post-excavation Project Management
Denis Sami	DS	OA East	Metalwork/ Anglo-Saxon ceramics
Simon Timberlake	ST	Freelance	Worked Stone/Metallurgy
Lawrence Billington	RB	OA East	Flint Specialist
Dave Brown	DB	OA East	Illustrator
Martha Craven	MC	OA East	Environmental Assistant Supervisor
Hayley Foster	HF	OA East	Faunal Remains
James Fairbairn	JF	OA East	Photographer
Katherine Hamilton	KH	OA East	Archives Supervisor
Illustrator		OA East	Illustrator (TBC)
Karen Barker	KB	Freelance	Conservator
Rachel Fosberry	RF	OA East	Archaeobotanist
Jo McKenzie	JM	Freelance	Soil Micromorphology
Newcastle University	NU	N/A	Micromorphology slide preparation
Scottish Universities Environmental Research Centre	SUERC	N/A	Radiocarbon dating

Table 5: Project Team

7.2 Task list and programme

7.2.1 The programme of work will commence on approval of this Post-Excavation Assessment and Updated Project design. The Analysis report will be delivered within 12 months of the work commencing. Following this, work on the publication will take place.

7.2.2 A task list is presented below. A programme is appended at the end of the report.

Task no.	Description	Performed by	Days
1	Project Management	NG/TP	3
2	Team meetings	NG/TP/AH	0.5
3	Liaison with relevant specialists	NG/TP/AH	0.5
Stage 1	**Stratigraphic Analysis**		
	Stratigraphic Narrative		
4	Update database and digital plans/sections to reflect any changes	AH	1
5	Finalise site phasing	AH	0.5
6	Finalise phasing and groups	AH	2
7	Add final phasing and groups to database	AH	1
8	Obtain HER search and visit record office to view historic maps	AH	1
9	Conduct spatial analysis	AH	2
10	Compile overall stratigraphic feature text and site narrative to form the basis of the full/archive report	AH	10

Task no.	Description	Performed by	Days
11	Review, collate and standardise results of all final specialist reports and integrate with stratigraphic text and project results for full/archive report	AH	5
12	Write discussion for full/archive report	AH	3
	Artefacts		
13	X-ray metalwork	KB	0.5
14	Process remaining samples from flint scatters	MC	30
15	Sort residues from flint scatter samples	Tbc	30
16	Worked flint cataloguing and full report	LB	30
17	Anglo-Saxon pottery: produce full report	DS	2
18	Worked stone: further analysis	ST	1
	Environmental		
19	Faunal remains: Produce full report	HF	4
20	Take samples in Kubiena tins from monoliths	RF	0.5
21	Prepare slides for micromorphology	NU	2 (slides)
22	Analysis of micromorphology slides and produce report	JM	5
23	Radiocarbon dating	SUERC	10 (samples)
	Illustration		
24	Select Sections for Illustration		0.25
25	Select Plates for Inclusion		0.25
26	Select flintwork for illustration		0.5
27	Illustrate selected Small Finds		3
28	Illustrate selected flintwork		5
29	Illustrate selected pottery		3
30	Produce site phase plans, sections and other figures		5
31	Illustrate Selected Sections		1
Stage 2	**Publication**		
32	Compile draft publication text		20
33	Review and collate final specialist reports		2
34	Compile list of illustrations/liaise with illustrators		2
35	Produce Figures		8
36	Collate/edit captions/bibliography/appendices		2
37	Internal Edit		4
38	Send for refereeing		1
39	Post-refereeing revisions		1
40	Final edit		1
Stage 3	**Archiving**		
41	Compile paper archive	KH	1
42	Archive/delete digital photographs	KH	1
43	Compile/check and deposit material archive	KH	1

Table 6: task list

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APPENDIX A CONTEXT INVENTORY

Context	Category	Cut	Feature Type	Function	Phase	Group	Breadth	Depth
203	cut	203	gully	boundary	4	203	0.73	0.2
204	fill	203	gully	disuse	4	203	0.7	0.2
205	layer	0	surface collection		0	0		
206	cut	206	well	construction	4	0	1.56	1
207	fill	206	well	disuse	4	0	0.21	1
208	fill	206	well	disuse	4	0	1.35	
209	cut	209	gully	drainage? Boundary?	4	209	0.49	0.17
210	fill	209	gully	disuse	4	209	0.49	0.17
211	cut	211	pit	unknown	5	0	1.3	0.26
212	fill	211	pit	backfill	5	0		0.26
213	cut	213	pit	unknown	5	0	1.3	0.25
214	fill	213	pit	backfill	5	0		0.25
215	cut	215	ditch	boundary	4	215	0.63	0.15
216	fill	215	ditch	silting	4	215		0.15
217	cut	217	ditch	boundary	0	0	1.5	0.22
218	fill	217	ditch	silting	0	0		0.22
219	layer	0	natural	colluvium	1	0		
220	deposit	0	layer		1	0		
221	deposit	0	layer		1	0		
222	deposit	0	layer		1	0		
223	deposit	0	layer		1	0		
224	deposit	0	layer		1	0		
225	layer	0	deposit		1	0		
226	deposit	0	layer		1	0		
227	cut	227	gully terminus	boundary	4	209	0.34	0.11
228	fill	227	gully terminus	disuse	4	209	0.34	0.11
229	cut	229	gully	boundary	4	229	0.35	0.1
230	fill	229	gully	disuse	4	229	0.35	0.1
231	cut	231	ditch	drainage/boundary	4	203	1.14	0.41
232	fill	231	ditch	disuse	4	203		0.41
233	layer	0	colluvium		1	0	1	0.27
234	deposit	0	layer		1	0	1	0.21
235	cut	235	SFB1	dwelling	3	0	3.16	0.32
236	cut	236	ditch	boundary/drainage	4	0	0.2	0.22
237	fill	236	ditch	disuse	4	0	0.2	0.22
238	cut	238	ditch	boundary	4	0	1.18	0.24
239	fill	238	ditch	disuse	4	0	1.18	0.24
240	cut	240	ditch	boundary	4	0	1.2	0.25
241	fill	240	ditch	disuse	4	0		
242	fill	235	modern	eval trench backfill	5	0		0.36
243	fill	235	SFB1	disuse-midden	3	0		0.24
244	fill	235	SFB1	uncertain	3	0		0.8
245	fill	235	SFB1	disuse	3	0	1.3	0.44
246	fill	235	SFB1		3	0	1.3	0.24
247	cut	247	ditch	hollow way	5	247	5.3	0.39
248	layer	247	surface (external)	roadway	5	247	2.48	0.11
249	fill	247	ditch	backfill	5	247	1.98	0.08

Context	Category	Cut	Feature Type	Function	Phase	Group	Breadth	Depth
250	layer	247	surface (external)	roadway	5	247	4.11	0.17
251	deposit	0	layer		1	0	1	0.11
252	deposit	0	layer		1	0	1	0.2
253	fill	247	hollow way	disuse	5	247	5.14	0.2
254	cut	254	ditch	drainage gully	5	0	0.6	0.28
255	fill	254	ditch	disuse	5	0	0.3	0.28
256	cut	256	pit	quarry pit	4	0	4.7	0.3
257	fill	256	pit	disuse	4	0		0.08
258	fill	256	pit	disuse	4	0		0.22
259	cut	259	pit	possible animal burial	5	0	0.84	0.12
260	fill	259	pit	backfill	5	0		0.12
261	layer	0	silts		1	0	1	0.12
262	layer	0	colluvium		1	0	1	0.21
263	deposit	0	layer		0	0	1	0.33
264	fill	266	pit		3	0		0.26
265	fill	266	pit		3	0		0.25
266	cut	266	pit		3	0	1.65	0.26
267	cut	267	ditch	boundary	0	0	0.55	0.15
268	deposit	267	ditch	disuse	0	0		0.15
269	cut	269	SFB2	structural	3	0		0.16
270	fill	269	SFB2		3	0		0.16
271	cut	271	pit	chalk quarrying	4	0	3.8	0.82
272	fill	271	pit	backfill	4	0	2.4	0.22
273	fill	271	pit	disuse	4	0		0.26
274	fill	271	pit	disuse	4	0		0.34
275	cut	275	pit	uncertain	4	0	3.36	0.68
276	fill	275	pit	disuse	4	0	2.93	0.68
277	fill	275	pit	slumping/silting	4	0	2.9	0.37
278	fill	275	pit	redeposited natural	4	0	0.68	0.34
279	cut	279	ditch	boundary	4	279	0.84	0.3
280	fill	279	ditch	silting	4	279	0.84	0.3
281	cut	281	pit	refuse	3	0	0.76	0.48
282	fill	281	pit	slumping	3	0		0.16
283	fill	281	pit	deliberate tip	3	0		0.06
284	fill	281	pit	deliberate backfill	3	0		0.12
285	fill	281	pit	silting	3	0		0.16
286	cut	286	post hole	structural	5	0	0.75	0.46
287	fill	286	post hole	disuse	5	0		0.4
288	cut	0	SFB3	sunken floored building	0	0	2.2	0.52
289	fill	286	post hole	post packing	5	0		0.46
290	cut	290	post hole	structural	5	0	0.8	0.32
291	fill	290	post hole	post packing	5	0		0.32
292	fill	290	post hole	disuse	5	0		0.32
293	cut	293	tree throw	natural	5	0	0.6	0.14
294	fill	293	tree throw	silting	5	0		0.14
295	cut	295	natural hollow	natural	5	0	0.4	0.38
296	fill	295	natural hollow	silting	5	0		0.38
297	cut	297	pit	storage	5	0	0.8	0.2
298	fill	297	pit	disuse	5	0		0.2

Context	Category	Cut	Feature Type	Function	Phase	Group	Breadth	Depth
299	cut	299	post hole (SFB2)	structural	3	0	0.5	0.6
300	fill	299	post hole (SFB2)	disuse	3	0		0.6
301	layer	0	deposit	colluvium?	0	0	4	0.15
302	cut	302	post hole	structural	0	0	0.4	0.22
303	fill	302	post hole	post packing	0	0		0.22
304	fill	302	post hole	disuse	0	0		0.2
305	cut	305	pit	horse burial	3	0	0.95	0.14
306	fill	305	pit	disuse	3	0	0.95	0.14
307	cut	307	SFB2		3	0		0.16
308	fill	307	SFB2	disuse	3	0		0.08
309	fill	307	SFB2	disuse	3	0		0.16
310	cut	310	ditch	boundary	4	0	0.79	0.32
311	fill	310	ditch	disuse	4	0		0.16
312	fill	310	ditch	disuse	4	0		0.18
313	cut	313	ditch	boundary	4	215	0.65	0.18
314	fill	313	ditch	disuse	4	215		0.18
315	cut	315	ditch	boundary	4	203	0.64	0.28
316	fill	315	ditch	disuse	4	203		0.26
318	cut	318		boundary	4	318	0.22	0.13
319	fill	318	ditch	disuse	4	318	0.23	0.13
320	cut	320	tree throw	natural	5	0	0.8	0.22
321	fill	320	tree throw	natural	5	0		0.22
322	cut	322	ditch terminus	boundary	4	209	0.3	0.18
323	fill	322	ditch terminus	disuse	4	209		0.18
324	cut	324	ditch	boundary	4	318	0.44	0.23
325	fill	324	ditch	silting	4	318	0.44	0.23
326	cut	326	ditch	boundary	4	318	0.53	0.17
327	fill	326	ditch	silting	4	318		0.17
328	cut	328	ditch	boundary	4	209	0.3	0.16
329	fill	328	ditch	disuse	4	209		0.16
330	cut	330	ditch	boundary	4	318	0.64	0.22
331	fill	330	ditch	silting	4	318		
332	cut	332	ditch	boundary	4	203	0.88	0.38
333	fill	332	ditch	silting	4	203		0.2
334	fill	332	ditch	disuse	4	203		0.18
335	cut	335	ditch	boundary	4	203	0.28	0.05
336	fill	335	ditch	disuse	4	203		0.05
337	cut	337	post hole (SFB2)	structural	3	0	0.44	0.54
338	fill	337	post hole (SFB2)	disuse	3	0		0.54
339	cut	339	SFB2	structural	3	0		0.2
340	fill	339	SFB2	disuse	3	0		0.2
341	fill	339	SFB2	disuse	3	0		0.06
342	fill	288	pit	Slumping	4	0	2.6	0.1
343	fill	288	pit	disuse	4	0		0.48
344	fill	288	pit	disuse	4	0		0.5
345	cut	0	post hole (SFB3)	structural	0	0	0.68	0.46
346	fill	345	post hole (SFB3)	disuse	0	0		0.46
347	fill	288	pit	disuse	4	0		0.48
348	fill	288	pit	disuse	4	0		0.5
349	cut	349	gully	drainage/boundary	4	349	0.39	0.14
350	fill	349	gully	disuse	4	349	0.39	0.14
351	cut	351	gully	drainage	4	349	0.06	0.06

Context	Category	Cut	Feature Type	Function	Phase	Group	Breadth	Depth
352	fill	351	gully	disuse	4	349		0.06
353	cut	353	ditch	boundary	4	279	1	0.23
354	fill	353	ditch	silting	4	279	1	0.23
355	cut	355	pit	unknown	0	0	0.42	0.3
356	fill	355	pit	backfill	0	0		0.3
357	cut	357	tree throw	natural	3	0	0.6	0.16
358	fill	357	tree bowl	natural	3	0		0.16
359	cut	359	gully	boundary/drainage	4	349	0.33	0.18
360	fill	359	gully	disuse	4	349		0.18
361	cut	361	gully terminus	boundary/drainage	4	349	0.34	0.13
362	fill	361	gully terminus	disuse	4	349		0.13
363	cut	363	pit	storage	3	0	0.97	0.35
364	fill	363	pit	disuse	3	0	0.97	0.35
365	cut	365	pit	unknown	3	0	0.55	0.23
366	fill	365	pit	disuse	3	0		0.23
367	cut	367	pit	unknown	3	0	0.76	0.14
368	fill	367	pit	disuse	3	0	0.76	0.14
369	cut	369	pit	unknown	3	0	0.9	0.28
370	fill	369	pit	redeposited natural	3	0	0.65	0.17
371	fill	369	pit	silting	3	0		0.15
372	cut	372	pit	quarrying	5	0	2.6	0.44
373	fill	372	pit	backfill	5	0		0.2
374	fill	372	pit	silting	5	0	2	0.3
375	cut	375	post hole	structural	5	0	0.4	0.22
376	fill	375	post hole	disuse	5	0	0.4	0.22
377	cut	377	pit	unknown	5	0	0.6	0.17
378	fill	377	pit	disuse	5	0		0.17
379	cut	379	pit	unknown	4	0	1.54	0.48
380	fill	379	pit	silting	4	0	0.62	0.2
381	fill	379	pit	deliberate tipping	4	0		0.2
382	fill	379	pit	silting	4	0		0.2
383	cut	383	gully	drainage	5	0	0.6	0.18
384	fill	383	gully	disuse	5	0		0.18
385	cut	385	ditch	trackway	5	247	2.2	0.5
386	fill	385	ditch	trackway	5	247		0.5
387	fill	385	ditch	disuse	5	247		0.38
388	fill	385	ditch		5	247		0.3
389	cut	389	ditch	trackway	5	0	4.9	0.52
390	fill	389	ditch		5	0		0.52
391	fill	389	ditch	disuse	5	0		0.4
392	cut	392	gully	drainage	5	392	0.5	0.42
393	fill	392	gully	disuse	5	392		0.42
394	fill	389	ditch	redeposited	5	0		0.38
395	cut	395	ditch	trackway	5	0	2.5	0.46
396	cut	395	ditch	disuse	5	0	2	0.34
397	cut	397	hollow way	trackway	5	247	3.56	0.34
398	layer	397	surface	trackway	5	247	1.96	
399	layer	397	surface	trackway	5	247	1.64	0.1
400	layer	397		trackway	5	247	1.6	
401	fill	397	hollow way	disuse	5	247	3.56	0.28
402	cut	402	ditch	trackway	5	0	0.78	0.16
403	fill	402	ditch	disuse	5	0		0.16

Context	Category	Cut	Feature Type	Function	Phase	Group	Breadth	Depth
404	cut	404	ditch	trackway	5	0	0.72	0.1
405	fill	404	ditch	disuse	5	0		0.1
406	cut	406	ditch	trackway	5	0	0.54	0.1
407	fill	406	ditch	disuse	5	0		0.1
408	cut	408	pit	unknown	3	0	1.83	0.28
409	fill	408	pit	silting	3	0	1.83	0.19
410	fill	408	pit	silting	3	0		0.23
411	cut	411	post hole (SFB2)	structural	3	0	0.15	0.1
412	fill	411	post hole (SFB2)	disuse	3	0	0.15	0.1
413	cut	413	post hole (SFB2)	structural	3	0	0.2	0.21
414	fill	413	post hole (SFB2)	disuse	3	0	0.2	0.21
415	cut	415	hollow-way	road	5	0	4.51	0.54
416	fill	415	hollow-way	disuse	5	0	4.51	0.34
417	layer	0	test pit	natural	1	0	0.58	0.24
418	layer	0	test pit	natural	1	0	4.66	0.59
419	layer	0	test pit	natural	1	0	2.87	0.42
420	cut	420	ditch	boundary	4	0	0.46	0.28
421	fill	420	ditch	disuse	4	0	0.46	0.28
422	cut	422	ditch	boundary	4	0	1.26	0.28
423	fill	422	ditch	disuse	4	0	1.26	0.28
424	cut	424	SFB2	structural	3	0	4	0.22
425	layer	0	test pit	natural	1	0	1.12	0.2
426	cut	426	quarry pit	extraction	5	0	3.86	0.56
427	fill	426	quarry	disuse	5	0	1.78	0.5
428	fill	426	quarry pit	disuse	5	0	2.12	0.56
429	fill	426	quarry	disuse	5	0	1.3	0.52
430	fill	426	quarry	disuse	5	0	1.6	0.57
431	layer	0	buried soil	natural	5	0	6	
432	layer	0	buried soil		1	0	0.9	0.34
433	layer	0	buried soil		1	0	3.36	0.16
434	layer	0	buried soil		1	0	1	0.28
435	layer	0	buried soil		1	0	0.36	0.58
436	layer	0	buried soil		1	0	0.9	0.51
437	fill	389	ditch	disuse	5	0		0.32
438	fill	395	ditch	disuse	5	0		0.24
439	cut	439	hollow-way	use	5	0	3.23	0.24
440	fill	439	hollow-way	disuse	5	0		0.24
441	fill	439	hollow-way	disuse	5	0		0.11
442	cut	442	pit	unknown	4	0	1.58	0.46
443	fill	442	pit	disuse	4	0		0.46
444	cut	444	pit	quarrying	4	0	0.77	0.3
445	fill	444	pit	disuse	4	0		0.3
446	cut	446	SFB2	structural	3	0		0.24
447	fill	446	SFB2	disuse	3	0		
448	cut	448	ditch	trackway	5	0	2.7	0.18
449	fill	448	ditch	trackway	5	0		0.18
450	fill	448	ditch	disuse	5	0		0.22
451	cut	451	pit	natural/storage?	0	0	3.1	0.42
452	fill	451	pit	disuse	0	0		0.42
453	cut	453	pit	hollow?	0	0	3.9	0.42
454	fill	453	pit	disuse	0	0		0.42
455	cut	455	SFB2	structural	3	0	1.74	0.19

Context	Category	Cut	Feature Type	Function	Phase	Group	Breadth	Depth
456	fill	455	SFB2	disuse	3	0		0.19
457	cut	457	gully	drainage	3	0	0.9	0.24
458	fill	457	gully	disuse	3	0		0.24
459	cut	459	ditch	trackway	5	0	2.4	0.62
460	fill	459	ditch	trackway	5	0		0.62
461	fill	459	ditch	disuse	5	0		0.6
462	cut	462	ditch	trackway	5	392	2.6	0.6
463	fill	462	ditch	trackway	5	392		0.6
464	fill	462	ditch	disuse	5	392		0.4
465	cut	465	SFB1	dwelling	3	0		
466	fill	465	SFB1	disuse	3	0		0.36
467	fill	465	SFB1	midden	3	0		0.3
468	fill	288	pit	slumping	4	0	2.6	0.1
469	fill	288	pit	disuse	4	0		0.48
470	fill	0	pit	disuse	0	0		0.5
471	fill	288	pit	slumping	4	0	2.6	0.1
472		288			4	0		0.48
473	fill	288	pit	disuse	4	0		0.5
474	cut	0	post hole (SFB3)	structural	0	0	0.8	0.4
475	fill	474	post hole (SFB3)	disuse	0	0		0.4
476	cut	0	post hole (SFB3)	structural	0	0	0.18	0.26
477	fill	476	post hole (SFB3)	disuse	0	0		0.26
478	cut	0	post hole (SFB3)	structural	0	0	0.4	0.16
479	fill	478	post hole (SFB3)	disuse	0	0		0.16
480	cut	0	post hole (SFB3)	structural	0	0	0.56	0.39
481	fill	480	post hole (SFB3)	disuse	0	0		0.39
482	cut	482	post hole (SFB2)	structural	3	0	0.36	0.3
483	fill	482	post hole (SFB2)	backfill	3	0		0.16
484	fill	482	post hole (SFB2)	backfill	3	0		0.14
485	cut	485	post hole (SFB2)	structural	3	0	0.16	0.1
486	fill	485	post hole (SFB2)	disuse	3	0		0.1
487	cut	487	SFB2	disuse	3	0		0.18
488	fill	487	SFB2	disuse	3	0		0.06
489	fill	487	SFB2	disuse	3	0		0.18
490	cut	490	SFB1	dwelling	3	0		
491	fill	490	SFB1	disuse	3	0		0.4
492	fill	490	SFB1	midden	3	0		0.3
493	cut	493	pit	unknown	4	0	0.99	0.17
494	fill	493	pit	disuse	4	0		0.17
495	cut	495	ditch	boundary	4	279	0.75	0.26
496	fill	495	ditch	disuse	4	279		0.26
497	cut	497	ditch	boundary	4	229	0.59	0.36
498	fill	497	ditch	disuse	4	229		0.36
499	cut	499	post hole (SFB1)	structural	3	0	0.49	0.66
500	fill	499	post hole (SFB1)	use	3	0		0.66
501	layer	0	Test pit		0	0		
502	layer	0	Test pit		0	0		
503	layer	0	Test pit		0	0		
504	layer	0	Test pit		0	0		
505	layer	0	Test pit		0	0		
506	layer	0	Test pit		0	0		
507	layer	0	Test pit		0	0		

Context	Category	Cut	Feature Type	Function	Phase	Group	Breadth	Depth
508	layer	0	Test pit		0	0		
509	layer	0	Test pit		0	0		
510	layer	0	Test pit		0	0		
511	layer	0	Test pit		0	0		
512	layer	0	Test pit		0	0		
513	layer	0	Test pit		0	0		
514	layer	0	Test pit		0	0		
515	layer	0	Test pit		0	0		
516	layer	0	Test pit		0	0		
517	layer	0	Test pit		0	0		
518	layer	0	Test pit		0	0		
519	layer	0	Test pit		0	0		
520	cut	520		trackway	5	392	1.28	0.21
521	cut	521	gully	drainage	5	392	0.81	0.2
522	fill	521	gully	disuse	5	392		0.2
523	cut	523	gully	drainage	5	392	0.22	0.1
524	fill	523	gully	disuse	5	392		0.1
525	fill	520	trackway	disuse	5	392		0.21
526	cut	526	pit	quarry	4	0	5.04	0.77
527	fill	526	pit	disuse	4	0		0.24
528	fill	526	pit	disuse	4	0		0.18
529	fill	526	pit	disuse	4	0		0.42
530	fill	526	pit	disuse	4	0		0.21
531	cut	531	pit	burning	1	0	0.4	0.15
532	fill	531	pit	disuse	1	0		0.15
533	cut	533	quarry pit	extraction	5	0	4.01	0.38
534	fill	533	quarrying pit	backfill	5	0		0.38
535	fill	533	quarrying pit	colluvial silting	5	0		0.17
536	cut	536	tree throw		1	0	1.78	0.13
537	fill	536	tree throw	disuse	1	0		0.13
538	cut	538	quarry	extraction	5	0	1.39	0.66
539	fill	538	quarry	infill	5	0		0.25
540	fill	538	quarry	infill	5	0		0.19
541	fill	538	quarry	infill	5	0		0.26
542	fill	538	quarry	infill	5	0		0.16
543	cut	543	gully terminus	use	5	0	0.45	0.11
544	fill	543	gully	disuse	5	0		0.11
545	cut	545	post hole	structure	5	0	0.12	0.04
546	fill	545	post hole	backfill	5	0		0.04
547	cut	547	tree throw	natural	1	0	0.23	0.19
548	fill	547	tree throw	natural	1	0		0.19
549	cut	549	ditch	hollow way	5	0	4.9	0.44
550	fill	549	ditch		5	0		0.4
551	layer	549	surface	trackway	5	0		0.04
552	cut	552	pit	use	3	0		
553	fill	552	pit	backfill	3	0		
554	layer	0	Test pit		0	0		
555	layer	0	Test pit		0	0		
556	layer	0	Test pit		0	0		
557	layer	0	Test pit		0	0		
558	layer	0	Test pit		0	0		
559	layer	0	Test pit		0	0		

Context	Category	Cut	Feature Type	Function	Phase	Group	Breadth	Depth
560	layer	0	Test pit		0	0		
561	layer	0	Test pit		0	0		
562	layer	0	Test pit		0	0		
563	layer	0	Test pit		0	0		
564	layer	0	Test pit		0	0		
565	layer	0	Test pit		0	0		
566	layer	0	Test pit		0	0		
567	layer	0	Test pit		0	0		
568	layer	0	Test pit		0	0		
569	layer	0	Machine slot		0	0		
570	layer	0	Machine Slot		0	0		
571	layer	549	surface	trackway	5	0	0.72	0.04
572	fill	549	ditch	levelling	5	0	2.4	0.2
573	fill	549	ditch	silting	5	0	3.28	0.34
575	cut	575	pit	quarrying	4	0	2.14	0.62
576	fill	575	pit	backfill	4	0		0.62
577	cut	577	pit	quarrying	4	0	1.79	0.82
578	fill	577	pit	backfill	4	0		0.54
579	fill	577	pit	silting	4	0		0.54
580	cut	580	pit	quarry	4	0	3.06	0.98
581	fill	580	pit	silting	4	0		0.98
582	cut	582	pit	quarry	5	0	0.64	0.42
583	fill	582	pit	disuse	5	0		0.42
584	layer	0	Test pit		0	0		
585	layer	0	Test pit		0	0		
586	layer	0	Test pit		0	0		
587	layer	0	Test pit		0	0		
588	layer	0	Test pit		0	0		
589	layer	0	Test pit		0	0		
591	layer	0	Test pit		0	0		
592	layer	0	Test pit		0	0		
593	cut	593	pit	use	5	0		0.34
594	fill	593	pit	disuse	5	0		0.34
595	cut	595	ditch	use	5	247	1	0.2
596	fill	595	ditch	use	5	247		0.1
597	fill	595	ditch	use	5	247		0.08
598	fill	595	ditch	disuse	5	247		0.05
599	cut	599	pit	use	5	0	0.7	0.34
600	fill	599	pit	disuse	5	0		0.2
601	fill	599	pit	disuse	5	0	0.7	0.34
602	cut	602	pit	use	5	0		0.28
603	fill	602	pit	disuse	5	0		0.28
604	cut	604	quarry pit	chalk extraction	4	0	3.1	0.6
605	fill	604	pit	disuse	4	0		0.22
606	fill	604	pit	silting	4	0		0.26
607	fill	604	pit	backfill	4	0		0.23
608	fill	604	pit	backfill	4	0		0.07
609	fill	604	pit	silting	4	0		0.08
610	cut	610	pit	fire pit	1	0	0.34	0.15
611	fill	610	pit	disuse	1	0		0.15
612	deposit	0	dump layer		5	0	1.4	0.1
613	deposit	0	dump layer		5	0	1.5	

Context	Category	Cut	Feature Type	Function	Phase	Group	Breadth	Depth
614	cut	614	pit	unknown	0	0	0.64	0.12
615	fill	614	pit	disuse	0	0		0.12
618	cut	618	pit	extraction	4	0	2.02	0.44
619	fill	618	pit	disuse	4	0		0.44
620	cut	620	surface	pot holing	5	0	1.6	0.1
621	layer	620	surface	pot holing	5	0		0.1
622	cut	622	three throw	natural	1	0	0.67	0.32
623	fill	0	three throw	natural	1	0		0.25
624	fill	622	tree throw	natural	1	0		0.07
625	layer	0	test pit	colluvium	1	0	1	
627	cut	627	ditch	use	5	0		
628	fill	627	ditch	disuse	5	0		
629	cut	629	tree throw		1	0		
630	fill	629	tree throw		1	0		
631	layer	0	alluvium		1	0		
632	layer	0	alluvium	test pit	1	0	1	
633	cut	633	ditch		5	0	0.97	0.45
634	fill	633	ditch	backfill	5	0	0.97	0.45
636	cut	636	ditch		5	0	1.1	0.5
637	fill	636	ditch	backfill	5	0	0.34	0.5
638	fill	636	ditch	backfill	5	0	0.52	0.44
639	cut	639	ditch		5	0	1.28	0.08
640	fill	639	ditch	backfill	5	0	1.28	0.08
641	cut	641	tree throw		1	0	1.8	0.2
642	fill	641	tree throw		1	0	1.8	0.2
643	layer	0	Test pit		0	0		
644	layer	0	Test pit		0	0		
645	layer	0	Test pit		0	0		
646	layer	0	Test pit		0	0		
647	layer	0	Test pit		0	0		
648	layer	0	Test pit		0	0		
649	layer	0	Test pit		0	0		
650	layer	0	Test pit		0	0		
651	layer	0	Test pit		0	0		
652	layer	0	Test pit		0	0		
653	layer	0	Test pit		0	0		
654	layer	0	Test pit		0	0		
655	layer	0	Test pit		0	0		
656	layer	0	Test pit		0	0		
657	layer	0	Test pit		0	0		
658	layer	0	Test pit		0	0		
659	layer	0	Test pit		0	0		
660	layer	0	Test pit		0	0		
661	layer	0	Test pit		0	0		
662	layer	0	Test pit		0	0		
663	layer	0	Test pit		0	0		
663	layer	0			1	0		0.2
664	layer	0	Test pit		0	0		
665	layer	0	Test pit		0	0		
666	layer	0	Test pit		0	0		
667	layer	0	Test Pit		0	0		
668	layer	0	Test pit		0	0		

Context	Category	Cut	Feature Type	Function	Phase	Group	Breadth	Depth
669	cut	669	pit	unknown	1	0	1.1	0.34
670	fill	669	pit	use	1	0	1.1	0.34
671	layer	0	Test pit		0	0		
672	layer	0	Test pit		0	0		
673	layer	0	Test pit		0	0		
674	layer	0	Test pit		0	0		
675	layer	0	Test pit		0	0		
676	layer	0	Test pit		0	0		
677	layer	0	Test pit		0	0		
678	layer	0	Test pit		0	0		
679	layer	0	Test pit		0	0		
680	layer	0	Test pit		0	0		
681	layer	0	Test pit		0	0		
682	layer	0	Test pit		0	0		
683	layer	0	Test pit		0	0		
684	layer	0	Test pit		0	0		
685	layer	0	colluvial hill wash	natural	1	0		0.12
686	layer	0	Test pit		0	0		
687	layer	0	Test pit		1	0		0.22
688	layer	0	Test pit		0	0		
689	layer	0	Test pit		0	0		
690	layer	0	Test pit		0	0		
99999	unstratified	0						

APPENDIX B ARTEFACT ASSESSMENTS

B.1 Metalwork

By Denis Sami

Introduction

B.1.1 The site produced a total of 100 metal artefacts consisting of copper-alloy (CuA), iron (Fe), lead (Pb) and pewter finds (Table 7). Three coins were also recovered and are catalogued in a separate dedicated excel database (Table 8).

B.1.2 This assessment does not include two early Roman copper-alloy brooches as they are described and discussed separately by Dr Anna Booth (Appendix B.2).

B.1.3 This assemblage is mostly indicative of timber building construction, domestic activity and dress accessories mostly dating to the medieval and post-medieval periods. Only two finds date to Romano-British activity and it is probable that they were reused in the Anglo-Saxon period. A small group of metal objects recovered from three Early to Middle Anglo-Saxon sunken-featured buildings (SFB) is dated to the phase spanning the 5th to the 9th centuries (Phase 3).

Metal	Quantity	Percent
CuA	24	24.00%
Fe	70	70.00%
Pb	5	5.00%
Pewter	1	1.00%
Total	**100**	**100.00%**

Table 7: Quantity and percent of the whole assemblage by metal

Material	Quantity
Ag	1
CuA	1
Total	**2**

Table 8: Quantity of coins by metal

Methodology

B.1.4 The metalwork was assessed according to the Oxford Archaeology East (OAE) metalwork finds standard, following the suggestions of the Historical Metallurgy Society (HMS, Datasheets 104 and 108), the *Archaeometallurgy. Guidelines for best practice* (HE, 2015) and the 2013, *Guidelines for the Storage and Display of Archaeological Metalwork* by the English Heritage.

B.1.5 Eva Evison (1987) provides the simplest typology and description of Anglo-Saxon knifes, this system was used in the description of small knife SF 52. Medieval metalwork has been fully explored by Clark (1995), Egan (1998) and Egan and Pritchard (1991). Musket balls were analysed on the light of Foard (2008 and 2009) while the

second volume of the English medieval hammered coins by North (1991) acted as the main reference for coin SF 90.

B.1.6 The Portable Antiquities Scheme (PAS) finds record guides and the Finds Research Group (FRG) datasheets are also here used in the description of finds.

B.1.7 The metalwork assemblage both from excavation and samples was quantified using an Access database. A single Excel database was used to enter details and measurements of each single artefact, this database was interrogated to compile statistics. All metal finds were counted, weighted when relevant and classified on a context by context basis. The catalogue is organised by context number.

B.1.8 The metalwork and archive (Excel/Access databases) are curated by OAE until formal deposition. Summary catalogues are provided in Tables 12-15.

Factual Data

B.1.9 Metalwork was recovered from topsoil, pits and ditches dating to the Early/Middle Anglo-Saxon, medieval and post-medieval periods.

B.1.10 The assemblage is overall poorly preserved with finds oxidised and damaged by corrosion. Only the 18% of the assemblage is in complete condition (Table 9), while 82% remains unidentified at this stage.

Condition	Percent
complete	18.00%
incomplete	82.00%
Total	**100.00%**

Table 9: Percent of complete and incomplete artefacts

B.1.11 The largest group of finds is represented by iron hand-forged nails (40%) of different size and forms.

Artefact	Quantity	Percent
bracelet	2	2.00%
bucket	4	4.00%
buckle	1	1.00%
buckle plate	1	1.00%
button	1	1.00%
fitting	1	1.00%
horseshoe	1	1.00%
key	1	1.00%
knife	1	1.00%
lace chape	1	1.00%
mount	2	2.00%
musket ball	3	3.00%
nail	40	40.00%
pin	1	1.00%
strap end	2	2.00%
Thimble	1	1.00%

Artefact	Quantity	Percent
tool	1	1.00%
unidentified	36	36.00%
(blank)		0.00%
Grand Total	**100**	**100.00%**

Table 10: Typology of artefacts

B.1.12 A group of 23 metal finds were found in the fill of three Anglo-Saxon SFBs (Table 11). These are predominantly incomplete iron nails or small unidentified tools. Five copper-alloy finds are also present.

Building	CuA		Fe				Total
	Unidentified	Bracelet	Unidentified	Pin	Knife	Nail	
SFB1	2	2	10	1	1	4	20
SFB2	1		1				2
SFB3			1				1
Total	**3**	**2**	**12**	**1**	**1**	**4**	**23**

Table 11: Metal artefact from Anglo-Saxon SFBs, by material and type

Copper-alloy (Table 12)

B.1.13 There is a strong possibility that the undecorated Roman bracelet SF58 (see Crummy 1983, p.46, fig.47) was reused as personal decoration in the Anglo-Saxon period (Caple 2010). This bracelet was found nearly complete in the fill of SFB1 (Phase 3) together with another 19 metal objects (Table 11). From the same feature a small and thin strip of copper-alloy (SF123) was also recovered, with clear evidence of cut marks possibly from shears or scissors. The overall composition of the assemblage from SFB1 suggests possible metalworking activity in the building. Notably, the largest assemblage of hand-made Early/Middle Anglo-Saxon pottery came from the same SFB (see Appendix B.8).

B.1.14 Of particular interest is buckle plate SF54. Recently discussed by Ellen Swift (2019), this typology of dressing accessories dates from the very Late Roman period to the early decades of post-Roman period. The buckle plate was recovered from an ancient colluvium deposit (context 219) very close to SFB1.

B.1.15 With the exception of a medieval copper-alloy gilded mount (SF88) that is a good quality and high-status item, copper-alloy artefacts recovered from layers and topsoil are common dress components or artefacts usually employed in domestic activity such as thimble SF91. They all date to the medieval or post-medieval periods.

SF	Context	Feature	Artefact	Quantity	Description	Length (mm)	Width (mm)	Thickness (mm)	Diam. (mm)	Weight (gr)	Spot date
45	492	SFB1	Unidentified	1	A sub-circular and slightly concave artefact	11	10	1.4		1.37	RM/E/ MAS
54	219	colluvium	Buckle plate	1	An incomplete folded rectangular buckle plate. At one end is the remain of the two slots "hinge". At the opposite edge, the plate has a scalloped edge with crescent shaped projections in each of the in-curved elements. Three rivet holes are set at the angles and centre along the decorated edge. One side of the plate present heavy worn. The alloy appears to be rich of tin.	32.9	43.3	0.2		3.53	RM
58	245	SFB1	Bracelet	2	A nearly complete, although in two parts bracelet formed by a narrow plain strip of metal ending with two tapering hooks	187.4	9.2	0.9		15.55	RM
63	253	hollow way	lace chape	1	A tapering folded sheet of metal with cylindrical cross-section	25.5			2.1	0.2	MED
79	Metal detected	Colluvium layer (west)	unidentified	1	A shapeless sheet of metal			0.2		0.86	MED/ PMED
81	Metal detected	SFB1	unidentified	1	A tiny strip of metal	49.8	9.6	0.2		1.66	MED/ PMED
82	Metal detected	SFB1	unidentified	8	Eight very small fragments of a sheet of metal						MED/ MOD
83	Metal detected	Colluvium layer (west)	buckle	1	A plate from a buckle formed by a thin trapezoidal sheet of metal	18.5	17.3	0.3		1.05	MED
84	Metal Detected	Colluvium layer (west)	strap end	1	A triangular sheet of metal with very straight sides. Two square little holes are positioned at the angles of the short side. The strap is decorated with a set of punched pits to form three little lozenges	18.4	11.8	0.2		0.59	MED/ PMED
87	Metal detected	Colluvium layer (east)	strap end	1	Three pieces acorn type strap end formed by two plates and a knoped spacer	18.2	6.8	2.2		1.99	MED
88	Metal detected	Colluvium layer (east)	mount	1	A rectangular mount made of a thin strip of metal folded on one long side. There is evidence of gliding on one face while on the other face a little cylindrical rivet is still preserved at the centre of the plate	20	9	1.8		1.52	
91	Metal detected	Trackway ditch	thimble	1	A thimble with slightly tapering sides from the base to the crown. The decoration is formed by circular drilled pits	19.4		0.3	18.8	2.57	PMED/ MOD

SF	Context	Feature	Artefact	Quantity	Description	Length (mm)	Width (mm)	Thickness (mm)	Diam. (mm)	Weight (gr)	Spot date
					forming a pattern of concentric circles.						
92	Metal detected	Trackway ditch	mount	1	A six foils-domed mount with two separate rivets and central hole	18.1	17.9	5.2		0.92	MED
96	Metal detected	Colluvium layer (west)	unidentified	1	A thin strip of metal with three little holes along one side and two holes along the opposite side	40.3	18.4	0.3		2.45	MED/ PMED
97	Metal Detected	Colluvium layer (west)	unidentified	1	A strip of metal hammered to form a grove along the length of the artefact	40.1	19.4	0.3		3.46	MED/ PMED
123	492	SFB1	unidentified	1	A very thin strip of metal showing marks of cuttings possibly from scissors	29.3	4.8	0.2		0.44	E/ MAS

Table 12: catalogue of copper-alloy artefacts

Ironwork (Table 13)

B.1.16 SFB1 produced 16 iron artefacts, mostly incomplete and unidentified. They consist of nails and other small tools probably connected with working activity associated with the SFB. Within this assemblage was a complete short, hand-forged knife type Evison 3 (Evison 1987, 113–16; also discussed in Lucy *et al.* 2009: 194-96) conventionally dated to *c*. AD 600-700. SFB2 produced a possible fastener and SFB3 a rod of metal with a hook at one end.

B.1.17 The remaining ironwork consists of unstratified medieval and post-medieval artefacts connected with agricultural, transport, domestic activity or timber building construction on site.

SF	Context	Feature	Artefact	Quantity	Description	Length (mm)	Width (mm)	Thickness (mm)	Diam. (mm)	Weight (gr)	Spot date
8	245	SFB1	unidentified	1	A narrow strip of metal twisted to for a ring with rectangular cross-section	15.2	13.4	2.8			E/MAS
51	Metal detected	Colluvium layer (central)	nail	1	Tapering shaft with sub-square cross-section and sub-circular flat head						MED/ MOD
52	Metal detected	Colluvium layer (central)	nail	1	A tapering and bent shaft						MED/ MOD
53	208	Well	unidentified	1	A long and slightly tapering strip of metal with rectangular cross-section and rounded end	125.1	18.3	3.1			MED/ MOD
56	241	Ditch	nail	1	Tapering shaft with sub-square cross section	49.3		6.1			AS-PMED
57	245	SFB1	pin	1	A long tapering shaft with circular cross section	103.1			4.2		E/MAS

SF	Context	Feature	Artefact	Quantity	Description	Length (mm)	Width (mm)	Thickness (mm)	Diam. (mm)	Weight (gr)	Spot date
59	243	SFB1	knife	1	A short knife with sub-rectangular cross-section central tapering tang splaying into a straight and angled back and slightly curved cutting edge.	64.8	8.9	3.6			E/MAS
59	243	SFB1	unidentified	1	A fragment of metal strip	24.3	24.1	4.9			E/MAS
61	246	SFB1	unidentified	1	A long strip of metal with moderate D shaped cross-section. At one end the strip is bent to form a long hook	18.6	8.8	2.3			E/MAS
63	253	hollow-way	nail	8	Fragment of nails						MED/ MOD
64	253	hollow-way	nail	1	A very large and short nail formed by a tapering shaft with sub-rectangular cross-section and rectangular flat head	99.5	64.4	11.3			MED/ MOD
65	253	hollow-way	nail	1	A very large and short nail formed by a tapering shaft with sub-rectangular cross-section and rectangular flat head	28.3	53.4	19.8			MED/ PMED
66	253	hollow-way	unidentified	3	Three shapeless lumps of metal						MED/ MOD
68	249	hollow-way	nail	1	Tapering shaft with sub-square cross-section						MED/ MOD
69	249	hollow-way	nail	2	Bent and tapering shaft with sub-square cross-section and rectangular flat head						MED/ MOD
70	249	hollow-way	nail	1	Short tapering shaft with sub-square cross-section and large circular head	12.3	10.1	2.4			MED/ MOD
71	249	hollow-way	horseshoe	1	Part of toe and branch of a horseshoe with a hole for nail	91.3	29.7	4.9			MED/ MOD
72	243	SFB1	unidentified	1	A rod of metal with sub-rectangular cross-section	64.5	8.4	5.5			E/MAS
73	270	SFB2	unidentified	1	A possible part of a fastener formed by a short rod of metal with circular cross-section flattered and expanded at one end	29.1	11.3	5.2			E/MAS
74	276	Pit	nail	1	part of tapering shaft with sub-square cross section						MED/ MOD
75	276	Pit	nail	1	Tapering shaft with sub-square cross-section						MED/ PMED
76	272	Pit	unidentified	1	A straight rod with circular cross-section tapering ate the ends	18.1		6.3			MED/ MOD
99	400	Layer	unidentified	1	A shapeless lump of metal						
100	400	Layer	nail	1	A short and bent horseshoe nail with bub-square cross-section tapering shaft and sub-pyramidal head	21.3	8.9	4.9			MOD

SF	Context	Feature	Artefact	Quantity	Description	Length (mm)	Width (mm)	Thickness (mm)	Diam. (mm)	Weight (gr)	Spot date
102	407	Ditch	unidentified	1	A shapeless lump of metal						MED/ MOD
103	388	Ditch	nail	1	Tapering shaft with sub-rectangular cross-section						MED/ MOD
104	388	Ditch	nail	1	Tapering shaft with sub-rectangular cross-section and sub-circular head	58.9	15.1	5.6			MED/ MOD
105	388	Ditch	nail	1	Tapering shaft with sub-rectangular cross-section						MED/ MOD
108	386	Ditch	nail	1	A tapering shaft with sub-square cross-section and sub-circular flat head	47.8	12.5	5.8			MED/ MOD
109	387	Ditch	nail	1	Tapering shaft with sub-rectangular cross-section and sub-rectangular head	68.2	12.1	6.2			MED/ MOD
110	387	Ditch	nail	1	Tapering shaft with sub-rectangular cross-section and sub-circular head	69.6	19.2	6.9			MED/ MOD
111	390	Ditch	nail	1	Tapering shaft with sub-rectangular cross-section and sub-circular head	68.3	15.4	4.9			MED/ MOD
112	391	Ditch	nail	1	Tapering shaft with sub square cross section and flat circular head	51.9	4.8	5.4			MOD
112	391	Ditch	fitting	1	Solid tapering shaft with sub-square cross-section	91.3		10.3			MED/ MOD
113	391	Ditch	nail	1	Tapering shaft with sub-square cross-section and sub-circular flat head	58.9	15.2	5.1			MED/ MOD
115	437	Ditch	nail	1	A tapering and bent shaft						
116	445	Pit	bucket	4	Four fragments of a possible small size cylindrical metal bucket or vessel flat base. The bucket is formed by a thin sheet of metal hammered and folded with a circular sheet of metal to for the base of the vessel.						MED/ PMED
117	441	Foundation	nail	1	Tapering shaft with sub-rectangular cross-section and sub-circular head	58.1		14.2			MED/ MOD
118	441	Foundation	unidentified	1	A shapeless lump of metal						MED/ MOD
119	473	SFB3	unidentified	1	Long thin rod with circular cross-section at one end it is flattened and forms a hook. At the opposite end a lump of rust suggest a second possible hook	119.4		3.5			MED/ MOD
121	492	SFB1	unidentified	1	A rod of metal with circular cross-section	69.2		3.4			E/MAS
122	492	SFB1	unidentified	1	A sub-rectangular sheet of metal with a possible fastening broken loop at one short side.	51.8	36.1	2.1			E/MAS
129	467	SFB1	unidentified	1	A possible wrought iron hinge formed by a narrow and slightly	71.5	16.7	3.2			E/MAS

SF	Context	Feature	Artefact	Quantity	Description	Length (mm)	Width (mm)	Thickness (mm)	Diam. (mm)	Weight (gr)	Spot date
					curved strip of metal with rectangular cross-section and straight sides. At the centre of the strip and on the internal side is a sub-cylindrical protuberance crossing from side to side the strip. At one end is a small circular fastening hole c.3mm						
130	492	SFB1	unidentified	1	A possible tool formed by a straight rod of metal with circular cross-section and flattened spatulated ends.	58.2	4.8	4.5			E/MAS
131	492	SFB1	nail	1	A heavily U shaped bent nail with tapering shaft and sub0square cross-section. Part of a sub-circular flat head is still preserved	36.1	19.2	5.4			E/MAS
132	492	SFB1	nail	1	A narrow tapering shaft with sub-rectangular cross-section and possible expanded square head	42.2	5.4	2.9			E/MAS
133	492	SFB1	unidentified	1	A sub-conical artefact with truncated tip	103.8	27.3				E/MAS
136	525	Trackway	nail	1	A very large and short nail formed by a tapering shaft with sub-rectangular cross-section and rectangular flat head	57.1	54.9	17.1			MED/ PMED
137	467	SFB1	nail	1	Tapering shaft with sub-square cross-section and sub-circular flat head	65.1		5.2			E/MAS
138	546	Posthole	nail	1	Tapering shaft with sub-square cross-section and sub-circular flat head	0					MOD
139	440	Foundation	tool	1	An unidentified artefact formed by a narrow and straight shaft with circular cross-section stepping into a triangular head	58.2	18.9	6.1			MED/ MOD
141	597	Ditch	nail	1	Tapering shaft with sub-rectangular cross-section and sub-rectangular head	81.2	28.9	16.3			MED/ PMED
142	597	Ditch	nail	1	A very large and short nail formed by a tapering shaft with sub-rectangular cross-section and rectangular flat head	71.2	60.1	15.3			MED/ PMED
143	609	Pit	nail	1	Tapering shaft with sub-square cross-section and sub-circular flat head	50.5	19.2	6.3			
144	TBC		key	1	A key with original D shaped bow now incomplete. The shaft is conical expanding toward the bit and it is decorated with ridges at the top and end. Solid circular in cross-section pin. The bit is formed by two	135.2	29.8	10.8			PMED

SF	Context	Feature	Artefact	Quantity	Description	Length (mm)	Width (mm)	Thickness (mm)	Diam. (mm)	Weight (gr)	Spot date
					symmetrical clefts divided into three wards						
145	245	SFB1	unidentified	1	A slightly curved rod of iron with sub-square cross-section	43.9		3.7			E/MAS
916	492	SFB1	nail	1	Tapering shaft with sub-square cross-section and sub-circular flat head	53.8	17.4	6.8			E/MAS

Table 13: catalogue of iron artefacts

Pewter (Table 14)

B.1.18 A single circular and undecorated pewter button was recovered from a post-medieval hollow way.

SF	Context	Feature	Artefact	Quantity	Description	Length (mm)	Width (mm)	Thickness (mm)	Diam. (mm)	Weight (gr)	Spot date
62	253	hollow-way	button	1	A cast circular flat pewter button with sub-circular fastening loop	9.8			17.1		MOD

Table 14: catalogue of pewter artefact

Lead (Table 15)

B.1.19 The weight and the calibre of musket balls SF80 and SF92 suggest these artefacts were 17th century pistol shots (Foard 2008 and 2009). Between 1646 and 1648, Linton was the background of intense skirmishes between Royalists and Parliamentarians. It is possible that the two pistol balls date to this period.

SF	Context	Feature	Artefact	Quantity	Description	Length (mm)	Width (mm)	Thickness (mm)	Diam. (mm)	Weight (gr)	Spot date
67	253	hollow way	unidentified	1	A slightly tapering rod of metal with sub-rectangular cross-section	67.8	8.8	4.1	15.4		MED/ MOD
80	Metal detected	Colluvium layer (west)	musket ball	1	A spherical ball possibly from a pistol				11.2	7.38	MOD
92	Metal detected	Trackway ditch	musket ball	1	A spherical ball possibly from a pistol				11.9	10.3	MOD

Table 15: catalogue of lead artefacts

Coins

B.1.20 Only a Late Roman copper-alloy coin in very poor condition and a late medieval silver penny were recovered from topsoil.

B.1.21 SF90. A silver penny of Henry VII dating to the years 1485-1509, North 1991, p.104, n1739

OB: Single arched crown, small facing bust. [+hEnRIC DI GRΛ REX] with cross fourchee
REV: [+hEnRIC DI GRΛ REX] with cross fourchee. CIVITΛS LO[nDOn]
Weight: 0.34
Diam: 11.4
Thick: 0.2

B.1.22 SF93. A coin possibly of Valentinian I; Valens or Gratian, Reece period 19 (AD 364-378)

OB: Emperor, bust right
REV: […]S[…]
Weight: 1.52
Diam: 15.9
Thick: 1.3

Statement of Potential

B.1.23 This small and poorly preserved assemblage has a low potential to expand our understanding of social and economic dynamics at the site. The metal artefacts from the SFB are of local importance as they possibly relate to some form of metalworking activity taking place within SFB1. When discussed in association with the Anglo-Saxon pottery, this group of objects can contribute to a broader narrative about the Early Anglo-Saxon period.

Recommendations for further work

B.1.24 X-ray analysis will help to identify artefacts with particular thick encrustation and to understand if some rusted finds have signs of repair or damage. X-ray analysis will in addition provide a good quality visual documentation and will help in drawing finds. A total of 23 artefacts should be considered for x-ray (Table 16).

SF	Context	Feature	Material	Artefact	Quantity	Condition	X-Ray
8	245	SFB1	Fe	unidentified	1	incomplete	yes
53	208	well	Fe	unidentified	1	incomplete	yes
57	245	SFB1	Fe	pin	1	incomplete	yes
58	245	SFB1	CuA	bracelet	2	incomplete	yes
59	243	SFB1	Fe	knife	1	complete	yes
59	243	SFB1	Fe	unidentified	1	incomplete	yes
61	246	SFB1	Fe	unidentified	1	incomplete	yes
72	243	SFB1	Fe	unidentified	1	incomplete	yes
73	270	SFB2	Fe	unidentified	1	incomplete	yes
116	445	pit	Fe	bucket	4	incomplete	yes
119	473	SFB3	Fe	unidentified	1	incomplete	yes
121	492	SFB1	Fe	unidentified	1	incomplete	yes
122	492	SFB1	Fe	unidentified	1	incomplete	yes
129	467	SFB1	Fe	unidentified	1	incomplete	yes
130	492	SFB1	Fe	unidentified	1	incomplete	yes
131	492	SFB1	Fe	nail	1	incomplete	yes
132	492	SFB1	Fe	nail	1	complete	yes

SF	Context	Feature	Material	Artefact	Quantity	Condition	X-Ray
133	492	SFB1	Fe	unidentified	1	incomplete	yes
137	467	SFB1	Fe	nail	1	incomplete	yes
139	440	foundation	Fe	tool	1	incomplete	yes
144		colluvium	Fe	key	1	incomplete	yes
145	245	SFB1	Fe	unidentified	1	incomplete	yes
916	492	SFB1	Fe	nail	1	complete	yes

Table 16: metalwork for x-ray analysis

Illustration

B.1.25 A total of eight metal artefacts should be considered for illustration (Table 17). These are metal finds recovered from or connected to SFB1. A high-resolution photograph should be taken of copper-alloy strip SF123.

SF	Context	Feature	Material	Artefact	Quantity	Condition	Illustration
8	245	SFB1	Fe	unidentified	1	incomplete	yes
54	219	colluvium	CuA	Buckle plate	1	incomplete	yes
57	245	SFB1	Fe	pin	1	incomplete	yes
58	245	SFB1	CuA	bracelet	2	incomplete	yes
59	243	SFB1	Fe	knife	1	complete	yes
61	246	SFB1	Fe	unidentified	1	incomplete	yes
129	467	SFB1	Fe	unidentified	1	incomplete	yes
130	492	SFB1	Fe	unidentified	1	incomplete	yes

Table 17: list of finds for illustration

Retention, dispersal and display

B.1.26 Iron metalwork from topsoil and modern contexts can be considered for discard after x-ray analysis (see list Table 16).

B.1.27 The remaining metalwork needs to be archived following the county procedure for archiving archaeological material.

B.2 Brooches

By Anna Booth

Introduction

B.2.1 The group consists of two brooches, a Nauheim Derivative and Langton Down brooch, both dating from the early 1st century AD into the post-Conquest period, with the former type continuing in use for slightly longer than the latter (Table 18). Both brooches were recovered during metal detecting of the colluvial deposits.

Methodology

B.2.2 Mackreth's typology, published in his 2011 volume *Brooches in Late Iron Age and Roman Britain* has been used here as it is the most recent comprehensive study of brooches of this period and deals with the forms discussed here in detail.

B.2.3 The catalogue is organised by SF number. Measurements are provided for each together with a description and suggested chronological range. Note that width is measured at the head of the brooch and thickness includes the catch-plate and head.

Factual Data

B.2.4 SF78 is incomplete with part of the head and pin missing and damage to the catch-plate and bow. Despite this it survives in relatively good condition with a fine green patina and only minor corrosion and damage.

B.2.5 SF86 has damage to its head and catch-plate and is missing its pin fitting and pin. The surface of the metal is heavily corroded, obscuring the decoration on the bow somewhat.

B.2.6 SF78 belongs to Mackreth's (2011, vol.I, 16) Nauheim Derivative Type 3.b1. His Type 3 appears to have been in use from the early decades of the 1st century AD to the later decades of the same century (*ibid*.), although it should be noted that Mackreth's typological divisions of the Nauheim Derivatives are in general supported by only limited dating evidence. Another of his Type 3.b1 from Canterbury was found in a context dated AD 15-43 (Frere *et al*. 1987, 185, fig.65.2) confirming their early origins. However, a Nauheim Derivative of another style from Foxholes Farm, Hertfordshire, found in a context dated 80-20 BC (Partridge 1989, 132 fig.76,5) provides an indication that some variants may have been in use even earlier during the previous century.

B.2.7 SF 86 belongs to Mackreth's (2011, vol.I, 34) Langton Down Type 2.b2. Mackreth's typological divisions of the Langton Down brooches were based on small stylistic details (in the case of the present sub-type relating primarily to the presence or absence of beading on the bow). These divisions are supported by the disproportionate distribution of his proposed variants across different King Harry Lane cemetery phases, but there remains little evidence from other sites to confirm that this is more than a site-specific trend. However, his re-dating of the King Harry Lane cemetery phases potentially pushes the general Langton Down chronology further back into the early decades of the 1st century AD, with some variants possibly even

earlier (*ibid*., appendix 1.) and the form does not appear to have remained in use for long beyond the Conquest.

Statement of potential

B.2.8 Both brooches were recovered from the colluvial deposits, together with mostly medieval and post-medieval metalwork (Appendix B.1). Therefore, these brooches offer a very low potential for answering the project objectives although they may suggest the presence of Late Iron Age/Early Roman occupation in the surrounding area.

Recommendation for further work

B.2.9 No further analysis is recommended for this assemblage.

B.2.10 Drawing is not recommended for either brooch given that neither is from a secure context.

Retention, dispersal and display

B.2.11 SF78 survives in good condition and should remain stable if stored according to the current guidance. SF86 may benefit from further cleaning and conservation to increase visibility of the decoration on the bow and ensure that the present level of surface corrosion does not deteriorate further.

SF	Context	Feature	Artefact	Description	Date
78	Metal detected	Colluvium layer (West)	Brooch	An incomplete copper alloy late Iron Age to early Roman Neuheim derivative brooch. The bow is an elongated triangular shape, rectangular in cross-section and the head bending at a right-angle in profile. The outer face of the bow is decorated with a fine longitudinal groove along each edge. There is a small notch missing to the right-hand side of the centre of the bow. One coil survives to one side of the head, but the rest of the spring and pin are missing. The lower bow tapers to a sharp point and to its rear is a small trapezoidal catch-plate with a small break and hole through its upper edge. The original Neuheim brooch features an open-work catch-plate and it is the absence of this that distinguishes their derivative forms. This belongs to Mackreth's (2011) Type 3.b1. L: 52.0mm, W: 7.0mm Th:1.5mm, W: 2.32g	c.50 BC- AD 100
86	Metal detected	Colluvium layer (West)	Brooch	An incomplete copper alloy Iron Age to early Roman Langton Down brooch. The head would have been almost fully cylindrical originally, although most of the rear section is now missing together with the pin spring it once contained. The bow has a rounded hump where it joins the head is straight when viewed in profile and tapers very slightly towards the foot. Its outer face is decorated with a pair of fine longitudinal raised lines running down the centre and along each edge. To the reverse of the lower bow there is the damaged remains of an open-work catch-plate. This example belongs to Mackreth's (2011) Type 2.b2. L: 39.5mm, W: 15.5mm, Th: 13.0mm, W: 5.22g	c.AD 15-60

Table 18: Brooch catalogue

B.3 Metal working waste

by Simon Timberlake

Introduction

B.3.1 A single piece of iron slag from context 258 (pit **256**, Phase 4) was examined from this excavation.

Methodology

B.3.2 The slag was identified visually using an illuminated x10 magnifying lens, and compared with an archaeological slag reference collection. A dropper bottle containing dilute hydrochloric acid was used to confirm the presence or absence of calcite. In addition, the slag was tested with a magnet to confirm the presence of wustite or free iron.

Iron Slag

B.3.3 The single piece of slag from this context consisted of a broken-up fragment of a very porous and vesicular low-density smithing hearth base (SHB) with a rim of a still-attached red burnt clay to vitrified clay hearth lining (VHL) on the underside (total weight 124g; 60x40x50mm (thick)). The junction of the hearth lining with the SHB mass was a little denser, with the presence of smaller gas bubbles within the melt and some small dark glass inclusions. This denser base was also much more magnetic, suggesting the presence of wustite here amongst the darker fayalitic-type slag. The SHB mass above this consisted of numerous slag drips with numerous voids representing burnt-out charcoal inclusions. Some of these still showed the negative relief of the charcoal particles. These ranged between 8 and 15mm in diameter. From the impression of these, the likely wood species was oak. There was also no trace of the use of coal as a fuel.

Conclusion

B.3.4 What can be said about this slag is somewhat limited based on one piece. However, it seems clear that secondary iron smithing was probably taking place with the remains of a small smithing hearth base formed within the bottom of a forge hearth during the process of smithing iron upon an anvil. In other words, this might be an example of typical blacksmith's work, one in which charcoal rather than coal was used as a fuel. The latter suggests small-scale ironworking which probably dates to the Anglo-Saxon – medieval periods rather than to the post-medieval period. Unfortunately, this cannot be determined from the visual examination of the slag, but on balance, an earlier rather than later date for this is expected.

Further work

B.3.5 No further work is required.

Retention and dispersal

B.3.6 Given the small size and weight of the piece, and the fact that this is the only record of ironworking preserved, the slag should be retained within the finds archive.

B.4 Worked and unworked flint

By Lawrence Billington

Introduction

B.4.1 The excavations at Linton produced a very large assemblage of worked and burnt flint – largely collected during surface collection, hand-excavation and extensive bulk sampling of lithic-bearing buried soils/old land surfaces and colluvial deposits preserved over large swathes of the southern part of the site. To allow the assemblage to be characterised and assessed within the timetable and resources of the Post-Excavation Assessment phase of the project, a rapid scan assessment of a sample of the lithic assemblage has been undertaken, as outlined in detail below.

B.4.2 The assemblage is one of the largest ever recovered from a single phase of excavation in Cambridgeshire. At present some 22,139 worked and burnt flints (undifferentiated) weighing over 150kg have been catalogued, and it is estimated that following the completion of the wet-sieving programme the worked flint assemblage will number somewhere around 70,000 pieces (see below).

B.4.3 Once the excavations were underway it quickly became clear that the vast majority of the flintwork was of Later Mesolithic date. This impression has been reinforced by typological analysis of the retouched forms recorded during the assessment and initial characterisation of the technological traits of the assemblage. Given the extreme rarity of substantial Later Mesolithic flint assemblages in the region, especially those which do not form a minor element of chronologically mixed (Early Mesolithic – Early Bronze Age) assemblages, this material is of clear regional importance and has the potential to make a major contribution to a series of regional research aims and objectives.

Methodology

B.4.4 For the purposes of this assessment the raw counts of flints entered in the site's basic finds database have been used to quantify the assemblage; this records the material by weight and count but does not distinguish between worked and unworked burnt flint. The flint so far recorded in this database includes all of the material recovered from the following broad groups:

1. Flint from cut features
2. Flint from systematic surface collection of the site
3. Flint from unstratified contexts or unsystematic surface collection
4. Flint hand-collected from test pits

B.4.5 Alongside this material, a major element of the excavation strategy employed to deal with the exceptionally flint-rich deposits encountered in the southern part of the site was the whole earth bulk sampling of deposits recovered from 1m test pits, without hand collection of finds, for off-site wet sieving. At this stage a sample of the deposits from each of these test pits has been wet-sieved (mesh size of 2mm) and sorted. The samples processed to date consist of one or two 10l buckets, typically representing between 5% and 20% of the material from each test pit (further details are provided

below). This sorted material has been catalogued in slightly more detail than the hand-recovered flint, with the worked and burnt flint separated.

B.4.6 All of the material so far quantified has been scanned, and all clearly retouched pieces have been extracted from the assemblage and catalogued according to standard classificatory schemes (e.g. Healy 1988; Butler 2005; Jacobi 1978; Clark 1934). Notes and observations have also been made on other aspects of the assemblage including the condition and technological character of the material. To supplement this, all of the flintwork from one of the richest test pits (907 worked flints) has been fully catalogued to allow a more detailed, quantified, assessment of the composition of the assemblage.

B.4.7 This report begins with a basic quantification of the assemblage, setting out the amount of flint recovered from the site according to a number of basic groups defined on the basis of context, location and/or excavation method. This includes (crude) estimates of the likely total numbers of flints to be recovered from unsorted bulk sample residues. This is followed by a characterisation of the assemblage, which includes discussion of the raw materials/condition of the flint, its composition, its chronology and dating, and its depositional context/history. This is followed by a statement of potential and recommendations for further analysis to realise the research potential of the assemblage and allow effective dissemination of the results of this analysis.

Quantification

B.4.8 A basic breakdown of the flint quantified to date is provided in Table 19, which breaks the assemblage down in four groups, defined by differences in context and/or excavation methodology, each of which is considered separately below.

Group	Worked/burnt flint no.	Weight (g)
Features	2030	14,755
Surface collection	3548	34,872
Test Pits	16169	89,941
Unstrat/other	392	14,525
Grand Total	22139	154,093

Table 19: Basic quantification of the flint catalogued at assessment stage

Features

B.4.9 Over two thousand worked/burnt flints were recovered from the excavation of cut features. The vast majority of these features were ditches, quarry pits and structures of Anglo-Saxon, medieval and post-medieval date and the flintwork clearly represents residual material incidentally caught up in the fills of later features. In many cases the flint was recovered in low numbers, as is typical for such residual material, but some features produced unusually large quantities of flintwork. These attest to the very dense surface scatters of flint across parts of the site; particularly notable are the large assemblages (between 82 and 379 flints) from intercutting ditches **236**, **238** and **240** (Phase 4), which pass close to the very dense scatters encountered in Test Pit Group 1 (see below).

Surface collection

B.4.10 Over 3500 flints were recovered as a result of systematic surface collection undertaken over the colluvial deposits and buried soils covering the southern part of the site. Some 500 of these flints were individually recorded three-dimensionally, with the remainder collected from a grid of 5m x 5m collection units. Altogether, flint was collected from 115 5m x 5m units, giving an average density of some 30 flints and up to maximum of 250 per collection unit.

Test pits

B.4.11 The majority of the assemblage quantified to date, over 16,000 flints, derives from the excavation of a series of 1m x 1m test pits through the buried soils and associated deposits across the southern part of the site (Fig. 4). These include a large number of 'isolated' test pits excavated on a regular grid pattern across the site and four groups (Test Pit Groups 1-4) of test pits subsequently excavated on chequerboard arrays to investigate the particularly dense lithic scatters encountered in the southern part of the site.

Test Pit Group 1

B.4.12 Test Pit Group 1 consisted of ten test pits excavated in two chequerboard arrangements. Flint was collected by hand during the excavation of these test pits, with full retention of excavated sediments from off-site wet sieving. Hand collection recovered a total of 4096 worked/burnt flints and a further 1039 worked flints and 1029 (1.9kg) burnt unworked flints were recovered from sorting of some 130 litres of sediment of the almost 2500 litres sampled from the test pits – a *c*. 5% sample. On this basis it could be expected that full processing of the remaining samples will result in final totals of over 20,000 worked flints and over 38kg of unworked burnt flint.

Test Pit Group 2

B.4.13 Test Pit Group 2 was made up of ten test pits, all were whole-earth sampled, and flints from six were also collected during excavation. Hand-collection recovered over 400 worked/burnt flints whilst a further 535 worked flints and 231 (0.6kg) of unworked burnt flint have been collected from the sorting of 150 litres of a total of around 2000 litres of sediment – a *c*. 7.5% sample. Totals of around 10,000 worked flints and 8kg of unworked burnt flint should be anticipated following full processing of the bulk samples.

Test Pit Group 3

B.4.14 Test Pit Group 3 was made up of nine test pits. Only in the case of one test pit were flints hand recovered – producing 577 worked/burnt flints – with over 1300 worked flints and 300 unworked burnt flints (0.5kg) deriving from the sorting of 100 litres of a total of some 1600 litres of sediment (a *c*. 6.5% sample). Totals of around 20,000 worked flints and over 8kg of unworked burnt flint are estimated following full sample processing.

Test Pit Group 4

B.4.15 Test Pit Group 4 was made up of fifteen test pits, all of which were whole-earth sampled and three of which were subject to hand recovery of flint during excavation,

the latter producing a total of 462 worked/burnt flints. Sorting of 170 litres of a total of some 1200 litres of sediment (a *c*. 14% sample) recovered almost 1200 worked flints and 0.7kg of unworked burnt flint. Totals of around 8500 worked flints and 5kg of unworked burnt flint are anticipated following full processing of samples.

Gridded/sampling Test Pits

B.4.16 Flint was recovered from a further 26 isolated test pits set out across the site as part of a systematic sampling strategy. The vast majority of the flint from these test pits was hand-collected during excavation and it is not anticipated that the retained samples from these test pits will be processed/sorted. Over 2200 worked/burnt flints were recovered from these test pits, with individual test pits containing between 1 and 271 hand-collected flints.

Test Pits in Area 2

B.4.17 Three test pits were excavated in Area 2 in the south-west of the site. One of these produced a small assemblage of 26 flints (hand-collection) but the others produced much larger assemblages, with hand-collection producing over 700 worked/burnt flints from Test Pit 687 and 330 from Test Pit 651. Bulk sampling of 20 litres of a total of 190 litres (a *c*. 10% sample) of sediment from Test Pit 651 produced a further 194 worked flints, and on this basis complete processing of the samples from these test pits should produce an assemblage of over 5000 worked flints from these test pits.

Estimated total quantifications of worked flint

B.4.18 Based on the figures presented above, an overall estimated quantification of the worked flint assemblage from the excavations, following processing and sorting of all samples, can be attempted. These figures should, of course, be treated with caution. Table 20 sets out the estimated number of worked flint for the various assemblage groups. Where quantification of the hand-collected flint from features and surface collection has not distinguished between worked and unworked burnt flint, an estimate has been made based on the ratio of worked to burnt flint from a sample of hand-collected flint from Test Pit 234 (where around 70% of the total count is made up of worked flint, see below). To these estimated worked flint totals should be added an estimated total of up to 100kg of unworked burnt flint.

Broad assemblage group	Estimated number of worked flints
Features	1500
Surface collection	2500
Unstrat/other	300
TP Group 1	20,000
TP Group 2	10,000
TP Group 3	20,000
TP Group 4	8500
Other Test Pits	7000
Totals	70,000

Table 20: Estimated totals of the worked flint assemblage following full pressing of samples. Numbers have been rounded to avoid any indication of precision

Assemblage Characterisation

Raw materials

B.4.19 Given the very large size of the assemblage, the raw materials utilised are relatively homogenous, and the worked flint is largely made up of material which derives from small to medium sized rounded to sub-rounded flint cobbles/pebbles with hard abraded cortex typical of material collected from fluvial gravels. Despite the presence of flint-bearing chalk on the upper (northern) slopes of the site (which was observed during the excavation to yield good quality flint nodules) assessment has identified very little evidence for the use of nodular chalk flint.

B.4.20 The gravel flint used for the vast majority of the assemblage could have been sourced on or directly adjacent to the site from the flint rich terrace/floodplain gravels and there is clear evidence from elsewhere along the Cam/Granta river system for extensive exploitation of similar sources during the Mesolithic and Neolithic (e.g. Armour 2007; Collins 2012). The quality of this gravel flint is variable and the assemblage includes a large proportion of shattered core fragments and chunks of irregular waste which have fractured along pre-existing thermal flaws and faults (see below for quantification of this material from Test Pit 234).

Condition

B.4.21 The condition of the worked flint is varied. Whilst it is difficult to generalise too firmly, and based only on a rapid scan of the material, there appears to be a clear and predictable trend towards differences in condition and the context of the flintwork. Thus the material collected as a residual element from cut features typically includes material with a degree of edge damage consistent with a relatively complex post-depositional history. The same is true to some extent of much of the surface collected material, and some of the assemblage from the 'isolated' gridded test pits in areas where the underlying deposits are suspected to be of colluvial origin. Many of the flints from these contexts are likely to have seen some downslope displacement and disturbance. In contrast, much of the flint from the major test pit groups, and many of the 'isolated' test pits, is in fresh, sometimes very fresh/mint condition, and appears to represent if not *in situ* material, then flintwork which has been subject to minimal disturbance; a conclusion borne out by the excellent representation of micro-debitage in these assemblages (see below).

B.4.22 The majority of the assemblage does not display any recortication ('patination'), or is patinated a very light blue. There are, however, exceptions to this, with a minority of pieces displaying an opaque white recortication. The extent to which this differential recortication is of chronological significance and/or relates to specific depositional circumstances is unclear at this stage.

Composition

B.4.23 Taken as a whole, the assemblage is dominated by unretouched material, with cores, irregular waste, unretouched flakes and chips all very well represented, with low numbers of retouched tools and large quantities of unworked burnt flint. There are some differences in the composition of assemblages from the various broad groups of flintwork defined above but these relate largely to differences in excavation/sampling

methodology, with chips and small flake fragments very much better represented in assemblages subject to large scale wet-sieving (*i.e.* the test pits), as opposed to those recovered from features and surface collection. Overall, the impression from the assessment is that the bulk of the material from the site is remarkably homogenous in its composition (as it is in terms of technology/typology – see below).

B.4.24 In order to provide an initial assessment of the composition of the major assemblages derived from the test-pitting of the dense scatters encountered in the southern part of the site, all of the hand recovered flint from Test Pit 234 (Test Pit Group 1), and the flint sorted from a sample (26 litres – a *c*. 12.5% sample) of the wet-sieved deposits from the test pit have been catalogued according to a simple techno-typological classificatory scheme (Table 21).

Type	Hand-collected	Wet-sieved (2mm mesh, 20 litre sample)	Total
Chips, flakes and flake fragments <20mm	314	210	524
Primary flakes	10		10
Secondary Flakes	171	8	179
Tertiary flakes	61	3	64
Secondary blades	16		16
Tertiary blades	28		28
Cores	13		13
Irregular waste	63		63
Microburins	2		2
Microliths	5	1	6
Other retouched	2		2
Total worked	**685**	**222**	**907**
Unworked Burnt count	283	409	692
Unworked Burnt weight (g)	1885	585	2470

Table 21: Basic quantification, by type, of flint from test pit 234 (Test Pit Group 1)

B.4.25 This shows that a very large proportion of the assemblage is made up of chips, spalls and flake fragments smaller than 20mm in size; such pieces account for almost half of the hand recovered material and over 90 per cent of the material collected from wet sieving. Extrapolating from the sample of wet-sieved flint, full processing of samples is likely to produce a total of *c*. 2500 worked flints of which *c*. 2000 – around 80 per cent - would be small chips and flake fragments of this kind. This estimated figure should be borne in mind when comparing the overall size of the assemblage with those recovered using less stringent sampling methods. Beyond this, the good representation of these small pieces, which seems to be typical of all of the major test pit assemblages from the site, is consistent with the assemblage deriving from large scale, on-site, flintworking.

B.4.26 Other elements of the assemblage indicate that all stages of core reduction are present, with tested pieces, cores, irregular waste and waste flakes alongside fine potentially usable removals and retouched tools. The proportion of retouched tools is, however, very low and this might be taken as an indication that the assemblage largely reflects flintworking, as opposed to representing the frequent use, maintenance and

discard of retouched tools such as might be expected from a more 'balanced' assemblage indicative of 'settlement-type/domestic' activity. However, this kind of interpretation is likely to be ill-founded as Later Mesolithic assemblages invariably have a much lower proportion of retouched tool than either earlier (Early/Middle Mesolithic) or later (Neolithic/Early Bronze Age assemblages) and formal tools other than microliths are rare (*e.g.* Robins 1998; cf. Billington 2016, Fig. 7.18).

Chronology and dating

B.4.27 In the absence of associated ^{14}C dates or other dateable finds, the dating of the flint assemblage depends entirely on the analysis of typologically diagnostic retouched forms and its technological traits. During assessment all recognisably retouched tools/tool by-products were isolated and recorded according to a standard typological scheme. A total of 107 pieces were recorded and a summary quantification is provided in Table 22. Bearing in mind the size of the assemblage, the range of retouched tools/by-products is very restricted, with microliths making up 45% of all the retouched pieces (48 examples), followed by microburins (15%), edge-retouched blades and flakes (15%), truncated blades/flakes (8%), scrapers (7.5%) and two core tools, alongside single examples of a few other tools including a leaf-shaped arrowhead.

Group		Microlith	Microburin	Edge retouched blade	Truncated blade	Scraper	Edge retouched flake	Notched blade	Bifacially flaked piece	Core tool	Leaf-shaped arrowhead	Piercer	Tranchet adze reused as blade core	Tranchet adze sharpening flake	Truncated flake	Backed blade
Test Pits	Group 1	23	8	1	2	1	2									
Test Pits	Group 2	3														
Test Pits	Group 3	3					1									
Test Pits	Group 4	4	1									1				
Test Pits	Other	7	2	1	2			1					1	1		1
Unstratified/other		1		2		1		1	1							
Surface collection		6	4	3	3	3	2			1	1				1	
Features		1	1	3	2	3	1									
Grand Total		**48**	**16**	**10**	**9**	**8**	**6**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**

Table 22: Basic breakdown of retouched tools identified during the assessment

B.4.28 The most striking aspect of the retouched tools is the almost complete dominance of pieces of Mesolithic date. This applies most clearly to the microliths and microburins but also includes the two core tools (one a tranchet adze reused as a blade core and the other the broken butt end of what was probably a tranchet adze or pick), a tranchet adze sharpening flake and relatively large number of truncated blades. Many of the edge-retouched pieces are also made on blades/bladelets consistent with a Mesolithic

date. In contrast, the only retouched forms which can, with any certainty, be attributed a Neolithic or Early Bronze Age date are the single leaf-shaped arrowhead and several of the scrapers and edge-retouched pieces. The typological make-up of the assemblage thus makes it very clear that the overwhelming majority of the assemblage relates to Mesolithic activity, with a very small proportion of later material. It is also important to note that the typologically later material is also largely restricted to the extensive, at least partly colluvial, deposits sampled by the surface collection, and the retouched forms from the four Test Pit Groups give every impression of being exclusively Mesolithic.

B.4.29 Diagnostically Mesolithic material was recovered from all of the major assemblage groups – including all of the main test pit groups (see Table 22), with the large number of microliths and microburins form Test Pit Group 1 reflecting the large amount of material quantified and scanned at this stage of the post-excavation programme.

B.4.30 Turning to the technological attributes of the assemblage, observations made during assessment are entirely in keeping with the Mesolithic date suggested by the retouched tools. Blades and bladelets are fairly well-represented, making up 14% of unretouched removals over 20mm in size from Test Pit 234, and with typical blade-based debitage including core tablets and crested pieces noted during the scan of the assemblage. The cores, whilst including a large number of minimally/casually worked examples, include many fine blade/bladelet cores – generally with single or opposed striking platforms.

B.4.31 The dating of the Mesolithic element of the assemblage can be refined by more detailed analysis of the typology of the relatively large assemblage of microliths recovered from the site. A complete catalogue of microliths recovered to date, with summary descriptions and dimensions is provide in Table 23, which also classifies them according to Roger Jacobi's 1978 typological scheme. In the regional context, the microlith assemblage is extremely unusual in being very heavily dominated by narrow-blade/geometric microliths of Later Mesolithic type. Most of the 48 microliths are complete enough to classify in broad terms, and they are dominated by micro-scalene triangles (generally retouched on all three sides and rarely measuring more than 4mm wide) and by various forms of narrow backed bladelets. The latter include at least seven very narrow pieces with retouch along both lateral edges which can be classified as true rods (most less than 5mm wide), alongside 14 pieces with retouch along one lateral edge, sometimes accompanied by additional, ancillary retouch. Most of these are very narrow, but they do include one larger backed point. Two further pieces can be described as narrow anvil-backed points, and two others as lanceolate points. Rarer forms include two convex backed pieces, and one micro-tranchet. Simple obliquely blunted points are relatively rare and of the four examples two are very narrow, with obtuse truncations and may represent unfinished scalene triangles (cf. Olszewski 1993, 201).

Group		Context	Subtype	Jacobi class	Length	Breadth
Test Pits	Group 1	234	Narrow backed bladelet with additional inverse lateral retouch	13	24	7
	Group 1	234	Lunate/convex-backed with ancillary retouch on chord	9	16	7
	Group 1	234	Anvil backed bladelet (point) with ancillary lateral retouch	n/a	24	6
	Group 1	234	Distal microburin with inverse retouch on both lateral edges to form point	n/a	16	7
	Group 1	234	Narrow backed bladelet	5a	18	5
	Group 1	234	Narrow backed bladelet	13	18	6
	Group 1	234	Scalene triangle	7a2	15	4
	Group 1	584	?Rod	6	12	4
	Group 1	584	Scalene triangle	7a2	17	4
	Group 1	585	Anvil backed bladelet (point) with ancillary lateral retouch	n/a	25	6
	Group 1	586	Scalene triangle	7a2	13	3
	Group 1	586	Scalene triangle	7a1	9	4
	Group 1	586	Micro-tranchet	5c	19	5
	Group 1	586	Rod	6	6	2
	Group 1	586	Scalene triangle	7a2	14	3
	Group 1	586	Scalene triangle	7a2	7	4
	Group 1	586	Scalene triangle	7a2	9	4
	Group 1	586	Narrow backed bladelet	5b	12	3
	Group 1	587	Obliquely blunted pint with additional lateral retouch	n/a	30	10
	Group 1	587	Scalene triangle	7a2	12	4
	Group 1	587	?Narrow backed bladelet	5a	15	6
	Group 1	588	Narrow backed bladelet	5b	21	7
	Group 1	590	Rod	6	12	2
	Group 2	647	Obliquely blunted point	1a	19	10
	Group 2	656	Narrow backed bladelet	5a	12	4
	Group 2	663	Fragment	n/a	16	7
	Group 3	635	Narrow backed bladelet	5b	23	5
	Group 3	635	Narrow backed bladelet	5a	14	3
	Group 3	635	Scalene triangle	7a1	9	3
	Group 4	677	Scalene triangle	7a1	32	7
	Group 4	677	Unfinished	n/a	15	7
	Group 4	679	Obliquely blunted point	1a	8	4
	Group 4	683	Scalene triangle	7a1	10	2
	Other	625	Scalene triangle	7a2	16	3
	Other	651	Scalene triangle	7a1	6	3
	Other	651	Rod	6	7	2
	Other	651	Narrow backed bladelet	5b	16	3
	Other	682	?Convex backed/crescent	4	9	4
	Other	682	Narrow backed bladelet	5a	14	3
	Other	687	Backed point	4	39	9
Feature	Ditch	241	Narrow backed bladelet	5a	20	8
Surface collection		205	Rod	6	20	6
		205	Rod	6	9	4
		205	Rod	6	23	8
		205	Obliquely blunted point	1a	20	6
		205	Narrow backed bladelet	5a	16	5
		205	Lanceolate point (convex backed	n/a	28	8
Unstrat		99999	Lanceolate point	n/a	34	9

Table 23: Catalogue of microliths identified during assessment

B.4.32 At a national scale there remain many uncertainties regarding the typo-chronology of the Mesolithic, and in Eastern England these problems are compounded by a dearth of single period assemblages associated with reliable radiocarbon dates. Based on current understandings of the period (see, *e.g.* Barton and Roberts 2004; Reynier 2005; Waddington *et al*. 2007; Griffiths 2014; Conneller *et al*. 2016; Cooper 2017) narrow-blade microliths of the kind which dominate the Linton assemblage first appear in parts of Northern and Western Britain in the centuries around 8000 cal. BC, where they succeed assemblages of Early Mesolithic type, characterised by broad-blade microlith forms (Star Carr and Deepcar type assemblages). In Southern Britain the picture is more complicated (and there are fewer well-dated sites) but there is a growing consensus that the adoption of narrow-blade microlith technologies was considerably later over much of Southern England, the Midlands and East Anglia – with evidence for distinctive 'Middle Mesolithic' assemblages, associated with broad-blade microliths including certain distinctive basally retouched points (Honey Hill and Horsham type assemblages), which are broadly contemporary with the 'early' narrow blade assemblages from further north and west. In this area, the emergence of classic narrow-blade assemblages probably dates to no earlier than *c*. 7000 BC and a strong argument can be made that the kind of heavily retouched, diminutive microliths that form a significant element of the Linton assemblage (such as the micro-scalene triangles, crescents, micro-tranchets and rods) are likely to belong to the period after *c*. 6000 BC.

B.4.33 On this basis, and notwithstanding the considerable uncertainties that still attend the dating of Mesolithic assemblages, the microlith assemblage strongly suggests that the vast majority of the material is of Later Mesolithic date and most probably belongs to the final two millennia of the period, between *c*. 6000 and 4000 BC. The only microliths which may *possibly* relate to earlier, Early and 'Middle' Mesolithic, activity are the two larger simple obliquely blunted points and, more convincingly, a heavily recorticated large backed point from Test Pit 687, in the south western part of the site.

B.4.34 There are few Mesolithic assemblages in Cambridgeshire which have produced comparable numbers of microliths, and those which have tend to be either dominated by Early/Middle Mesolithic forms (e.g. the Godwin Ridge, Over, Evans *et al*. 2016) or very diverse mixtures of broad-blade and narrow-blade forms indicative of episodic activity taking place across much of the period (*e.g.* Peacock's Farm (Clark *et al*. 1935; Clark 1955; Smith *et al*. 1989) or Gaul Road, March (Mellor 2011)). More widely, across Eastern England, there is a similar trend for larger assemblages to either be dominated by broad-blade microliths or represent chronologically mixed assemblages with both Early and Later Mesolithic forms well-represented (Billington 2016; ch 6). The few comparable assemblages dominated by Later Mesolithic microliths in the region include several scatters excavated at West Stow Country Park, Suffolk (Pieksma and Gardiner 1990; Billington 2016, fig. 6.16), scatters from sub-alluvial contexts on the floodplain of the Great Ouse at Willingham, Bedfordshire (Billington 2015) and Old Wolverton Milton Keynes (Billington 2014), scatters at Tank Hill Road, Essex (Leivers *et al*. 2009) and several assemblages from Hertfordshire including Broxbourne (Switsur and Jacobi 1979; Jacobi 1994) and from recent excavations of the M1 widening scheme (Stansbie and Bridgman 2012).

Depositional context

B.4.35 As outlined briefly above, and in the main text of the report, the flint from the site was derived from a series of layers encountered directly below the ploughsoil over large parts of the southern part of the site, which appear to represent colluvial deposits and remnant old land surfaces/buried soils – many of which have probably been subject to a degree of truncation. Preliminary observations of the condition and composition of the assemblage suggest that whilst much of the surface collected flint probably derives from colluvial deposits, the flintwork derived from the main groups of test pits has seen minimal disturbance since its original deposition. The densities of flint from the main groups of test pits are extremely high, especially when the probability of a degree of truncation is considered.

B.4.36 It is difficult to directly compare the densities with those from other lithic scatters in the region, as large scale wet sieving of deposits using a fine mesh size has rarely been undertaken, but even considering just the flint recovered by hand, quantities of up to around 500 worked flints were routinely recovered (with estimated totals of over 2000 worked flints anticipated following wet-sieving of deposits from the richest test pits). Elsewhere in Cambridgeshire, test pitting of buried soil lithic scatters of Mesolithic, Neolithic and later date (hand-collection only or with a 5mm mesh sieve) rarely produce densities higher than 100 worked flints per $1m^2$ (e.g. Evans *et al*. 2016; Tabor 2016) whilst the exceptionally dense Mesolithic/Neolithic ploughzone scatters at Honey Hill, Ramsey yielded a maximum of 198 worked flints per $1m^2$ (sieved, 5mm mesh; Edmonds *et al*. 1999).

B.4.37 At a wider, national, scale such high densities of flintwork seem to be a distinctive feature of the record of Later Mesolithic activity in Southern Britain. Scatters dominated by Late Mesolithic material with densities comparable to, or exceeding, those at Linton include those at sites such as Broom Hill, Hampshire (O'Malley and Jacobi 1978); Blick Mead, Wiltshire (Jacques *et al*. 2018) and Wawcott III, Berkshire (Froom 1976). Like Linton, these sites seem to have seen extensive flintworking taking place alongside other activities, and also include large quantities of burnt flint and stone. There are strong grounds for interpreting many of these sites as places subject to long-term, episodic use, with repeated or punctuated activity and/or acts of deposition taking place over the course of centuries, and this in itself is likely to account for the high densities of artefacts. It also seems possible that some of the densest accumulations of material represent 'midden-like' accumulations material (cf. Pollard 2000), collected and deposited *en masse*, rather than representing the kind of high integrity *in situ* lithic scatters that characterise some other Late Upper Palaeolithic and Mesolithic sites (e.g. Conneller and Schadla Hall 2003; Lewis and Rackham 2011).

B.4.38 In summary, based on preliminary assessment, it seems very likely that the major test pits assemblages represent scatters which have experienced some degree of truncation but remain substantially undisturbed since their original deposition. There is a strong possibility that these scatters represent complex palimpsests deriving from multiple episodes of activity and/or may represent large scale 'middened' accumulations of material.

Statement of Potential

B.4.39 The very large assemblage of worked flint from Bartlow Road is of considerable regional importance. The most significant, and by far the largest, component of the assemblage is the Later Mesolithic flintwork recovered from test pitting in the southern part of the site. This material appears to relate to a single period and to have come from relatively undisturbed contexts. An extensive programme of sampling and wet sieving has allowed excellent recovery of the lithic material, an essential pre-requisite for dealing with assemblages of this date.

B.4.40 Single period Later Mesolithic assemblages of any size are very rare in Eastern England and this material has the potential to make a major contribution to a series of regional research objectives, as set out below. These have been formulated in reference to the 2011 Regional Research Framework (Medlycott 2011); the draft updated RRF period summary (Billington 2018) and the national *Mesolithic Research and Conservation Framework* (Blinkhorn and Milner 2013). Whilst these research objectives emphasise the importance of the assemblage, it is appropriate to also outline the *limitations* of the material – not to undermine its significance but to make clear where further analysis is unlikely to yield significant results and to underline the kinds of research questions the assemblage is best placed to address.

B.4.41 Firstly, it should be emphasised that in providing evidence for Mesolithic activity, the flintwork is not supported by other artefacts or environmental remains. No faunal remains were preserved in the flint-bearing sediments, assessment of the environmental remains from bulk samples indicates poor preservation of charred plant remains, and there is little potential for other environmental evidence such as pollen/molluscs. The dearth of organic remains also dictates that any attempt to provide a robust chronology for the Mesolithic activity on the basis of multiple ^{14}C dates is unlikely to be successful. Aside from this, the very dense flint scatters sampled by the test pitting in the southern part of the site lay in sediments immediately underlying the ploughsoil, and have inevitably been subject to a degree of truncation. Coupled with this vertical truncation, large areas of these flint-bearing deposits have been completely destroyed by quarry pits, severely compromising any attempt to understand the horizontal distribution of the flintwork. As such the site is poorly suited to fine-grained distributional analysis, and this, together with the absence of preserved faunal/environmental remains, precludes the kind of detailed 'paleo-ethnographic' approach taken to the best preserved lithic scatter sites, where attempts are made to reconstruct, in detail, the spatial and temporal patterns of specific episodes of activity.

B.4.42 With this in mind, the assemblage is best-placed to address research questions pitched at a larger scale, and whilst many of the research objectives summarised below and detailed more fully in Section 6 involve detailed analysis of the lithic material, an emphasis has been placed on the contribution the site can make to understanding regional-scale questions concerning Later Mesolithic activity, and its relationship to earlier and later periods.

Regional Research Objectives

Temporal patterns in Mesolithic population density and land-use

Typo-chronology of Mesolithic flint assemblages

Raw material selection, flintworking technology and tool-kit composition during the Mesolithic

The character and temporality of Late Mesolithic occupation

The Mesolithic-Neolithic transition

Methodological approaches for the prospection and investigation of Mesolithic sites

Recommendations

B.4.43 In order to effectively address the research aims and objectives outlined above, the following additional work is recommended:

- *Sorting and cataloguing.* All of the as yet unprocessed wet-sieved residues from the main test pit groups require sorting. Following this, the entire assemblage requires full cataloguing according to a standardised techno-typological classification including appropriate typological classification of retouched forms.
- *Selected detailed analyses.* In order to characterise the character and technology of the assemblage in more detail, selected samples of unretouched removals should be subject to detailed attribute analysis (recording technological traits such as platform type, dorsal scar pattern, hammer mode) and metric analysis (cf. Pitts and Jacobi 1979). A minimum sample size of 100 complete unretouched removals >20mm in size should be selected from each of the main test pit groups for these analyses.
- *Distributional analyses.* Following completion of the catalogue, the distribution of the lithic material from the main test pit groups should be analysed, with examination of the density of flint, its vertical and horizontal distribution and the distribution of different cases of artefact such as retouched tools/by-products, cores and burnt flint.
- *Illustration*. Provision should be made for extensive illustration of the assemblage, including a large proportion of the microliths and a representative sample of other retouched pieces and cores.
- *Reporting and publication.* The most effective way to report on the assemblage will be the production of a detailed grey literature/archive report, in which the assemblage and the various analyses can be described and catalogued in detail. This report should then form the basis for an abbreviated, illustrated report on the flintwork suitable for publication as part of a journal paper. The report and publication should include detailed discussion of the assemblage in its local (Cam/Granta Valley) and regional (Eastern England) context and explicitly address the main research aims set out above in the Statement of Potential.

B.5 Glass

By Carole Fletcher

Introduction

B.5.1 A small assemblage of glass was recovered from evaluation backfill and a sunken-featured building (SFB). The glass was scanned and recorded by form, colour, count and weight, dated where possible, and recorded in the text.

Factual Data

B.5.2 Context 501, which formed the backfill from the evaluation trench that originally exposed SFB1 (Phase 3), produced an irregular fragment of thick (17g, 7.4mm) clear, colourless ?window glass. One side is smooth, the other slightly matt, and all the breaks appear recent. The glass is 19th or 20th century.

B.5.3 SFB 465 also produced an irregular shard of glass; the thick (5.3-8.8mm) curved glass (22g) is clear, with a blue-green cast and the slightly matt external surface is moderately abraded. There are few faults in the glass and, although recovered from an SFB, the glass is neither Roman nor Anglo-Saxon. The shard is almost certainly from a Victorian cylindrical or similar utility vessel of the type that would have contained a carbonated beverage and is therefore 19th century. The glass was recovered from the upper fill, context 467 of the SFB and it seems very probable that the glass is intrusive from the backfill context 501.

Discussion

B.5.4 Shards of glass from utility bottles are not an uncommon find, they may be from beer or wine bottles. Neither find is significant and they would have represented casual discard, rather than deliberate deposition in their original location. Here they relate to backfill material and are therefore redeposited.

Statement of potential

B.5.5 The plain and fragmentary nature of the total assemblage means it is of no significance.

Recommendations for further work

B.5.6 This statement acts as a full record for the archive. No further work is required.

Retention, dispersal and display

B.5.7 The glass may be deselected prior to archival deposition.

B.6 Prehistoric Pottery

By Nick Gilmour

Introduction

B.6.1 An assemblage of prehistoric and Iron Age pottery totalling 58 sherds (876g) was recovered from the excavations, displaying a mean sherd weight (MSW) of 15.1g. The pottery was recovered from a total of 15 contexts relating to nine features/interventions (Table 24).

B.6.2 The pottery largely dates from the Early Iron Age, with small quantities of later material, although several sherds could not be closely dated. The pottery is in a moderate/stable condition, typical of most prehistoric assemblages from the region, and is dominated by small sherds (<4cm in size). The MSW is higher than expected, as it has been raised by a small quantity of larger sherds.

Context	Cut	Spot Date	Feature Type	No sherds	Weight (g)
205	-	EIA	layer 205	2	14
205	-	Prehistoric	layer 205	8	34
219	-	Prehistoric	layer 219	1	1
233	-	EIA	layer 219	1	9
246	235	Prehistoric	SFB	1	11
247	247	Prehistoric	Ditch	1	6
270	269	Prehistoric	SFB	1	8
277	275	EIA	Pit	1	9
283	281	EIA	Pit	2	27
283	281	MIA	Pit	4	26
285	281	EIA	Pit	2	23
285	281	Prehistoric	Pit	1	5
327	326	Prehistoric	Ditch	3	4
340	339	EIA	SFB	1	3
421	420	EIA	Ditch	6	128
494	493	EIA	Pit	17	504
513	-	Prehistoric	test pit	1	8
587	-	Prehistoric	test pit	5	56
Total				**58**	**876**

Table 24: Quantification of prehistoric pottery by context

Methodology

B.6.3 All the pottery has been fully recorded following the recommendations laid out by the Prehistoric Ceramic Research Group (2011). After a full inspection of the assemblage, fabric groups were devised on the basis of dominant inclusion types, their density and modal size. Sherds from all contexts were counted, weighed (to the nearest whole gramme) and assigned to a fabric group. Sherd type was recorded, along with evidence for surface treatment, decoration, and the presence of soot and/or residue. Rim and base forms were described using a codified system recorded in the catalogue and were assigned vessel numbers. Where possible, rim and base diameters were measured, and surviving percentages noted. In cases where a sherd or groups of refitting sherds

retained portions of the rim, shoulder and/or other diagnostic features, the vessel was categorised by ceramic tradition (Grooved Ware, Beaker etc.)

B.6.4 All pottery was subject to sherd size analysis. Sherds less than 4cm in diameter were classified as 'small' (44 sherds); sherds measuring 4-8cm were classified as 'medium' (ten sherds), and sherds over 8cm in diameter classified as 'large' (four sherds). The quantified data is presented on an Excel data sheet held with the site archive.

B.6.5 This assessment report provides a discussion of significance and series of recommendations for further recording, analysis, publication and retention.

Prehistoric pottery fabrics

B.6.6 Five different fabrics were identified in the assemblage. These are listed below, and the quantity of each fabric type is given in Table 25 below.

SA: Moderate quartz sand, micaceous sandy matrix.

SF1: Frequent quartz sand, rare medium flint, micaceous sand matrix.

SF2: Frequent quartz sand, moderate fine flint.

SF3: Frequent quartz sand and moderate course flint.

SF4: Frequent quartz sand, moderate medium flint and rare course flint.

Fabric type	No sherds	Weight (g)	% fabric (by wt)
SA	8	45	5.1
SF1	32	717	81.8
SF2	5	16	1.8
SF3	11	82	9.4
SF4	2	16	1.8
Grand Total	58	876	100.00

Table 25: Quantification of prehistoric pottery by fabric

Early Iron Age pottery

B.6.7 A total of 32 sherds (717g) of Early Iron Age pottery was recovered from the excavations. The pottery derived from nine contexts relating to three pits (22 sherds, 563g), one ditch (6 sherds, 128g), one sunken-featured building (1 sherd, 3g) and two layers (3 sherds, 23g). Whilst some of the material is probably residual, notably that from the sunken-featured building, the majority of the pottery is from the pits and is thought to be contemporary with the contexts from which it derives.

B.6.8 The assemblage is characterised by plain and decorated sherds in sand and flint tempered fabric SF1. Diagnostic feature sherds include sherds decorated with external wiping. The Early Iron Age pottery, while lacking a fineware component, is comparable to that recovered from Hadstock Road, Linton (Fell 1953). The material recovered from Hadstock Road forms one of the type-sites for the Darmsden-Linton ceramic tradition.

Pit 493

B.6.9 The majority of the Early Iron Age pottery was recovered from context 494, within pit **493** (Phase 1). The assemblage from this pit comprised 17 sherds (504g). The pottery from this pit is the most diagnostic material from the site. It is in much better condition

than the other prehistoric pottery recovered during the excavations and includes all four sherds classified as large (over 8cm in diameter). All these sherds are in fabric SF1. Diagnostic sherds include three re-fitting sherds from the base of a vessel. This vessel has a plain flat base and the external surface of this vessel has been heavily wiped vertically. A further sherd (42g) is likely to be from the base of the same vessel, although it does not re-fit and none of the wall of the vessel is present to confirm similar treatment of the external surface. Two further body sherds (114g) have external surfaces that have been heavily wiped. The remaining sherds are all plain body fragments.

Other Early Iron Age pottery

B.6.10 The remaining Early Iron Age pottery was recovered in small groups or single sherds from features across the site. This material is all likely to be residual within later features. Of note is a single sherd (9g) recovered from context 277, within medieval pit **275** (Phase 4). This sherd is decorated externally with fingernail impressions, in a style typical of Early Iron Age ceramics in this region.

Middle Iron Age pottery

B.6.11 Context 283, a fill of pit **281** produced six sherds (53g) of pottery. Two of these sherds (27g) were Early Iron Age. The remaining four sherds (26g) are in fabric SA1. One of these sherds (10g) is from a slack shouldered vessel, which is characteristic of the Middle Iron Age in this region. This small assemblage of Middle Iron Age pottery may indicate occupation nearby but is too small to indicate activity on the site.

Other prehistoric sherds

B.6.12 A group of 22 sherds (133g) are currently dated simply as 'prehistoric' and have not been assigned to a specific period or ceramic tradition. The majority of these sherds (15 sherds, 99g) were recovered from layers, with the remainder coming from a ditch, a pit and a sunken-featured building. None of these sherds date the feature they were recovered from and they are all small and abraded.

Discussion

B.6.13 In terms of size and significance, the key assemblage derives from pit **493**. These sherds are in very good condition and are very similar in form and fabric to the pottery recovered from Hadstock Road, Linton (Fell 1953). This material dates to the Early Iron Age and that from the Hadstock Road site forms one of the type sites for the Darmsden-Linton pottery group.

B.6.14 While the pottery from this excavation is well paralleled by that from Hadstock Road, it is of note that there are no fineware or burnished sherds present in the current assemblage. This may simply be due to the small size of the assemblage, with just 17 sherds recovered from the pit.

B.6.15 The other Early Iron Age pottery from this excavation is all likely to be residual within later features. However, the material also demonstrates activity during this period.

Recommendations for further work

B.6.16 The assemblage has been fully recorded and no further work is recommended.

Retention, Dispersal and Display

B.6.17 All the material should be retained.

B.7 Romano-British Pottery

By Alice Lyons

Introduction

B.7.1 A total of 53 sherds, weighing 441g, of Late Roman pottery was recovered during this excavation. A minimum of 50 individual vessels are recorded, mostly as single pieces found with later material. The pottery is significantly abraded with an average sherd size of 8g and is residual in character. Roman pottery was primarily recovered from pits, Anglo-Saxon sunken-featured buildings and Test Pits, with small quantities found in other features (Table 26).

Feature	Sherd Count	Weight (g)	Weight (%)
Pit	12	193	43.76
Sunken Featured Building (SFB)	25	122	27.66
Test pit	9	62	14.06
Ditch	3	43	9.75
Post hole	1	13	2.95
Surface collection	3	8	1.82
Total	**53**	**441**	**100.00**

Table 26: The pottery quantified by feature

Methodology

B.7.2 The pottery was assessed following the national guidelines (Barclay *et al.* 2016). The total assemblage was studied, and a catalogue was prepared (Table 28). The sherds were examined using a hand lens (x10 magnification) and were divided into fabric groups defined based on inclusion types present. Vessel forms (jar, bowl) were also recorded. The sherds were counted and weighed to the nearest whole gramme and recorded by context. Decoration, residues and abrasion were also noted. OA East curates the pottery and archive.

The Pottery

B.7.3 Seven Romano-British pottery fabrics were identified during this excavation (Table 27).

Fabric Name: abbreviation *Published reference*	Form	Sherd count	Weight (g)	Weight (%)
Sandy reduced (grey) ware: SGW	Beaker, dish, jar,	37	297	67.35
Horningsea Reduced ware: HORN RE *Tomber and Dore 1998, 116*	Storage jar	4	61	13.83
Sandy oxidised (white to red) ware: SOW; SREDW	Jar/bowl; strainer	5	33	7.48
Shell Tempered ware: ROB SH *Tomber and Dore 1998, 212*	Jar/bowl	3	25	5.67
Lower Nene Valley colour coat: LNV CC *Tomber and Dore 1998, 118*	Jar, jug	2	20	4.54
Hadham Oxidised ware: HAD OX *Tomber and Dore 1998, 151*	Beaker	1	3	0.68
Lower Nene Valley grey ware: LNV GW	Lid	1	2	0.45

Perrin 1999, 78-87				
Total		**53**	**441**	**100.00**

Table 27: The pottery fabrics and forms, listed in descending order of weight (%)

The Coarse Wares

Reduced (grey) wares

B.7.4 Most of this small assemblage (67% by weight) consists of locally made utilitarian Sandy grey ware vessel fragments. Although nearly all the material consists of undiagnostic body sherds, where vessel form can be assigned globular jars are the most common. It is noteworthy that several of these jar fragments retain significant external soot residues which suggest they were used as cooking pots. Several finer beaker fragments were found, also a single straight-sided beaded rim from a dish or lid.

B.7.5 Noteworthy within the coarse ware assemblage is a heavy (118g) Sandy grey ware vessel base from a Late Roman dish which was well-used, internal wear marks survive, before it was deposited in Anglo-Saxon pit **363** (fill 364, Phase 3). This base may have been deliberately adapted (cut-down) for secondary use possibly as a small weight in the post-Roman period.

B.7.6 In addition, a few pieces from distinctive large Horningsea-type storage jars were found. These vessels, produced just north of Cambridge, were commonly used in local assemblages throughout the Roman period (Evans *et al.* 2017, 83-107). A single fragment of a local Late Roman shelly ware jar/bowl was also found.

Oxidised (white and red) wares

B.7.7 A few fragments of locally produced Sandy oxidised jar/bowl fragments were found, along with a Sandy red ware perforated strainer base.

Fine Wares

B.7.8 Two Nene Valley colour coated sherds were found consisting of a jar base and a jug handle. These Nene Valley products are typical of the later Roman range of wares which were widely distributed in East Anglia and the East Midlands (Tyers 1996, 173-175). Also found was a single piece from a Nene Valley grey ware lid. A Late Roman red ware beaker fragment was also found which is thought to have been manufactured in the large regional centre at Hadham in Hertfordshire.

Summary and Statement of potential

B.7.9 This is a small abraded assemblage of locally made Late Roman coarse wares, with a small amount of traded fine wares. All the Roman pottery was found in Anglo-Saxon or medieval features and is therefore residual, with the exception of one Roman vessel base that was adapted for re-use in the Anglo-Saxon period.

B.7.10 High-status Roman activity is known to have taken place nearby with the Early Roman Bartlow Hills barrow cemetery only *c*. 2km to the south and a contemporary villa (CHER

09841) and cemetery (CHER 06198) located only *c*. 150m south of the development site.

B.7.11 The presence and poor condition of this small Roman pottery assemblage, however, confirms contemporary activity was taking place in the vicinity of the excavation but it has been disturbed, and in one example adapted, by post-Roman settlement.

Recommendations for further work

B.7.12 No further analysis is recommended.

Retention and dispersal

B.7.13 This is a residual assemblage which could possibly be considered for dispersal into a teaching or reference collection. It will not merit formal display.

Context	Cut	Feature Type	HM/WM	Fabric	Dsc	Form	Quantity	Weight (g)	Spot date
205	0	surface collection	WM	STW	R	JAR/BOWL	1	2	C3-C4
205	0	surface collection	WM	SGW	R	DISH/LID	1	4	MC2-C4
205	0	surface collection	WM	SGW	U	JAR	1	2	C2-C4
246	235	SFB_1	WM	SGW	U	JAR	1	2	MC1-C4
270	269	SFB_2	WM	SGW	R	JAR	1	4	E/MC1
280	279	ditch	WM	SGW	U	JAR/BOWL	1	12	C1-C4
287	286	post hole	WM	SGW	U	JAR/BOWL	1	13	C3-C4
325	324	ditch	HM/WM	LNVCC	H	JUG	1	18	C3-C4
340	339	SFB_2	WM	SGW	U	JAR	1	2	LC1-C4
340	339	SFB_2	WM	SGW	B	DISH	1	6	C2-C4
340	339	SFB_2	SW	HORN GW	D	SJAR	1	31	C2-C3
340	339	SFB_2	WM	SGW	D	JAR	1	2	MC1-C4
340	339	SFB_2	WM	SOW	U	FLAG	1	4	LC1-C4
340	339	SFB_2	WM	SGW	U	JAR/BOWL	1	1	MC1-C4
343	288	pit	WM	SGW	U	JAR	1	3	LC1-C4
344	288	pit	WM	SGW	U	JAR	1	19	C2-C4
364	363	pit	WM	SGW	B	DISH	3	118	C3-C4
371	369	pit	WM	SREDW	D	STRAINER	1	11	C2-C4
382	379	pit	WM	STW	U	JAR	2	23	C3-C4
382	379	pit	WM	SGW	U	JAR	1	11	C1-C4
447	446	SFB_2	WM	LNVCC	U	JAR	1	2	C3-C4
447	446	SFB_2	WM	SGW	U	JAR	1	1	LC1-C4
447	446	SFB_2	HM/WM	SGW	D	DISH	1	6	E/MC1
447	446	SFB_2	HM/WM	HORN CW	D	SJAR	1	8	C2-C3
447	446	SFB_2	WM	SGW	U	JAR	1	3	MC1-C4
456	455	SFB_2	WM	SGW	D	JAR	1	1	MC1-C4
456	455	SFB_2	WM	SGW	U	JAR	1	4	C4-EC5
456	455	SFB_2	WM	SGW	U	JAR	1	1	MC1-C4

Context	Cut	Feature Type	HM/WM	Fabric	Dsc	Form	Quantity	Weight (g)	Spot date
467	465	SFB_1	WM	SOW	U	JAR/BOWL	1	3	C3-C4
489	487	SFB_2	WM	SGW	UB	DISH	1	9	E/MC2-C3
489	487	SFB_2	WM	SGW	U	JAR	1	2	MC1-C4
489	487	SFB_2	WM	SGW	U	JAR	1	4	MC1-C4
489	487	SFB_2	WM	SGW	U	JAR/BOWL	1	1	MC1-C4
492	490	SFB_1	WM	LNV GW	R	LID	1	2	LC2-EC4
492	490	SFB_1	WM	SGW	U	JAR	1	10	LC1-C4
492	490	SFB_1	HM/WM	HORN CW	D	SJAR	1	11	C2-C3
492	490	SFB_1	WM	SREDW	U	JAR/BOWL	1	2	C2-C4
498	497	ditch	WM	SOW	UB	JAR	1	13	MC1-C4
510	0	Test pit	WM	SGW	U	BEAK	1	1	M/LC1-C2
514	0	Test pit	WM	SGW	U	JAR/BOWL	1	5	LIA/ESAX
553	552	pit	WM	SGW	U	JAR	1	3	LC1-C4
564	0	Test pit	WM	SGW	UB	BOWL	1	22	C4+
580	580	pit	WM	SGW	U	JAR/BOWL	1	4	C3-C4
587	0	TPG1	WM	SGW	U	JAR	1	7	MC1-C4
587	0	TPG1	HM/WM	HORN CW	D	SJAR	1	11	C2-C3
626	0	Test pit	WM	HAD OX	D	BEAK	1	3	C4
645	0	TPG2	WM	SGW	U	JAR	1	1	MC1-C2
653	0	Test pit	WM	SGW	U	JAR	1	8	LC1-C4
670	669	pit	WM	SGW	U	JAR/BEAK	1	1	LC1-C4
672	0	TPG3	WM	SGW	U	JAR	1	4	MC1-C4

Table 28: Roman pottery catalogue. KEY: B = base, C=century, D = decorated body sherd, Dsc = description, E=early, ERB = Early Roman, L=late, M=mid, R = rim, U=undecorated body sherd

*For full fabric names see Table 27

B.8 Anglo-Saxon Pottery

By Denis Sami

Introduction

B.8.1 A total of 126 fragments (1836g) of handmade Early/Middle Anglo-Saxon pottery (*c.* AD 450-850) was recovered from the excavations (Table 29). The assemblage consists of the standard range of fabrics, forms and decoration for this period in the county. The condition of the overall assemblage is good with sherds being moderately abraded and with an average sherd weight of 14.5g.

Fabric	Quantity	Weight	Percentage
E/MSX(L)	2	27	1.59%
E/MSX(Q)	115	1680	91.27%
E/MSX(V)	9	130	7.14%
Total	**126**	**1837**	**100.00%**

Table 29: Quantity of finds by fabrics

Methodology

B.8.2 Finds were assessed according to the Oxford Archaeology East finds standard following the 2016 document *A Standard for Pottery Studies in Archaeology* (SPSA) and the Medieval Pottery Research Group (MPRG) document *A guide to the classification of medieval ceramic forms* (MPRG 1998).

B.8.3 Hand-made fabrics and forms of the Early Anglo-Saxon period are not directly described in *The Production and Distribution of Medieval Pottery in Cambridgeshire* (Spoerry 2016); however, a scheme for defining and describing such material is presented for Middle Anglo-Saxon hand-made pottery.

B.8.4 Previous work on hand-made Anglo-Saxon pottery in the Eastern region includes Alan Vince's petrological analysis of Anglo-Saxon ceramics from Kilverstone (AVAC 2003) and Bloodmoor Hill, Carlton Colville (AVAC 2003). The 2016 publication of the Anglo-Saxon ceramic assemblage from Harston Mill (Thomson and Sudds 2016) offered comparisons and elements of discussion together with Neville's (1854) report on the excavation of the Linton Anglo-Saxon cemetery. These provide background information on the variability of fabrics and vessel forms in the region.

B.8.5 The West Stow catalogue of pottery stamps (West 1985: 130-33), updated according to the Archive of Anglo-Saxon Pottery Stamps (www.aasps.org.uk), was used as reference in the identification of the pottery stamps.

B.8.6 All the Early to Middle Anglo-Saxon ceramic material both from excavated and sampled contexts was quantified using an Access database. A single Excel database was used to enter details and measurements of each sherd and this was interrogated to compile statistics. All sherds were counted, weighed and classified on a context by context basis. The catalogue is organised by context number. Fabric, feature description and weight are reported in the catalogue together with an in-house dating system based on Spoerry's 2016 scheme.

B.8.7 The pottery and archive (Excel/Access datasets) are curated by OAE until formal deposition. A summary of pottery data is provided in Table 37. **Error! Reference source not found.**

Factual Data

B.8.8 A total of 88.08% of the pottery was recovered from the fill of three sunken-featured buildings (SFB) (Tables 30-33) with few residual fragments from pits and ditches dating to the medieval and post medieval periods.

Context	Quantity	Weight (g)
242	1	12.94
243	14	260.3
245	24	384.67
467	22	348.42
491	3	48.85
492	19	286.82
Total	**83**	**1342**

Table 30: SFB1, contexts producing Anglo-Saxon pottery

Context	Quantity	Weight (g)
270	1	1.16
300	1	9
309	1	1.58
340	3	24.92
341	2	7.78
456	2	7.61
488	3	75.18
489	6	150.42
Total	**19**	**277.65**

Table 31: SFB2, contexts producing Anglo-Saxon pottery

Context	Quantity	Weight (g)
347	3	22.29
348	3	33.95
470	3	19.32
Total	**9**	**75.56**

Table 32: SFB3, contexts producing Anglo-Saxon pottery

SFB	Quantity	Weight (g)	% of whole assemblage
1	83	1342.00	65.87
2	19	277.65	15.07
3	9	19.32	7.14
Total	**111**	**1638.97**	**88.08**

Table 33: Quantity, weight and percent of Anglo-Saxon pottery from the SFBs

B.8.9 Sherds are low to moderately abraded, mainly as a result of taphonomic processes. Variation in the degree of abrasion and fragmentation was noted with sherds from SFB1 having an average weight of 16.16g, SFB2 scoring 14.61g and SFB3 8.39g. The overall average sherd weight is high to medium for rural sites.

B.8.10 A total of 10 fragments were decorated with stamped motifs (discussed below) (Table 34). These were all recovered from SFB1.

B.8.11 The assemblage is formed of quartz tempered and organic tempered wares with two fragments of limestone tempered fabric. The fabrics reflect typical regional Early to Middle Anglo-Saxon handmade products showing affinities with vessels from the south-east and the midland counties (Spoerry 2016, 8-9).

B.8.12 The following sandy-clay prepared fabrics were identified:

Early/Middle Anglo-Saxon Limestone, E/MASX(L), Hard fired, mid to dark greyish brown core and surfaces. Sandy matrix with moderate to frequent very poorly sorted limestone, sparse to moderate grey and orange polycrystalline quartz, rare fragments of shells are also visible.

Early/Middle Anglo-Saxon Quartz, E/MASX(Q), Hard fired, grey to dark-grey sometimes with pale-brown surfaces. Moderate to abundant well sorted sub-angular to rounded clear grey and rare pink polycrystalline quartz. Mica is visible in some fragments, as well as inclusion of calcareous material up to 3mm and igneous rock. Often with external and internal wet surface finishing.

Early/Middle Anglo-Saxon Vegetable, E/MSX(V), Hard fired, dark grey core and oxidised pale-brownish surfaces. Moderate to common striations of dark organic material possibly chaff, rare to moderate poorly sorted sub-angular but mostly rounded quartz < 0.5mm, moderate and poorly sorted calcareous up to 3mm. Elongated voids on surfaces left after organic material burned out.

B.8.13 All vessels are hand-made domestic products. Vessel forms include jars and bowls with everted, upright or inturned rims (22 in total). Only two thick sagging bases were identified.

B.8.14 Sherds often present traces of sooting and nine fragments have thick organic residue on the internal surface suggesting a primary kitchen/storage use of the pots.

Decoration

B.8.15 Eleven fragments were decorated with incised horizontal and diagonal lines and/or sequences of stamps (Table 34).

B.8.16 Decorated fragments from contexts 243, 462 and 492 (SFB1) belong to the same pot, a likely cremation vessel (in blue, Table 34). A second cremation vessel consists of decorated fragments from context 467 (SFB1) (in orange, Table 34). Possibly from the same vessel are also decorated fragments from context 245 and 467 (72) (SFB1) (in green, Table 34).

Decoration / Context	Diagonal lines	Horizontal lines	Circle	Divided circle	Cross in circle	Triangle
243	V2				V2	
245 (5)				V2		
245 (6)		V1				
245 (10)		V1				V1
462	V2	V2			V2	
467 (72)	V1	V1		V1		
467 (80)					V3	
467 (86)				V3		
467 (176)				V3		
492 (104)			V2		V2	
492 (134)		V2				

Table 34: Catalogue of pottery decoration

Plate B.8.1: lines and stamps decoration from SFB 1

Statement of Potential

B.8.17 This small assemblage can only provide a chronological contribution to the site research objectives. However, when considered on a regional basis this assemblage is

useful for understanding variability in terms of fabrics, forms and decoration of hand-made Early to Middle Anglo-Saxon pottery in the county.

Recommendations for further work

B.8.18 Anglo-Saxon pottery sherds from the evaluation (LINBAR14) should be checked for cross-fittings, added to the below catalogue and to the discussion at the next stage.

B.8.19 Thin section analysis is recommended for six fragments (two samples for each fabric).

B.8.20 The results of this analysis will provide a valuable contribute in visually recognisable variations within fabric groups.

B.8.21 Analysis of organic residue is recommended for four sherds (Table 35). These analyses will aid understanding of the site economy, diet, form/function of vessels and culinary processes.

Context	Sample N	Fabric
489	1	E/MSX(Q)
492 (133)	2	E/MSX(Q)
492 (150)	3	E/MSX(Q)
492 (153)	4	E/MSX(Q)

Table 35: List of sherds for organic residue analysis.

B.8.22 Further comparative analysis should be considered for stamped decorations in order to investigate possible patterns of similarities or variation with regional assemblages.

B.8.23 Up to 27 sherds, consisting of rims and decoration, should be considered for illustration (Table 36).

Context	N	Description	Vessel
16	8	stamps, lines	4
18		rim, lines, stamps	2
18		rim	
205		rim	
205	G10	rim	
243		stamps	2
245	6	rim, lines and stamp	1
245	10	lines, stamp	1
245		rim	
245		rim	
245		rim	
340		rim	
462	70	rim, lines and stamp	2
467	72	stamp and lines	1
467	86	stamps	3
467		rim	
467	182	rim	
467	188	rim	
467	177	rim	

Context	N	Description	Vessel
488	8	rim	
489	37	rim	
489	25	rim	
492	104	rim, lines	2
492	134	stamps	2
492	127	rim	
653		rim	

Table 36: *list of sherds for recommended illustration.*

B.8.24 A maximum of 4 working days is estimated for illustration

B.8.25 A total of two working days is estimated to bring this report to a publication standard.

Retention, dispersal and display

B.8.26 All sherds are to be retained and archived accordingly.

Quantification summary table

Context	Feature	Fabric Family	Fabric	Description	Quantity	Weight (g)	Stamp	Pot Date (min)	Pot Date (max)
205	Surface collection	E/MSX	E/MSX(Q)	rim	1	9.63		450	850
205	Surface collection	E/MSX	E/MSX(Q)		1	13.56		450	850
205	Surface collection	E/MSX	E/MSX(Q)	rim	1	8.83		450	850
242	SFB	E/MSX	E/MSX(Q)		1	12.94		450	850
243	SFB	E/MSX	E/MSX(Q)		1	2.72		450	850
243	SFB	E/MSX	E/MSX(Q)		1	3.9		450	850
243	SFB	E/MSX	E/MSX(Q)		1	8.6		450	850
243	SFB	E/MSX	E/MSX(Q)		1	1.72		450	850
243	SFB	E/MSX	E/MSX(Q)		1	19.04	7 cross in circle (C2) between oblique lines	450	550
243	SFB	E/MSX	E/MSX(Q)	base	1	99.44		450	850
243	SFB	E/MSX	E/MSX(Q)		7	118.24		450	850
243	SFB	E/MSX	E/MSX(Q)		1	6.64		450	850
245	SFB	E/MSX	E/MSX(Q)	rim	1	12.61	3 horizontal lines between shoulder and neck	450	850
245	SFB	E/MSX	E/MSX(Q)		1	1.75		450	850
245	SFB	E/MSX	E/MSX(Q)		1	4.29	small part of stamp. Possibly same vessel as 467 n72	450	850
245	SFB	E/MSX	E/MSX(Q)		1	4.04	2 horizontal parallel lines, below a row of plain triangles	450	550
245	SFB	E/MSX	E/MSX(Q)		1	7.41		450	850
245	SFB	E/MSX	E/MSX(Q)		1	11.55		450	850
245	SFB	E/MSX	E/MSX(Q)		1	17.94		450	850
245	SFB	E/MSX	E/MSX(Q)		1	8.01		450	850

Context	Feature	Fabric Family	Fabric	Description	Quantity	Weight (g)	Stamp	Pot Date (min)	Pot Date (max)
245	SFB	E/MSX	E/MSX(Q)	rim	1	51.74		450	850
245	SFB	E/MSX	E/MSX(Q)	rim	1	7.81		450	850
245	SFB	E/MSX	E/MSX(Q)	rim	1	26.09		450	850
245	SFB	E/MSX	E/MSX(Q)		11	223.24		450	850
245	SFB	E/MSX	E/MSX(Q)		2	8.19		450	850
270	SFB	E/MSX	E/MSX(Q)		1	1.16		450	850
280	ditch	E/MSX	E/MSX(V)		1	16.26		450	850
285	pit	E/MSX	E/MSX(V)		4	24.91		450	850
298	pit	E/MSX	E/MSX(Q)		1	9.65		450	850
300	posthole	E/MSX	E/MSX(L)		1	9		450	850
309	SFB	E/MSX	E/MSX(Q)		1	1.58		450	850
325	ditch	E/MSX	E/MSX(Q)		1	6		450	850
327	ditch	E/MSX	E/MSX(Q)		1	15.25		450	850
340	SFB	E/MSX	E/MSX(Q)	rim	1	9.16		450	850
340	SFB	E/MSX	E/MSX(Q)	rim	1	2.89		450	850
340	SFB	E/MSX	E/MSX(Q)	base	1	12.87		450	850
341	SFB	E/MSX	E/MSX(Q)	rim	1	2.27		450	850
341	SFB	E/MSX	E/MSX(Q)		1	5.51		450	850
347	pit	E/MSX	E/MSX(Q)		1	5.05		450	850
347	pit	E/MSX	E/MSX(Q)		1	9.8		450	850
347	pit	E/MSX	E/MSX(Q)		1	7.44		450	850
348	pit	E/MSX	E/MSX(Q)		1	4.58		450	850
348	pit	E/MSX	E/MSX(V)		1	5.69		450	850
348	pit	E/MSX	E/MSX(V)		1	23.68		450	850
371	pit	E/MSX	E/MSX(Q)		1	3.28		450	850
456	SFB	E/MSX	E/MSX(Q)		1	1.2		450	850
456	SFB	E/MSX	E/MSX(Q)		1	6.41		450	850
462	SFB	E/MSX	E/MSX(Q)	rim	1	20.34	two weaving parallel lines at the base of the neck, two oblique lines under the neck, a cross in circle (C2)	450	550
467	SFB	E/MSX	E/MSX(Q)	rim	1	14		450	850
467	SFB	E/MSX	E/MSX(Q)		1	6.5	2 possibly 3 diagonal(?) and parallel lines, below 2 worn divided circles (Bold B2 updated B3)	450	550
467	SFB	E/MSX	E/MSX(Q)		1	16.49		450	850
467	SFB	E/MSX	E/MSX(Q)		1	12		450	850
467	SFB	E/MSX	E/MSX(Q)		1	17.1		450	850
467	SFB	E/MSX	E/MSX(Q)		1	5.26		450	850
467	SFB	E/MSX	E/MSX(Q)		1	12.57		450	850
467	SFB	E/MSX	E/MSX(Q)		1	17.11		450	850
467	SFB	E/MSX	E/MSX(Q)		1	13.94		450	850
467	SFB	E/MSX	E/MSX(Q)		1	12.47		450	850

Context	Feature	Fabric Family	Fabric	Description	Quantity	Weight (g)	Stamp	Pot Date (min)	Pot Date (max)
467	SFB	E/MSX	E/MSX(Q)		1	20.65		450	850
467	SFB	E/MSX	E/MSX(Q)		1	7.69		450	850
467	SFB	E/MSX	E/MSX(Q)	rim	1	47.83		450	850
467	SFB	E/MSX	E/MSX(Q)		1	6.64		450	850
467	SFB	E/MSX	E/MSX(Q)		1	13.08	possibly cross in circle see West How 3C.18, very worn and incomplete	450	550
467	SFB	E/MSX	E/MSX(Q)		1	9.72		450	850
467	SFB	E/MSX	E/MSX(V)		1	8.41		450	850
467	SFB	E/MSX	E/MSX(Q)		1	8.01	5 divided circles similar to old B3 updated B2	450	550
467	SFB	E/MSX	E/MSX(Q)		1	21.65		450	850
467	SFB	E/MSX	E/MSX(Q)	rim	1	40.2		450	850
467	SFB	E/MSX	E/MSX(Q)		1	5.09	3 divided circles, similar to old B3 updated B2	450	600
467	SFB	E/MSX	E/MSX(Q)	rim	1	32.01		450	850
470	pit	E/MSX	E/MSX(Q)		1	2.86		450	850
470	pit	MSX	E/MSX(Q)		1	5.56		720	850
470	pit	E/MSX	E/MSX(Q)		1	10.9		450	850
488	SFB	E/MSX	E/MSX(V)		1	51.22		450	850
488	SFB	E/MSX	E/MSX(Q)	rim	1	11.07		450	850
488	SFB	E/MSX	E/MSX(Q)		1	12.89		450	850
489	SFB	E/MSX	E/MSX(Q)		1	4.53		450	850
489	SFB	E/MSX	E/MSX(Q)		1	9.48		450	850
489	SFB	E/MSX	E/MSX(Q)	rim	1	15.39		450	850
489	SFB	E/MSX	E/MSX(Q)		1	2.6		450	850
489	SFB	E/MSX	E/MSX(Q)		1	36.4		450	850
489	SFB	E/MSX	E/MSX(Q)	rim	1	82.02		450	850
491	SFB	E/MSX	E/MSX(Q)	rim	1	6.97		450	850
491	SFB	E/MSX	E/MSX(Q)		1	3.53		450	850
491	SFB	E/MSX	E/MSX(Q)		1	38.35		450	850
492	SFB	E/MSX	E/MSX(Q)		1	7.53		450	850
492	SFB	E/MSX	E/MSX(Q)		1	11	circles (Group 2 n8), cross in circle (C2), 2 diagonal lines	450	550
492	SFB	E/MSX	E/MSX(Q)		1	17.78		450	850
492	SFB	E/MSX	E/MSX(Q)		1	4.38		450	850
492	SFB	E/MSX	E/MSX(Q)		1	7.88		450	850
492	SFB	E/MSX	E/MSX(Q)		1	7.68		450	850
492	SFB	E/MSX	E/MSX(Q)	base	1	20.36		450	850
492	SFB	E/MSX	E/MSX(Q)		1	4.3		450	850
492	SFB	E/MSX	E/MSX(Q)		1	6.11		450	850
492	SFB	E/MSX	E/MSX(Q)		1	51.52		450	850
492	SFB	E/MSX	E/MSX(Q)		1	11.42		450	850

Context	Feature	Fabric Family	Fabric	Description	Quantity	Weight (g)	Stamp	Pot Date (min)	Pot Date (max)
492	SFB	E/MSX	E/MSX(Q)		1	2.16		450	850
492	SFB	E/MSX	E/MSX(Q)		1	10.12		450	850
492	SFB	E/MSX	E/MSX(Q)		1	7.63		450	850
492	SFB	E/MSX	E/MSX(Q)	rim	1	18.07		450	550
492	SFB	E/MSX	E/MSX(Q)		1	35.08		450	850
492	SFB	E/MSX	E/MSX(Q)	rim	1	27.78		450	850
492	SFB	E/MSX	E/MSX(Q)		1	18.42		450	850
492	SFB	E/MSX	E/MSX(L)	rim	1	17.6		450	850
494	SFB	E/MSX	E/MSX(Q)		1	5.61		450	850
494	pit	E/MSX	E/MSX(Q)		1	8.11		450	850
554	layer	E/MSX	E/MSX(V)		1	5.16		450	850
632	layer	E/MSX	E/MSX(Q)		1	2.83		450	850
653	layer	E/MSX	E/MSX(Q)		1	4.56		450	850
653	layer	E/MSX	E/MSX(Q)	rim	1	8.56		450	850
99999	top-soil	E/MSX	E/MSX(Q)		1	70.95		450	850

Table 37: Summary catalogue of Early to Middle Anglo-Saxon hand-made ceramic.

B.9 Medieval and post-medieval pottery

By Carole Fletcher

Introduction

B.9.1 Archaeological works produced a moderately sized hand-excavated medieval and post-medieval pottery assemblage, from across the areas excavated. The assemblage is broadly medieval, although there are some Late Saxon-early medieval sherds present, as well as post-medieval and early modern sherds.

Methodology

B.9.2 The Prehistoric Ceramics Research Group (PCRG), Study Group for Roman Pottery (SGRP), The Medieval Pottery Research Group (MPRG), 2016 *A Standard for Pottery Studies in Archaeology* and the MPRG *A guide to the classification of medieval ceramic forms* (MPRG 1998) act as standards.

B.9.3 Recording was carried out using OA East's in-house system, based on that previously used at the Museum of London. Fabric classification has been carried out for all previously described post-medieval types, using Cambridgeshire fabric types where possible (Spoerry 2016). The Museum of London fabric series (MoLA 2014) acts as a basis for post-1700 fabrics. All sherds have been counted, classified by fabric, weighed on a context-by-context basis and fully recorded in an Access database. Where material was recovered from samples, it was only considered where no other pottery was recovered. The pottery and archive are curated by Oxford Archaeology East until formal deposition or dispersal.

Factual Data

B.9.4 An assemblage of 424 sherds, weighing 4.209kg, representing a minimum number of 172 vessels (MNV), was recovered. The condition of the overall assemblage is moderately abraded; however, the average sherd weight is low, at approximately 0.009kg, suggesting much of the assemblage has undergone some reworking.

B.9.5 The excavation was carried out by hand and selection made through standard sampling strategies on a feature-by-feature basis. There are not expected to be any inherent biases. Layer 205 (surface collection) was gridded out and excavated by spit, and the pottery recovered is fully recorded, as is the material from the test pits and the unstratified material. However, all of these have been listed as unphased and will therefore only be discussed in broad terms with regard to the whole assemblage.

B.9.6 Fabrics present in the full assemblage (listed in Table 38) are mainly East Anglian, with a low number of sherds from the industrial midlands and a single sherd of imported pottery identified. The production centres identified include Cambridgeshire, Norfolk, Northamptonshire, Essex, Norfolk and Staffordshire. The generic post-medieval Redwares may be from Essex or from Ely's riverside post-medieval pottery industry (Cessford *et al*. 2006). The largest single group of sherds are Medieval Essex-type micaceous grey sandy wares (128 sherds, 1.431kg), followed by East Anglian Redwares

(EAR), a generic term that can include Colchester-type wares amongst its products but is used where the industries have not been identified.

Full Name	Fabric Code	Count	MNI	Weight (kg)	% by weight
Developed St Neots-type ware	DNEOT	6	9	0.089	2.1
Dutch-type redwares	DUTR	1	1	0.018	0.4
Early Medieval Essex Micaceous Sandy ware	EMEMS	8	11	0.110	2.6
Early Medieval Essex Micaceous Sandy ware/Medieval Essex-type micaceous grey sandy wares	EMEMS-MEMS	13	42	0.423	10.0
East Anglian Redwares	EAR	35	94	1.025	24.4
Hedingham Coarseware	HEDIC	6	13	0.127	3.0
Hedingham Fineware	HEDI	7	20	0.155	3.7
Horticultural Redware	HORT	1	1	0.030	0.7
Huntingdonshire Fen Sandy ware	HUNFSW	1	1	0.002	0.05
Lyveden A-type Shelly ware	LYVA	1	1	0.004	0.1
Medieval Essex-type micaceous grey sandy wares	MEMS	38	128	1.431	34.0
Medieval Essex-type micaceous grey sandy wares (Low Iron)	MEMS (LI)	3	6	0.088	2.1
Medieval Sandy Greyware	MSGW	16	36	0.313	7.4
Medieval Sandy ware	MSW	18	38	0.194	4.6
Pearlware	PEARL	1	1	0.001	0.0
Pearlware (Transfer-printed)	PEARL TR	1	2	0.005	0.1
Post-medieval Black-Glazed ware	PMBL	1	5	0.025	0.6
Post-medieval Redwares	PMR	5	5	0.048	1.1
Post-medieval Redwares (19th century Country ware)	PMR (19th cent)	4	4	0.052	1.2
Shelly wares	SHW	2	2	0.009	0.2
(South Cambridgeshire) Smooth Sandy ware	SCASS	2	2	0.047	1.1
Thetford-type wares	THET	1	1	0.002	0.05
White Stoneware	STONE (W)	1	1	0.011	0.3
Total		**172**	**424**	**4.209**	**100**

Table 38: Pottery fabrics present in the phased assemblage.

B.9.7 Vessels present are domestic in nature, jars being predominant by weight and count, then bowls, with jugs well-represented (Table 39). Sherds from a single post-medieval Black-Glazed ware drinking vessel were recovered from hollow way **247** (Phase 5). Sooted sherds are common, including sherds from an East Anglian Redware pipkin, and indicate food preparation and cooking or reheating of food prior to consumption.

Basic Form	Count	MNI	Weight	% by Weight
Bowl (including dishes)	47	16	0.695	16.5
Drinking vessel	5	1	0.025	0.6
Jar	161	62	1.741	41.4
Jar/jug	16	4	0.218	5.2
Jug	41	21	0.395	9.4
Undiagnostic	154	68	1.135	26.9
Total	**424**	**172**	**4.209**	**100.0**

Table 39: Vessel forms present in the total assemblage

B.9.8 The bulk of the material was recovered from 35 stratified contexts. The unphased material comprises 99 sherds weighing 0.968kg, MNV 44, recovered from six contexts

(layer 205, test pit **501**, **560**, **587**, **644** and **661**), in addition to unstratified material. The phased assemblage is therefore 325 sherds, weighing 3.241kg, MNV 128.

B.9.9 The majority of the assemblage (by weight) was recovered from Phase 4 (medieval *c*.1050-1500/1550), with an average sherd weight of 0.009kg (Table 40). The remainder, with the exception of two intrusive medieval sherds from Phase 2, was recovered from Phase 5 (post-medieval and modern *c*.1550-1900), with a higher average sherd weight of 0.014kg.

	MNI	Count	Weight (kg)	% Weight of total assemblage	% Residual		% Intrusive	
					Total phased assemblage	Individual phase assemblages	Total phased assemblage	Individual phase assemblages
Phase 2: Iron Age and Roman	2	2	0.005	0.2	0	0	N/A	N/A
Phase 4: Medieval	91	247	2.195	67.7	0	0	0	0
Phase 5: Post-medieval and Modern	35	76	1.041	32.1	27.1	0.887	0	0
Total phased assemblage	**128**	**325**	**3.241**	**100**				

Table 40: Count and weight of pottery by phase/period, residuality and intrusiveness

B.9.10 The percentages of residual or intrusive material are misleading, as the broad nature of the phases and the longevity of certain ceramic industries masks the subtleties of the assemblage. A relatively large Early/Middle Saxon domestic pottery assemblage (126 sherds, 1.837kg) was recovered from the sunken-featured buildings (SFB) on the site (Appendix B.8), with a further 15 sherds (0.198kg) from other features. However, only a single sherd of Late Saxon-early medieval Thetford ware was recovered. By comparison, 22 sherds (0.246kg) of early medieval fabrics were recovered, including Developed St Neots-type ware, early medieval Essex Micaceous Sandy ware and (South Cambridgeshire) Smooth Sandy ware, which suggests that there was no transition of Early/Middle Saxon to Late Saxon on the site, and that Late Saxon occupation is absent. Perhaps settlement shifted elsewhere and the area was only occupied again in the early medieval period, with the establishment of the now deserted medieval settlement of Barham.

Phase 4: Medieval

B.9.11 The medieval assemblage (AD 1050-1500/1550) was recovered from various features including well **206**, a number of medieval and post-medieval ditches (**203**, **236**, **240**, **636** and **639**), but mostly from quarry pits (**256**, **271**, **275**, **379**, **442**, **444**, **526**, **575**, **577**, **580**, **604** and **618**). These small borrow pits seem to have been used to collect small quantities of the pellet chalk, probably to produce lime. The quarrying activity extends into the post-medieval period (Section2.5.2). These quarry pits would then almost certainly have been used for rubbish deposition. There is no definitively late medieval pottery in the assemblage, which may also indicate the association of the material recovered within the deserted settlement of Barham.

Well

B.9.12 Well **206** produced 16 sherds (0.208kg), including sherds from at least three jugs, a body sherd and strap handle from an East Anglian Redware vessel, a sherd from a medieval Essex-type micaceous grey sandy ware jug and a body sherd from a Hedingham Fineware jug. It is very probable that some of these sherds relate to the usage of the well in the medieval period, the jugs perhaps breaking after they had been pulled from the well, with some of the fragments thrown back in.

Ditches

B.9.13 The medieval activity was primarily composed of a series of ditches running on an approximately east to west alignment. The ditches (**236**, **240**, **254**, **636** and **639**) in total only produced 35 sherds of pottery (0.484kg), mostly medieval Essex-type micaceous grey sandy wares, with jars the most common vessel sherd recovered. Ditch **639** produced the largest assemblage (29 sherds weighing 0.390kg), including 19 sherds (0.224kg) from a transitional early medieval Essex Micaceous Sandy ware/medieval Essex-type micaceous grey sandy ware jar, suggesting the ditch infilling may date to the early part of the 13th century.

Pits

B.9.14 The pits produced the bulk of the medieval assemblage (172 sherds weighing 1.410kg); no single pit produced more than 0.500kg of pottery and pits **275**, **379**, **442**, **444**, **526**, **533**, **575**, **577**, **604** and **618** produced nine or fewer sherds, each feature assemblage weighing less than 0.075kg. Most of the pits produced high medieval pottery (AD 1200-1350), however, some (**379**, **526**, **575 and 604**) also produced early medieval pottery, including sherds of Developed St Neots-type ware and early medieval Essex Micaceous Sandy ware, alongside high medieval fabrics including medieval Essex-type micaceous grey sandy wares and Hedingham Coarseware.

B.9.15 The larger assemblages by weight were recovered from pits **256**, **271** and **580**, of which pit **271** produced the largest assemblage (70 sherds weighing 0.489kg), including sherds from five Hedingham Fineware jugs, four East Anglian Redware jugs and a minimum of five medieval Essex-type micaceous grey sandy ware jars. Pit **256**'s smaller assemblage (38 sherds, 0.398kg) produced fewer jugs and jars, although it did contain a rim sherd from a medieval Essex-type micaceous grey sandy ware bowl. The assemblage from pit **580** (23 sherds, 0.130kg) produced no jugs, only jar sherds, and a small sherd of Developed St Neots-type ware.

Other features

B.9.16 A single post hole, **286**, produced a single sherd of medieval Sandy ware (0.013kg) and dump layer 612 (23 sherds, 0.080kg), produced undiagnostic East Anglian Redware and medieval Essex-type micaceous grey sandy wares.

Phase 5: Post-Medieval and Modern

B.9.17 This phase produced roughly a third of the assemblage (76 sherds, 1.041kg), recovered from three features, the hollow way, whose earlier incarnations may be some of the ditches in Phase 4, a north to south aligned extension of the hollow way, which

produced the bulk of the assemblage in this phase, although much is residual, and finally a feature described as modern.

B.9.18 Excavation of the trackway or hollow way (**247**, **385** and **389**) produced 20 sherds, weighing 0.228kg, including a sherd with a near-complete profile, from an early medieval (South Cambridgeshire) Smooth Sandy ware dish, alongside high medieval East Anglian Redware jars and medieval Essex-type micaceous grey sandy wares. Also present were five sherds from a post-medieval Black-Glazed ware drinking vessel, sherds from a post-medieval Redware bowl and fragments of 19th century post-medieval Redware/Country ware vessels.

B.9.19 Hollow way **415**=**439** produced 51 sherds, weighing 0.733kg, of pottery, mostly residual East Anglian Redwares, including sherds from a minimum of seven bowls, which may possibly relate to dairying. Post-medieval fabrics present include post-medieval Redwares, 19th century post-medieval Redware/Country ware and a sherd from a plant pot.

Discussion

B.9.20 After the Early/Middle Saxon occupation the site appears to have been abandoned until the early medieval period, when deposition of low levels of domestic refuse recovered from the medieval features is likely to have originally happened. The material may represent manuring scatter, perhaps relating to the deserted settlement of Barham (called Bercheham in the Domesday Book), which lies *c*.300m to the south of the site (Section 1.3.13). However, the assemblage mostly represents rubbish deposition recovered from pits dug for chalk extraction and from the infilling and/or repairs to the hollow way during the post-medieval period. The material has been heavily reworked, with little primary deposition in any phase.

B.9.21 The presence of both early and high medieval pottery in the pits may be due to the early nature of the features, perhaps all infilled by the end of the 13th century. Alternatively, it may result from reworking of the earlier material, since the quarrying continues into the post-medieval period (Section 2.6.6). Overall, the assemblage very probably relates to the deserted settlement of Barham, and the lack of definitively late medieval pottery in the assemblage may support this assumption. Historic England describes Barham as a medieval to post-medieval deserted settlement, quoting Berrisford (1963) to describe it as "a hamlet of Linton which seems to have been of considerable size in 1279" (https://www.pastscape.org.uk/). However, whether the village's abandonment was due to the plague, flood or the founding/demands of Barham priory (founded in 1292), which was situated adjacent to Barham and survived until the Dissolution in 1539 (Section 1.3.13), the pottery present does not indicate late medieval activity.

Statement of potential

B.9.22 The phased assemblage is not large, is heavily reworked and contains little material that is primary deposition, meaning that its potential is limited to indicating the supply of pottery and the uses of ceramics, at least in part, to the nearby deserted medieval settlement of Barham, which this report establishes.

Recommendations for further work

B.9.23 This statement acts as a full record for the archive and a summary catalogue is provided (an Access database holds the full record). No further work is required.

Retention, dispersal and display

B.9.24 The bulk of the diagnostic medieval pottery should be retained for the archive and eventual deposition.

Catalogue

Phase	Cut	Context	Fabric	Form	Count	MNI	Weight (kg)	Pottery Date
2	**299**	300	MSW		1	1	0.003	1150-1500
2	**339**	340	MSW		1	1	0.002	1150-1500
4		612	EAR		1	6	0.011	1200-1400
4		612	MEMS		3	17	0.069	1200-1400
4	**206**	207	EMEMS		1	1	0.003	1050-1225
4	**206**	207	EMEMS	Jar	1	1	0.006	1050-1225
4	**206**	208	EAR	Jug	1	2	0.026	1200-1400
4	**206**	208	EMEMS-MEMS		1	5	0.04	1050-1225/ 1200-1400
4	**206**	208	HEDI	Jug	1	1	0.01	1150-1350
4	**206**	208	MEMS	Jug	1	2	0.078	1200-1400
4	**206**	208	MEMS (OX)		1	3	0.042	1200-1400
4	**206**	208	MSGW		1	1	0.003	1150-1500
4	**236**	237	MEMS		1	1	0.007	1200-1400
4	**236**	237	MEMS	Jar	1	1	0.041	1200-1400
4	**240**	241	MEMS	Jar	1	1	0.03	1200-1400
4	**254**	255	MSW (O)	Jar	1	2	0.006	1150-1500
4	**256**	257	MSGW	Jar	1	12	0.188	1150-1500
4	**256**	258	EAR		0	5	0.013	1200-1400
4	**256**	258	EAR	Jar	1	1	0.005	1200-1400
4	**256**	258	EAR	Jug	1	1	0.009	1200-1400
4	**256**	258	EMEMS (M)	Jar	1	1	0.014	1050-1225
4	**256**	258	MEMS	Bowl	1	1	0.041	1200-1400
4	**256**	258	MEMS	Jar	2	6	0.04	1200-1400
4	**256**	258	MEMS (LI)	Jar	1	1	0.015	1200-1400
4	**256**	258	MSW		0	3	0.009	1150-1500
4	**256**	258	MSW (O)		1	1	0.017	1150-1500
4	**256**	258	MSW (O)	Jar	0	6	0.047	1150-1500
4	**271**	272	HEDI	Jug	1	1	0.021	1150-1350
4	**271**	272	MEMS		1	1	0.005	1200-1400
4	**271**	273	HEDI	Jug	2	7	0.062	1150-1350
4	**271**	273	HEDIC		1	2	0.006	1150-1350
4	**271**	273	MEMS	Jar	1	1	0.003	1200-1400
4	**271**	273	MSGW	Jar	1	1	0.002	1150-1500
4	**271**	274	EAR		0	4	0.015	1200-1400

Phase	Cut	Context	Fabric	Form	Count	MNI	Weight (kg)	Pottery Date
4	**271**	274	EAR	Jug	4	7	0.044	1200-1400
4	**271**	274	EMEMS-MEMS	Jar	4	10	0.08	1050-1225/ 1200-1400
4	**271**	274	HEDI	Jug	2	10	0.049	1150-1350
4	**271**	274	MEMS	Jar	3	25	0.173	1200-1400
4	**271**	274	MEMS (LI)	Jar	1	1	0.029	1200-1400
4	**275**	276	EAR	Jug	1	1	0.006	1200-1400
4	**275**	276	HUNFSW		1	1	0.002	1150-1350
4	**275**	276	MSGW	Jar	2	3	0.015	1150-1500
4	**275**	276	MSW		1	2	0.005	1150-1500
4	**275**	276	SHW		1	1	0.006	1150-1500
4	**286**	287	MSW		1	1	0.013	1150-1500
4	**379**	382	DNEOT		2	2	0.023	1050-1250
4	**379**	382	MSGW		1	1	0.012	1150-1500
4	**442**	443	EAR		1	1	0.005	1200-1400
4	**442**	443	EAR	Jar/jug	1	1	0.03	1200-1400
4	**444**	445	EAR		1	1	0.016	1200-1400
4	**444**	445	EAR	Bowl	1	1	0.023	1200-1400
4	**444**	445	EAR	Jug	1	1	0.007	1200-1400
4	**526**	529	DNEOT	Bowl	1	2	0.028	1050-1250
4	**526**	529	EAR	Jar	1	1	0.01	1200-1400
4	**526**	529	HEDIC	Jar	1	1	0.008	1150-1350
4	**526**	529	MEMS		1	1	0.005	1200-1400
4	**526**	529	MSW		1	2	0.014	1150-1500
4	**526**	530	MEMS	Jar	1	1	0.006	1200-1400
4	**526**	530	MSW	Jar	1	1	0.003	1150-1500
4	**533**	534	HEDIC		1	2	0.013	1150-1350
4	**533**	534	MEMS	Jar	1	1	0.02	1200-1400
4	**533**	534	MSW		1	2	0.009	1150-1500
4	**575**	576	EMEMS	Jar	1	1	0.01	1050-1225
4	**575**	576	EMEMS-MEMS	Jar	1	1	0.013	1050-1225/ 1200-1400
4	**577**	579	EMEMS-MEMS	Jar	1	1	0.01	1050-1225/ 1200-1400
4	**577**	579	HEDI	Jug	1	1	0.013	1150-1350
4	**580**	581	DNEOT		1	1	0.002	1050-1250
4	**580**	581	EAR		0	1	0.001	1200-1400
4	**580**	581	EAR	Jar	1	3	0.028	1200-1400
4	**580**	581	EMEMS-MEMS	Jar	3	4	0.03	1050-1225/ 1200-1400
4	**580**	581	MEMS	Jar	3	14	0.102	1200-1400
4	**604**	606	EMEMS	Jar	1	4	0.024	1050-1225
4	**604**	609	EMEMS-MEMS		1	1	0.007	1050-1225/ 1200-1400
4	**604**	609	MSW		1	1	0.006	1150-1500
4	**618**	619	MEMS	Jar	1	1	0.011	1200-1400
4	**636**	638	MSGW		1	1	0.01	1150-1500

Phase	Cut	Context	Fabric	Form	Count	MNI	Weight (kg)	Pottery Date
4	**639**	640	EMEMS-MEMS	Jar	2	20	0.243	1050-1225/ 1200-1400
4	**639**	640	MEMS	Jar/jug	1	9	0.147	1200-1400
5	**235**	242	DNEOT	Jar	1	1	0.03	1050-1250
5	**235**	242	EAR		1	1	0.014	1200-1400
5	**235**	242	MEMS (OX)		1	1	0.031	1200-1400
5	**235**	242	PEARL TR	Dish	1	2	0.005	1770-1840
5	**247**	249	LYVA		1	1	0.004	1150-1400
5	**247**	249	MEMS (OX)		1	2	0.015	1200-1400
5	**247**	249	MSGW		1	1	0.007	1150-1500
5	**247**	249	MSW		1	1	0.004	1150-1500
5	**247**	249	PMBL	Drinking vessel	1	5	0.025	1600-1700
5	**247**	249	SCASS	Dish	1	1	0.042	1050-1225
5	**385**	388	DUTR	Bowl	1	1	0.018	1050-1250
5	**385**	388	EAR	Jar	1	1	0.024	1200-1400
5	**385**	388	PMR		2	2	0.014	1550-1800
5	**385**	388	PMR	Bowl	1	1	0.017	1550-1800
5	**385**	388	PMR	Jar	1	1	0.012	1550-1800
5	**389**	437	PMR (19th cent)		3	3	0.046	1800+
5	**439**	440	EAR		0	2	0.01	1200-1400
5	**439**	440	EAR	Bowl	1	1	0.017	1200-1400
5	**439**	440	EAR	Jar	1	1	0.014	1200-1400
5	**439**	440	EAR	Jar/jug	1	5	0.03	1200-1400
5	**439**	440	EAR	Jar: pipkin	1	1	0.112	1200-1400
5	**439**	440	PMR (19th cent)		1	1	0.006	1800+
5	**439**	441	EAR	Bowl	6	35	0.473	1200-1400
5	**439**	441	EAR	Jar	1	1	0.013	1200-1400
5	**439**	441	EAR	Jug	1	1	0.014	1200-1400
5	**439**	441	HORT	Jar	1	1	0.03	1700+
5	**439**	441	MEMS	Jar	1	1	0.009	1200-1400
5	**439**	441	PMR	Bowl	1	1	0.005	1550-1800
Unphased		205	DNEOT	Jar	1	2	0.005	1050-1250
		205	EAR		1	1	0.001	1200-1400
		205	EAR	Jug	1	2	0.017	1200-1400
		205	EMEMS		1	1	0.004	1050-1225
		205	HEDIC		1	1	0.012	1150-1350
		205	MEMS		1	2	0.008	1200-1400
		205	MEMS	Jar	1	4	0.057	1200-1400
		205	MEMS (OX)		4	10	0.165	1200-1400
		205	MSGW		5	12	0.053	1150-1500
		205	MSGW	Jar	3	4	0.023	1150-1500
		205	MSW		4	9	0.032	1150-1500
		205	MSW	Jar	1	1	0.007	1150-1500
		205	PEARL		1	1	0.001	1770-1840
		205	SHW		1	1	0.003	1150-1500

Phase	Cut	Context	Fabric	Form	Count	MNI	Weight (kg)	Pottery Date
		205	THET		1	1	0.002	840-1150
		501	STONE (W)	Jar/jug	1	1	0.011	1800-1900
		560	MSW			2	0.005	1150-1500
		587	HEDIC	Jar	1	4	0.051	1150-1350
		587	MEMS		1	4	0.122	1200-1400
		587	MSW	Jar	1	1	0.003	1150-1500
		644	SCASS		1	1	0.005	1050-1225
		661	DNEOT		0	1	0.001	1050-1250
		99999	EAR		2	4	0.032	1200-1400
		99999	EAR	Jug	1	1	0.005	1200-1400
		99999	EMEMS	Jar	1	1	0.035	1050-1225
		99999	EMEMS (M)		1	1	0.014	1050-1225
		99999	HEDIC	Jar	1	3	0.037	1150-1350
		99999	MEMS		0	13	0.13	1200-1400
		99999	MEMS	Bowl: rounded bowl	1	1	0.026	1200-1400
		99999	MEMS	Jar	1	1	0.014	1200-1400
		99999	MEMS	Jug	2	3	0.034	1200-1400
		99999	MEMS (LI)	Jar	1	4	0.044	1200-1400
		99999	MSW	Jar	1	1	0.009	1150-1500

Table 41: Pottery by phase, cut and context

B.10 Worked stone

by Simon Timberlake

Introduction

B.10.1 A total of 13.41kg (x78 pieces) of stone were examined from this excavation, of which 5.34kg (x36 pieces) consisted of worked stone (the vast majority of which was identified as being Romano-British or Anglo-Saxon rotary quern or millstone (4.815 kg)), some 7.19kg (x38 pieces) of burnt stone, with just 0.87kg (x 4 pieces) of probable building stone.

B.10.2 Most of the quern examined appeared likely to be early medieval (Anglo-Saxon) in date, with at least one of these pieces (SF98) having been found within an Early Anglo-Saxon pit.

B.10.3 A single burnt prehistoric hammerstone came from a context within a large spread 'deposit', and may be Mesolithic – Bronze Age in date.

B.10.4 Burnt stone came from a variety of different contexts, but most of this was prehistoric in character, some having been redeposited within later features, including an Early Saxon SFB and medieval ditches.

Methodology

B.10.5 All the stone was identified visually using an illuminated x10 magnifying lens, and compared where necessary with an archaeological worked stone reference collection. This included a number of specimens of basalt collected from the lava flow beds quarried in the Roman-medieval quern quarries at Mayen, Germany. Projected quern diameters were estimated using a chart, and in some cases this involved re-fitting rim fragments. A dropper bottle containing dilute hydrochloric acid was used to confirm the presence or absence of calcite in the rock.

Worked Stone

Catalogue and description of worked stone

Lava Quern

B.10.6 Analysis of the worked stone has revealed a fragmentary and burnt assemblage of lava quern deposited within Anglo-Saxon (Early Saxon) SFBs, pits and (later) early medieval features (Fig. B.10.1). More than 90% of this quern appears to have been burnt, and much of it weathered, with some of the quern used perhaps as hearth surround, such as the fragment of a large and very worn lower stone (SF98 from 410, pit **408**, Phase 3) recovered from an SFB structure.

B.10.7 The primary use of these appears mostly to be as hand-mill rotary querns of around 450-500mm diameter, the latter making up around 60% (by weight) of the diagnostic quern assemblage, with another 27% of this consisting of a single fragment from a lower millstone of *c*.800mm diameter (and approx. 80mm thick). The latter came from context 253 and could be medieval or Roman in date, traction powered, and quite possibly therefore a fragment of re-deposited Roman millstone; the type of 'basaltic

lava' (tephritic phonolite (Reiere *et al*. 2016, 408)) from which it was composed being quite different from the other lava lithologies.

B.10.8 Amongst the handmill quern assemblage there is an unequal split between upper and lower stones (15% upper / 80% lower (by weight): see Figure B.9.2); this being a good argument perhaps for the re-distribution and re-deposition of some of this quern, although differential preservation may well have a part to play, as will the ability to distinguish relevant details of typology in what is rather poorly preserved material.

B.10.9 Traces of crude harp furrow dressing can be seen upon the grind surfaces of the millstone (253) and lower quernstone (272). These are fairly unusual features in Anglo-Saxon querns (Watts 2002, 39), so once again it should be considered whether such stones might be residual, curated, or alternatively re-used Roman examples.

B.10.10 Yet another possibility is that at a variant of true peck-pattern dressing of the stones is represented here; for instance the type that is commonplace within Anglo-Saxon lava querns such as those recorded from Dorestad in the Netherlands (See Figure B.10.4).

B.10.11 Figure B.10.3 shows the lower stone SF98, in which the traces of a spindle hole through which the manual mill might have been affixed to a bench has been indicated.

B.10.12 Full details of this quern assemblage are provided in Table 42. This includes a hand-specimen petrographic assessment of lava type, a summary description of which is provided in the accompanying key. This assessment was undertaken with a view to looking for any correlation(s) between lava bed and date / type of quern, but no meaningful patterning could be detected; the lava beds within the source quarries at Mayen, Germany probably varying significantly between the top and bottom of flows, and probably also laterally in their inclusions (Mangartz 2008; Horter *et al*.1951; Reiere *et al. ibid*. 2016).

Context	Feature	Phase	SF/ other no	Nos. frags	dimensions (mm)	Wt (kg)	basalt type	U/L stone	estimated stone diameter (mm)	eye diam. (mm)	Type	grind surface	B	Comment * =draw
253	Hollow way	5		1	120x80x115 (thick)	1.313	A	L	800?	100+	millstone	2		gently sloping face + crudely-cut harp furrows *
272	Pit	5		3	170x140x50-35	1.446	C	L	500+		quern	3	B	x3 re-fitting pieces (weathrd) : close space peck pattern to crude harp furrow dressing
327	Ditch	4		5	5-12	0.006	B				quern?		B	v small frags
354	Ditch	4		2	30 + 75	0.230	D	U?			quern	3	B	quern 50mm thick
364b	Pit	3		1	115x55x20	0.223	D?	U?	390		quern	4	B	<5% of AS type
410	Pit	3	98	1	280x240x25-30	1.492	D	L	460	pivot = 20	quern	4	B	c.25% of AS type *
492a	SFB1	3		3	20-35	0.043	B				quern?		B	v small frags
492b	SFB1	3		6	7-16	0.005	B				quern?		B	v small frags
498	Ditch	4		6	8-20	0.014	B				quern?		B	v small frags
560	Test pit		Spit 2	1	75x110x50	0.530					hammer		B	prehistoric hammerstone (sstn) used as BS
627	Ditch	5		5	12-36	0.034	D				quern?		B	v small frags
670	Tree throw	1		2	20 + 35	0.009	B				quern?		B	x2 v small fragments

Table 42: Catalogue of worked stone (mostly lava quern). Weight lavastone=4.81 kg

Basalt type A = hard, coarse vesicular, med grey, pyroclast inclus, small pyroxene phenocryst (Mayen quarries?); B = light grey, fine vesicular, larger augite phenocryst, zeolite infill; C = dark grey, fine vesicular, minor zeolite + hematite infill of vesicles; D = moderate vesicular, light-mid grey, pyroclast inclus.+ zeolite; E = coarsely vesicular, hard grey, some larger vesicle zeolite fill + pyroxene phenocrysts; F = fine grain vesicular, mid grey, soft with no zeolite infill
U/L stone U = upper stone; L = lower stone
Quern/ millstone type Saxon = 'Saxon' or Early Medieval forms with raised collars around the eye, flat-concave grind surfaces (US), and occasional holes for handles
Grind surface 1 = little or no wear; 2 = minor wear (patchy); 3 = flattened ridges; 4 = more extensive wear (flattened with some polish); 5 = finely ground polish and rotational grooving (e.g. internal rims of pot querns)
Burnt? B= evidence for burning, including soot stains, suggesting re-use as hearth stone * = recommend drawing for publication

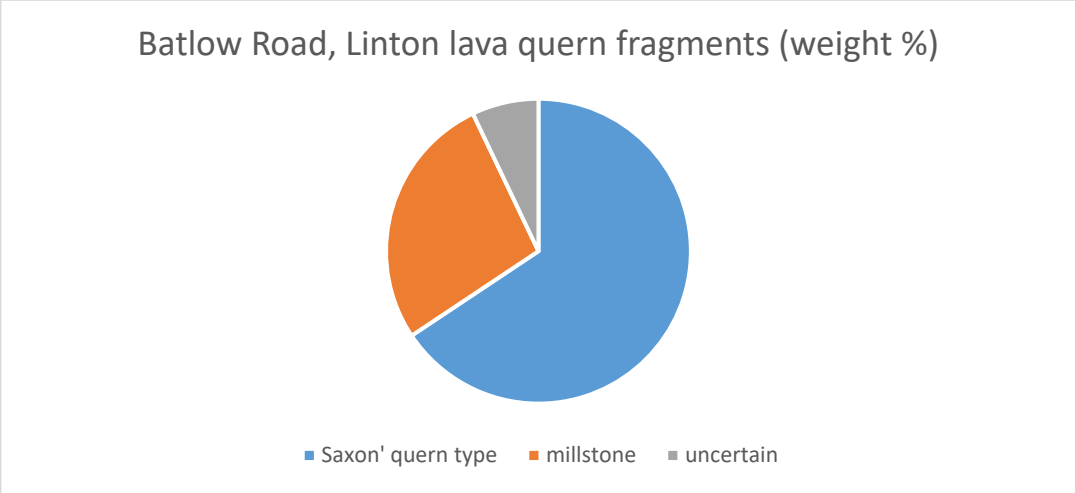


Figure B.10.1: Distribution of lava quern rotary mill types present.

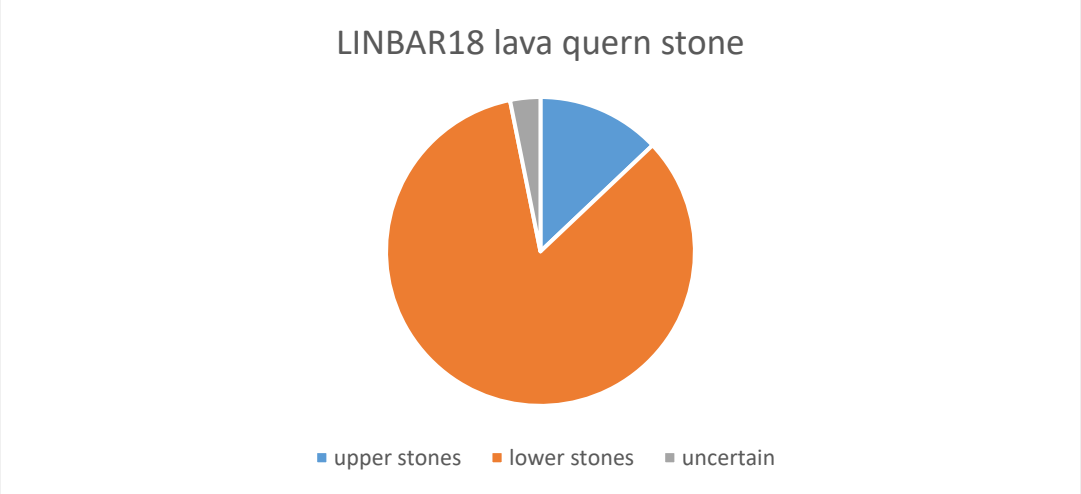


Figure B.10.2: Percentages of upper and lower stones present

Figure B.10.3: Part of lower stone of the 'Saxon' type lava quern <98> showing position of the spindle hole

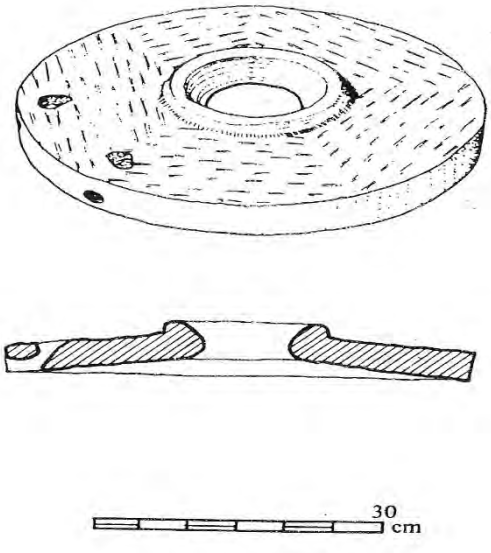


Figure B.10.4: Saxon quern (after Watts 2002)

Hammerstone

B.10.13 The single example of a broken and cracked prehistoric hammerstone found within a burnt stone cobble shows traces of pounding activity upon one flattened point of its circumference, and the even fainter traces upon another. Less than 50% of the hammerstone survives following its re-use as burnt stone. The context (560) is a spread or deposit which appears to be associated with other prehistoric material, including burnt stone.

Discussion

Quern typology and dating

B.10.14 The change from Roman to Anglo-Saxon (and early medieval) forms of rotary hand quern made from Mayen and Niedermendig lavas is moderately well documented (Hörter *et al*. 1951; Watts 2002,33-42; Mangartz 2008); the earliest medieval querns being somewhat larger in diameter but often thinner, with larger eyes and collars in the centre of the upper stones, an absence of furrow dressing upon the grind surfaces, a distinctive pick dressing on top, and frequently also small L-shaped perforations for handles (such as for the rope attachment of the upper stone to a wooden pole suspended from the roof rafters – and used for the easy turning of the mill).

B.10.15 Although produced from the 7th-8th centuries AD, lava querns of the 'Saxon' type become more commonplace in Europe during the 9th - 10th century AD, reflecting the re-activation of the Roman quarries at Mayen (Hörter *et al. ibid*., 73) and also the increase in cross-channel trade.

Notes on the production and trade of quernstone from the Mayen – Niedermendig quarry source, Eifel Region Germany

B.10.16 Quern production at Mayen began in the Late Neolithic, and was already considerably developed by the Late Iron Age (La Tène) period, although the height of production and trade with Britain and the Low Countries was not reached until Roman times. The latter expansion in production at Mayen followed the complete removal of the overburden of pumice ash deposits, and subsequently quarrying began on an industrial scale along a front measuring 5000m long and up to 50m deep into the bedded lava flows, this involving the total removal of at least one and a quarter million cubic metres of stone (Hörter *et al. ibid*., 72). Boats laden with quern and millstone as ballast left the port of Andernach on the Rhine for London and Colchester. Quern blanks or rough-outs were prepared at the quarry site(s) themselves from the splitting and shaping of the polygonal-shaped columns of basalt detached from the cooling joints of the flows (Mangartz *ibid*., 66-67).

B.10.17 This same method of extraction re-commenced in the Anglo-Saxon period, but on a smaller scale at Mayen, exploiting the un-worked block areas left in between the Roman quarries. Once the industry and trade route(s) were revived in the Mid-Late Saxon period, both finished products (hand querns and millstones) and also blanks were shipped to England from a series of distribution centres, including that of Dorestad in the Netherlands (Parkhouse 1997). London, Southampton and Ipswich were amongst the receiving ports for this trade between the 9th-11th centuries AD, and as the trade declined before its brief revival spurred on by the development of the pot quern and locally produced (English) quern and millstones during the 12th century, there was a period of re-cycling of a temporarily scarce resource.

The use of lava quern at Bartlow Road, Linton and comparisons with other sites

B.10.18 The particular interest at Linton is the evidence for the probable early use of quern associated with the Anglo-Saxon SFBs, and presumably therefore a *c*. 6th – 8th century AD date. However, the occurrence of very small amounts of burnt and weathered lava quern within such buildings (perhaps even as residual Roman material) is not unusual – what is more significant is the suggestion of their early introduction and use. It may be helpful therefore to compare this with other East Anglian sites where Anglo-Saxon lava quern has been found in larger amounts.

B.10.19 Mid-Late Saxon collared quern (dating most probably to the 9th-11th century AD) has now been recovered in much larger amounts than this from a number of sites in East Anglia where OAE excavations have been undertaken, such as Bradfield, Norfolk (11kg) and Bramford (34 kg), Long Melford (7.5 kg), and Haverhill (8kg) in Suffolk. Yet none of these sites appear to show any evidence for the use of quern at an earlier date. In this respect we must maintain caution in confirming the evidence for a still earlier import and use of Saxon quern at Linton, despite the evidence for this being a quite early-founded Anglo-Saxon settlement.

B.10.20 In some respects the rather poorly-preserved lower stone (SF 98) from pit **408** does resemble the lower stone typology of Anglo-Saxon collared querns (Horter *et al. ibid*., 69, fig.1.7). These are shown to have been completely flat and remarkably thin (25-30mm); matching the description of these querns as being about ‘2 feet wide and 2

inches thick' with a narrow perforated spindle hole in the middle (*ibid*. 69-70). In fact the main problem with confirming the assemblage type has been the lack of survival of any really good diagnostic fragments of these upper stones, alongside the suggestion that there is at least some residual Roman-type quern stone present.

Burnt Stone

Catalogue and description of burnt stone

B.10.21 At least 90% of the 7.2kg of burnt stone examined from this site (See Table 43) seems likely to be prehistoric in origin, a fact suggested by the type of reddening (oxidation) and cracking present on these cobbles being a typical effect of the immersion of hot stone in water for the purposes of cooking or bathing (Barfield & Hodder 1987), alongside the evidence for selection and collection of these cobbles from the stone 'float' present in the local gravel terraces (this range of stone types being fairly typical of the erratic component within Cambridgeshire river terrace gravels (see Worssam & Taylor 1969, 78, 84, 108). A rather similar use of this stone resource can be seen at almost any prehistoric (Neolithic – Iron Age) site in Eastern England.

B.10.22 At Bartlow Road, Linton this burnt stone reflects the background prehistoric presence which is most likely to range from the Mesolithic through to the Bronze Age – Iron Age period. Given the evidence for the stone's dispersal, re-distribution and re-deposition within later features, it will probably be difficult to date this more precisely.

B.10.23 A later date for the use (or creation) of some of the (non-cobble source) stone is suggested by the very strong burning of fragments of building stone (See Table 44) and of quern stone (Table 42) which may be associated with its use within hearths, in the manufacture of foundation rubble, or just for the purposes of middening.

Context no.	SF / other no.	No. of pieces	Weight (kg)	Dimensions (mm)	Geology	Source	Degree of burning	Notes
205		1	0.087	50	metaquartzite	glacial erratic	mod	cracked pebble
233	Spit 3	2	0.072	35 + 40	metaquartzite + micac sstn	glacial erratic	mod-high	cracked cobbles (metaquartzite = Bunter)
245a	8	1	0.534	105	calcar sstn	glacial erratic	mod	cracked cobble
245b	12	1	0.245	80	fine g micac sstn	glacial erratic	mod	cracked cobble
245c	4	1	0.028	55	quartz sstn	glacial erratic	high	small flake from cobble
263	Spit 3	1	0.091	80	quartz schist	glacial erratic	mod	cracked cobble frag (Scottish?)
285		3	0.95	70-110 (av 80)	sandstone (x2) + mic sstn	glacial erratic	x1 light + x2 mod	cracked cobble
317	Spit 9	2	0.499	35 + 110	chert (small) + quartz sstn	glacial erratic	light – unburnt?	x1 complete cobble
347	28	1	0.550	110	quartz micac flaggy sstn	glacial erratic	mod - high	heat-cracked frag of cobble
364a		1	0.269	115	quartz ferrug sstn	glacial erratic	light -unburnt?	flat cracked pebble
467	SFB 178	1	0.204	75	micac sstn	glacial erratic	mod	cracked cobble frag
470	41	1	0.713	135	quartz micac flaggy sstn	glacial erratic	mod - high	squared heat-cracked frag
489	S Quadrant SF<13>#54	1	0.707	125	quartz sstn (M/Jur Deltaic Ser foss plant)	glacial erratic	high	cracked cobble with Equisetum sp.
489b	103 SF <13>	1	0.160	95	sandy limestone slab	glacial erratic	light – unburnt?	burrowed M.Jur. lmstn
492	SEQ 115	3	0.062	15-50	dolerite	glacial erratic	high	
506		2	0.016	12 + 28	sandstone	glacial erratic	high	cracked cobble fragments
559		1	0.038	42	sandstone	glacial erratic	high	cracked cobble
584	Spit 1	1	0.098	60	quartz micac sstn	glacial erratic	mod	cracked cobble frag
587	Spit 5	1	0.031	72	sandy limstn	glacial erratic	mod	
591	Spit 6	1	0.951	155	arkosic grit (Millstone Grit)	glacial erratic	light-unburnt?	natural cobble
667		4	0.511	25 + 45 + 75 + 80	vein quartz (x2) + sstn(x2)	glacial erratic	light-unburnt?	
671		6	0.365	37 - 70	qtz sstn(x1) + sstn(x2)+ lmst + flint(x2)	glacial erartic	light-mod	cracked + uncracked pebbles
687	Spit 1	1	0.012	30	chert	glacial erratic	mod	small cracked frag

Table 43: Catalogue of burnt stone

Building Stone

B.10.24 Just 0.87 kg of stone probably used for building purposes has been identified amongst the stone recovered from this site (See Table 44). This includes a small burnt fragment of oolitic Ketton Stone, which might be a chip produced by the working of this stone on-site, a (burnt) piece of Cornbrash Limestone which could have been an imported fragment of rough walling stone brought onto site for expedient use (rather than as glacial stone collected from the gravels), as well as a fragment of early (?) post-medieval grey roof slate, one which might have come from the early-worked quarries at Delabole in Cornwall rather than the later (*i.e.* and more typically 19th century) North Wales source.

B.10.25 Ketton Stone began to be worked from the Lincolnshire Limestone at Ketton in Rutland during the Roman period, from which it had a radius of use which spread at least as far as Cambridge (this stone has been found at Northstowe, Kettles Yard, Cambridge and Eddington (the NW Cambridge villa excavations), this being a good quality freestone suitable for high-status architectural work. Needless to say, Ketton Stone then continued to be worked throughout the medieval – post-medieval period, thus its presence on site, if re-deposited, cannot be used for dating. The same applies to the import of Cornbrash Limestone from Rutland or Northamptonshire. This trade began in the Roman period (*i.e.* small quantities of this have been recovered from the NW Cambridge villa), although once again its use is much more likely to be medieval – post-medieval, although still rare as a vernacular building stone this far east of its source.

B.10.26 More easily dateable perhaps is the tiny fragment of Delabole Slate. The first extraction of this slate began in the early medieval period, yet by the 16th-17th century production had greatly increased and it was being traded across Southern England. The match with Delabole, or another Devonian slate, seems moderately good in this instance.

Context no.	No. of pieces	Weight (kg)	Dimensions (mm)	% complete	Geology	Source	Type	Date	Notes
265	2	0.850	160x95x40	100%	Cornbrash?	Northants/ –Rutland?	rough wall stone	Med ?	foss bivalve rock with Praexogyra sp. – heavily burnt upon one face + split
437	1	0.018	65x35x4	<5%	Devonian slate?	Delabole, Cornwall?	roof slate	Post-Med	pre-18th-19thC? NB polygonal shape (corner piece?) with chisel-hammered serrated edge
491	1	0.06	40x40x25		Ketton Stone?	Ketton, Rutland	wall stone?		small fragment from working (burnt)

Table 44: Catalogue of building stone.

Further work required

B.10.27 Whilst this assemblage, particularly the lava quern, has been examined in some detail, uncertainties remain about the contemporary identity and use/ re-use of the quern found within some of the Early Anglo-Saxon contexts. The analysis of this material may elucidate further information about its origin.

B.10.28 Further research into the occurrence and use of lava quern from Mayen within medieval England (in particular East Anglia) is likewise desirable, the information provided here being only an introduction to this subject. It will be necessary in this instance to refer to any published recommendations within the EH Research Agenda Strategy for the Eastern Counties regarding medieval archaeology and the quern industry (See Brown & Glazebrook 2000).

Retention and disposal

B.10.29 All of the burnt stone (listed in Table 43) may be disposed of, along with some of the undiagnostic fragmentary lava quern (all of the pieces to be retained within the site archive have been bagged up and indicated as such within the boxes returned). The small amount of building stone may be disposed of or retained, as discretion and collection priorities dictate.

B.11 Ceramic Building Material

by Ted Levermore

Introduction

B.11.1 Archaeological excavation recovered 169 fragments (17335g) of ceramic building material (CBM) from across the site (Table 45). This assemblage comprised Romano-British material (53 fragments, 9184g), medieval to post-medieval brick and tile (66 fragments, 7027g) and undiagnostic or undated material (50 fragments, 1124g). Generally, the CBM was moderately to severely abraded (average weight 103g) and collected from disuse fills of sunken-featured buildings, pits and ditches. The assemblage was recovered from all phases, with the majority concentrated in Anglo-Saxon (Phase 3) and medieval (Phase 4) contexts. Conclusions regarding the use and origin of the material are limited due to its dispersed and fragmentary nature. It is clear that the material is residual and/or intrusive to many features, affected by post-demolition activity, such as manuring, or any reorganisation or changes in the use of the landscape.

Phase	Feature	Count	Weight (g)
1	Tree Bowl	1	4
	Colluvium	3	551
		4	**555**
2	Pit	2	74
	Tree Bowl	2	157
		4	**231**
3	Ditch	11	859
	Post Hole (SFB 1)	4	1228
	SFB 1	19	2124
	SFB 2	11	1408
	SFB 3	3	952
		48	**6571**
4	Ditch	25	2984
	Foundation	37	2159
	Hollow way	3	85
	Pit	30	2933
	Quarry Pit	2	140
	Well	1	6
		98	**8307**
5	Eval Trench	**3**	**369**
0	Topsoil	3	334
	Surface Collection	6	382
	Layer	2	220
	?Colluvium	1	366
		12	**1302**
Grand Total		**169**	**17335**

Table 45: Summary of CBM by Feature Type and Phase

Methodology

B.11.2 The assemblage was quantified by context, fabric and form and counted and weighed to the nearest whole gramme. Width, length and thickness were recorded where possible. McComish (2015), Ryan (1996) and Woodforde (1976) formed the basis of reference material for identification and dating. Warry (2006) was consulted for *tegulae* forms and descriptions. The quantified data and fabric descriptions are presented on an Excel spreadsheet held with the site archive. A summary of the catalogue can be found in Tables 45 and 47.

Results of Assessment

Fabrics

B.11.3 Twenty-six fabric variants were recorded within this assemblage, which when consolidated formed thirteen fabric groups (four Romano-British and nine for the later material). The fabrics recorded were all typical CBM recipes, with preferences towards high fired, refined silty clays in the earlier fabrics and softer, sometimes coarser, sandier later fabrics, all with an array of coarse inclusions (see Table 46). The Romano-British fabrics are fairly evenly distributed amongst this portion of the assemblage. The majority of the later material was made in ME, MF or MS fabrics. The fairly even spread of the narrow Roman fabric set and the broader, scattered later fabrics is noteworthy when the volume of material they represent is compared. The Roman fabrics represent about the same amount of CBM as the later fabrics; as such this may point to a nearby and cohesive parent construction(s) for this early material. The medieval to post-medieval material is less informative in this way, suggesting a diversity of origin and disuse, and far weaker archaeological conclusions.

B.11.4 As the material is residual and/or intrusive, distribution patterns were not ascertained. Full fabric descriptions can be found with the site archive.

Period	Short Description	Code	Fabric Description
Roman	Calcareous with Dark Sand	RC	A compact silt clay fired to mid orange (occasionally with a reddish core) containing common fine (occasionally coarse) dark quartz and mica, occasional fine elongate and rounded voids and coarse angular dark grit and rounded flint, and rare fine to coarse calcareous pellets. Examples have fine sanded faces.
	Flint Tempered	RF	A fine sandy clay fired to dull red browns, mid orange or pink-brown containing fine quartz, grit, rounded and elongate voids and rare to common coarse to very coarse angular flint, stone and ?ironstone chunks. Examples have fine sanded faces.
	Micaceous Clay	RM	A compact micaceous clay fired to mid orange brown (occasionally reduced), containing rare fine to coarse grit and voids, rare coarse quartz inclusions. Examples have fine or coarse sanded faces.
	Quartz Sand Clay	RQ	A compact silt clay fired to mid to light orange-brown with red or grey core, containing rare very fine mica flecks, common fine quartz and grit, occasional fine to coarse rounded and elongate pores with rare coarse grit; some examples contained fine to coarse reddish clay flecks. Examples have fine sanded faces some with occasional large flint chunks.
Med - Pmed	Calcareous Inclusions	MC	A hard fired silt clay in dull red-orange containing fine quartz, dark grit and rounded voids with rare coarse to very coarse calcareous chunks. Examples have fine sanded faces.

Period	Short Description	Code	Fabric Description
	Estuarine Clay	ME	A soft pink-orange silt clay with rare fine quartz and grit inclusions and common coarse voids (rare organic impressions). Examples have fine or no sanded faces.
	Flint Tempered	MF	Compact fine sandy clays fired to mid to dull orange, containing rare to occasional fine to coarse quartz and grit, fine to coarse rounded voids and sub-rounded to sub-angular flint with rare ironstone and very coarse flint inclusions. Examples have fine sanded faces.
	Flint Tempered, coarse sandy clay	MF-CS	A fine sandy clay fired to dull brown, usually with a grey core, with common fine to coarse quartz and grit, occasional sub-rounded to sub-angular flint and elongate voids. Examples have fine sanded faces with flint chunks.
	Porous Clay	MP	A porous but compact silty clay fired to mid-yellow with orange patches. Few to no inclusions. Examples have coarse sanded faces.
	Refined Clay	MR	A compact orange silty clay with rare fine mica, rare fine to coarse quartz and rare coarse rounded voids. Examples have fine sanded faces with organic impressions.
	Refined Clay, yellow streaks	MR-Y	A compact dull red-brown silty clay containing occasional fine yellow clay flecks and coarse streaks with occasional rounded voids. Examples have fine sanded faces with coarse voids.
	Sand Tempered	MS	A coarse sanded clay fired to reds and oranges containing common fine to coarse white quartz, grit and occasional mica with occasional fine voids and rare coarse elongate voids. Examples have fine or coarse sanded faces mirroring to the coarseness of the internal sand inclusions.
	White Clay	MW	A compact mid yellow-grey silty clay with occasional fine to coarse quartz and grit and rare rounded and organic voids. Examples have fine sanded faces with organic impressions.

Table 46: CBM Fabric Descriptions

Assemblage

B.11.5 This CBM assemblage is characterised by a broad spread on site and high levels of abrasion, indicating intense post-demolition activity. Largely, the material was collected from ditches, SFB disuse fills and quarry pits. A portion was recovered from the colluvium pointing to surface discard and hill wash action. The CBM assemblage comprised a variety of fabrics (as discussed), forms and production techniques which points to multiple sources for the material and several phases of production. As the CBM is residual to the excavated features the dates recorded do not necessarily align with the phasing of the features. Indeed, in some cases there is a mixing of CBM dates represented within features. As such, the following text outlines the assemblage by material date and form in order to characterise the assemblage: find location is discussed when pertinent.

Romano-British

B.11.6 Fifty-three fragments of CBM (9184g) were assigned Roman or probable Roman dates based on form or fabric. These fragments presented diagnostic features of Roman brick and tile, including fragments of *tegula*, flue tiles and possible bonding tiles or *pedalis or besalis.* This material was collected from ditch, pit and SFB contexts and a small portion was collected from natural features and the topsoil.

Roofing Material

B.11.7 *Tegulae* were the most common diagnostic form present (24 fragments, 4781g); these fragments possessed remnant flanges and/or cutaways. The majority of the *tegulae*

were neatly formed with regular and smoothed upper faces (some with finger grooves running parallel to the flange) and variably finished outer faces and bases. Of note is a fragment from SFB1, from disuse fill 245 (380g), which has a single fox paw print lightly pressed into the upper face; evidence for the openness of the tiler's drying yard. The tiles were between 17 and 25mm thick, the flanges were on average 40 to 50mm tall, there were two outliers at 35 and 55mm. All but one example were of the typical flat *tegula* form. A single fragment from post hole **499** within SFB1 (Phase 3; 571g) probably derived from a curved example, a rarer form used for vaulted roofing (Warry 2006). Fourteen fragments possessed diagnostic flanges, three of which also had cutaways. Broadly the flanges were square in profile with sharp to rounded arises (Type A) or a rounded-square in profile with rounded arises (Type D) (Poole, after Warry 2006). It appears that the A and D types, in this assemblage, represent a scale of difference from squared to rounded, making it difficult to divide them into types – indeed some examples were recorded as 'A/D'. Some differences in finish were present, such as the type of mould sand used changed with clay fabric and a lack of parallel finger grooves on squarer flange forms. No type or size was reserved to any single fabric. The surviving cutaways presented a combination of angled trimming of the outer lower arris and a portion of the flange width (Composite Type A and C; Poole, after Warry 2006). Where combined with the flange type and tile dimensions they suggest a later Roman, post-AD 300 date (Warry 2006).

Hypocaust Material

B.11.8 The assemblage contained two fragments of box flue tile; collected from quarry pit **533** (Phase 5; 117g) and a disuse fill – (456) – of SFB 2 (Phase 3; 113g). Both fragments were moderately abraded and fairly small. These tiles were characterised by keyed/combed faces and remnant returns or their scars. The fragment from the pit was 17mm thick, roughly made with irregular surfaces and rounded arises; the outer face had remnant scoring and some sanding, the edge of this and the inner were un-sanded and unfinished. It was made in a calcareous clay (RC). The other fragment, a terminal end, was less abraded and much neater formed. It was 14mm thick, had smoothed and exacted surfaces and possessed a curved set of 3mm grooves on its outer face. The reverse was also smoothed and fairly well finished with remnants of a return scar along one edge. This tile was made in a hard fired gritty fabric (RQ). Though minimal this fraction of the assemblage is indicative of a high-status building in the locale.

Other Building Material

B.11.9 A large portion of the Roman material was less diagnostic than the forms already described. This fraction was made up of thick tile/thin brick and thinner flat tile; the latter tentatively assigned Roman dates based on fabric similarities. Several thick tile-type objects (17 fragments, 4465g), recorded as Roman Brick, were collected from disuse fills in SFB 2 and 3 as well as a pit, ditch and colluvium contexts. These tiles (or bricks) present in the assemblage were harder to classify without full lengths or widths; they fit the descriptions of lydions, large besalis or pedalis or of bonding brick/tile. These fragments were 30 to 40mm thick, made in sandy and gritty fabrics, with regular smoothed upper faces and variably sanded bases. All fragments were moderately to severely abraded and no full dimensions survived. A thin tile form,

distinct from the *tegulae*, was recorded (as Roman flat tile); these were probably bonding bricks/tiles or a *tegula* variant. Again, the lack of full dimensions prevents certainty of identification. The tiles were 15 to 25mm thick, had smoothed/wirecut upper faces and roughly finished sanded bases. They were collected from fills related to SFB 1 and a handful of pit and ditch contexts and were less abraded than the thicker tiles described. A fragment from quarry pit **580** (Phase 4) had a small patch of a mortar accretion on its remnant edge. The high proportion of this kind of material in this assemblage is interesting and likely to be indicative of local wall construction(s). The rough division between contents of SFB1 and SFBs 2 and 3 should be noted, but any conclusions should not be overstated.

B.11.10 Some of the material was undiagnostic and could only be assigned to a Roman date by their fabric (9 fragments, 528g). These fragments, as well as the state of the rest of the assemblage, indicate a high degree of post-demolition activity here.

Medieval to Modern

B.11.11 Sixty-five fragments (6866g) of later CBM was also recorded. The majority of this portion of the assemblage was made up of fragments of generic flat tile, assigned medieval to modern dates and a smaller portion of brick fragments, some with closer and earlier dates. The material was collected from SFB, ditch, pit and structural contexts.

Tile

B.11.12 Tile fragments made up the majority of the later material (41 fragments, 3582g). These fragments were moderately abraded and fairly small (average weight 87g), measuring 10 to 20mm thick (*c*. ½ inch). They were made in most fabrics, and presented variations in forming. Amongst these tiles were examples with peg holes, curved or pan tile fragments and possible floor tiles. All forms could only be assigned very broad late medieval to post-medieval dates. The latest example was the single yellow-white tile fragment from quarry pit **604** (Phase 4) which is probably a Burwell-type tile made into the modern era. The distribution of the tiles throughout disuse fills on site and their lack of discernible features limits conclusions here. The diversity of fabrics and the broad dates seen in these fragments points to a high degree of disturbance on site and the likelihood of several phases of deposition, as a result of manuring and local demolition activities.

Brick

B.11.13 Eighteen fragments of later brick (3162g) were recorded; like the rest of the assemblage they survived as small fragments and varied in diagnostic features. Some of this material could be assigned closer dates, namely two refitting fragments of an early 14th to late 15th century brick, retrieved from (491) SFB 1 (Phase 3). This medieval brick (35 x >140 x >105mm) was irregularly made, showing signs of intense handling, with very irregular and rounded arisses. The upper bed is wirecut and its edges and base characterised by grass and grain impressions. It was made in a fairly hard fired flinty clay (MF). This form fits descriptions of early bricks in Cambridgeshire and Essex (Ryan 1996). Fragments of a purplish brick, made in an estuarine clay, was collected from ditch **389** (Phase 5; 8 pieces, 1026g). This brick was probably slightly

larger than the above and is similar to the typology of medieval estuarine-type bricks described by Ryan (1996). Contexts associated with hollow way **439** (Phase 5) produced only fragments of brick, which were assigned latest medieval to post-medieval dates. The rest of the brick fragments were either undiagnostic or very difficult to assign dates. The association of dated material to particular features should not be overstated; however, the earlier medieval dates are nevertheless noteworthy.

Discussion

B.11.14 The concentration of Roman material may be an indication of proximity to the original building(s). However, the abrasion, fragmentation and spread caused by high levels of post-discard activity limits solid conclusions. The presence of roofing and hypocaust material implies investment in the building(s) which was probably of reasonably high-status. The high proportion of possible bonding tiles may suggest local walls, buildings or were further related to hypocaust construction. Patterning related to phases of production and construction could not be readily ascertained, although similarities in *tegula* form and the limited use of fabrics within the Roman assemblage does indicate a narrow range for production. The later material was less diagnostic, especially the tiles, but was of equal proportion and distribution to the Roman material. Several fabrics and production techniques were recorded which allowed medieval, post-medieval and modern dates to be assigned, most closely in the brick assemblage.

Statement of Potential

B.11.15 The entire CBM assemblage has been affected by post-discard processes; the Romano-British material is residual within the features it was found and the later material is intrusive to the features on site. This material is likely to have been brought to the site – or moved around the site – by demolition and agricultural processes and contributes little to the interpretation. Therefore, beyond highlighting the possible presence of Romano-British buildings nearby, its potential is relatively low.

Recommendations for further work

B.11.16 The material has been fully quantified and catalogued. No further analysis is required.

Retention and dispersal

B.11.17 The complete assemblage is of little archaeological significance. All material is recommended for discard/dispersal, except any diagnostic Roman tiles – *i.e.* those with flanges and/or cutaways – and the 14/15th-century brick.

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
205	-	Surface Collection	0		Brick	Thin	Med-Pmed	I	MS	1	173	mod		35	40						Fragment of a 1 1/2 inch brick. Upper face appears wear smoothed, edge and base are coarsely sanded.
205	-	Surface Collection	0	629	Undiag	Undiag	Undated	-	-	1	10	severe									Fragment of CBM with only part of a sanded face remaining, no complete measurements.
205	-	Surface Collection	0	160	Undiag	Undiag	Undated	?F	RF	1	22	severe									A corner fragment from a piece of CBM. No date applicable. Fragment is small and squared (30x30x10mm); unclear if a deliberate form.
205	-	Surface Collection	0	476	Undiag	Undiag	Undated	?F	RF	1	11	severe									Fragment of CBM with only part of a sanded face remaining, no complete measurements.
205	-	Surface Collection	0	382	Tile	Flat	Undated	?I	MS	1	17	severe									Arriss fragment, both faces are sanded. No clear date or form.
205	-	Surface Collection	0	377	Tile	Thick	Undated	L	MR	1	149	slight		35							Edge fragment from a thick tile, poss Med or Roman. Upper face is smooth, poss wear smoothing too. Base and edge are fairly regular and lightly sanded with common grass and grain impressions.
245	235	SFB 1	3		Tile	Tegula	Roman	D	RM	1	380	Sev		20		35	20	35	?A	UR	Fragment of tegula with paw print (50x45mm). Flange is abraded, no top. Upper face is smoothed and has a fox paw print with claws visible. Wide but shallow finger groove at base of flange. Cutaway has removed flange segment. Terminal edge, flange outer face and base are finely sanded. Base is irregular. Neatly made. Abraded.
407	406	Ditch	4	78	Tile	Tegula	Roman	A	RQ	1	304	slight		17			23	40	A		Fragment of high fired tegula with square section flange. No groove, just a concave face from flange top to base. No cutaway present. Upper faces are smoothed. Outers are fairly

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
																					flat but have distinctive folding, with fine sanding with occ coarse quartz
489	487	SFB 2	3		Tile	Tegula	Roman	K	RQ	1	51	mod					>15	31	A		Fragment of tegula flange, height only remnant, lost attachment to body of tile. Flange is square in profile with neat fairly sharp arrises. Fairly regular base and edge both dense fine sanded.
99999	-	Topsoil	0		Tile	Tegula	Roman	J	RQ	1	229	slight		17	20	42	25	40	A	LL	Lower left corner and cutaway of a Roman tegula tile. Neatly formed, smoothed uppers, regular outer edge, terminal end is smooth and regular, fairly regular and rounded arrises, base is irregular and coarsely sanded. Flange has square section with no parallel finger groove, fairly regular and fairly sharp arrises. Cutaway has trimmed 4mm vertically from the flange and then 15mm angle, a composite cut. Late Roman. Best example in assemblage, a shame it is unstrat.
491	490	SFB 1	3	156	Tile	Tegula	Roman	E	RQ	1	26	mod					18		A/ A2	LR	Fragment of upper face from a tegula, remnants of terminal end and no apparent cutaway (probably a lower). Faces smoothed, with fairly sharp overhanging arrises. Body clay is twisted with large voids.
626	TP	Colluvium	1		Tile	Brick	Roman	F	RF	1	423	mod		38							Large fragment from a large tile, probably Roman. Fairly neatly formed, neat and regular upper bed with striations and wiping marks, base bed is irregular and creased with patches of fine sanding. No surviving edges. Fine sandy fabric with coarse flint.

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
253	247	hollow way	4		Tile	Flat	Med-Pmed	G	MF	1	19	mod		12							Fragment of 1/2 inch flat tile, smoothed upper and fine sanded base
625	TP	Colluvium	1		Undiag	Undiag	Undated	I	MS	1	69	severe									Face fragment of undiag CBM, poss brick face. Probably med-pmed.
500	499	Post Hole (SFB 1)	3	166	Tile	Brick	?Roman	E	RQ	1	300	slight		35	35						Corner fragment of thick tile/thin brick, probably Roman. Mold made, fairly neat. Upper face has been wirecut and wiped smooth, edges and base are densely sanded, base is irregular, arrises are fairly regular sharp and sharp or irregular and rounded. Roman Bes/Ped or Medieval thin brick/floor brick? Dull orange brown with reddish core. Similar to frag in 587
642	641	Tree Bowl	1		Undiag	Undiag	Undated	-	-	1	4	severe									undiag
638	636	Ditch	4		Tile	Brick	?Roman	T	RC	1	601	mod		32	30						Large fragment of thick tile or floor brick. Fairly regular forming, smoothed upper with striations, edge and base are fairly regular and dense fine sanded, irregaular and rounded arrises. Patchy blue-grey upper face, slightly reddish core.
410	408	Pit	2		Undiag	Undiag	Undated	-	-	1	3	severe									undiag
581	580	Pit	4		Tile	Tegula	Roman	S	RC	1	148	mod		22			21	45	A/D		Fragment of tegula flane and body. Neatly formed rounded A form, poss D; square section with rounded inner arris. No finger groove. Smoothed exacted uppers, regular and trimmed outer face, fairly regular sanded base. Soapy texture.

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
500	499	Post Hole (SFB 1)	3	154	Tile	Tegula (curved)	Roman	A1	RQ	1	571	mod		25			20-15	48	A1/D		Large fragment of tegula flange and convex body. Flange is rounded A form, poss D: square section with rounded inner arris. Tapering flange width, 20 to 15mm. Shallow finger groove. Body is curved, rounded ridge horizontally across body. Appears to have been smoothed and worked with the curve in place, deliberate shaping? Neatly formed, uppers wiped and outers fairly neat with knife cuts at base and top edge of flangem rest of face is irregular. Base has been smoothed/wiped. Poss a deliberate atypical form.
576	575	Pit	4		Tile	Tegula	Roman	S	RC	1	294	mod		23			28	44	A1/D		Large fragment of tegula flange and body. Flange is rounded A1 form, poss D; square section with rounded inner arris. Neat forming, uppers smoothed, finger wipe marks but no groove, outers slightly more irregular and appear to be wire cut, base is wirecut smooth, basal arris is very irregular and crushed in places.
242	234	Eval Trench: Backfill associated with SFB1	5		Tile	Tegula	Roman	A	RQ	1	218	Mod		22			20	41	A3		Fragment of tegula. Smoothed upper faces. Neatly made with A3 tegula (trapezoidal in section, inward sloped tegula top). Deep finger groove at base of flange. Base and outer face are densely sanded but relatively neat and level. Breaks are quite straight, poss sawn.
244	235	SFB 1	3	49	Tile	Tegula	Roman	E	RQ	1	152	slight		20			25	41	A4		Fragment of tegula flange. Neatly formed, smoothed and wirecut upper faces, deep rounded finger groove at base of flange, flange has squared profile rounded inner arris. Outer and

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
																					base are densely fine sanded and fairly regular. Upper face of flange is half sanded.
245	235	SFB 1	3		Tile	Flat	Undated	F	RF	1	74	slight		17							Fragment of tile, poss Med. Dull red-brown colour and fine sandy. Neatly formed, upper face is smooth, poss wear smoothing. Base is irregaular and darker in coloure, sparley sanded.
246	235	SFB 1	3	35	Undiag	Undiag	Undated	G	MF	1	54	severe									Fragment of CBM with only part of a sanded face remaining, no comeplete measurements.
276	275	Pit	4		Tile	Tegula	Roman	F	RF	1	106	severe		~20			25	35	A4/D2		Fragment of tegula flange. Severely abraded. Neatly formed, smoothed upper faces. Remnants of outer and lower faces present; regular and densely fine sanded. Shallow finger groove at base of flange.
253	247	hollow way	4		Tile	Flat	Med-Pmed	L	MR	1	41	mod		11							Fragment of 1/2 inch flat tile, smoothed upper and coarse sanded base
253	247	hollow way	4		Tile	Flat	Med-Pmed	N	MF	1	25	mod		11							Fragment of 1/2 inch flat tile, smoothed upper and fine sanded with pockmarks base
323	322	Ditch	3		Undiag	Undiag	Undated	N/A	-	1	34	severe									Undiagnostic severely abraded chunk of CBM
280	279	Ditch	3		Tile	Tegula	Roman	B1	RM	1	211	severe		25		>50	22	55	D	LL	Severely abraded fragment of tegula, with cutaway. Remaining faces show smoothing. Forms is clumsily made; excess clay is visible on flange. Cutaway trimmed in several cuts, suggesting leather-hard clay. Base is coarsely sanded. Cutaway is quite long >50mm.

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
534	533	Quarry Pit	4		Tile	Box Flue	Roman	S	RC	1	117	mod		17							Body fragment of box flue tile with remnants of a return; rounded arrises. Roughly made and abraded, remnant scoring on outer. Outer and along return edge inside is sanded rest of inner is unsanded. Irregular surfaces.
489	487	SFB 2	3	21	Brick	Brick	Roman	B	RM	1	110	severe		30							Fragment of fairly thick tile with remnant edge face and some of body thickness. Probably a tegula or besalis/pedalis variant. Fairly neat dense sanded base and edge, edge is knife cut long top arris
327	326	Ditch	3		Brick	Brick	?Roman	?A	RQ	1	48	severe		35							Small fragment of probable Tegula body. Fine sanded base and remnant smoothed upper bed.
341	339	SFB 2	3	1	Undiag	Undiag	Undated	N/A	-	1	12	severe									Undiagnostic severely abraded chunk of CBM
340	339	SFB 2	3	73	Brick	Brick	?Roman	A/E	RQ	1	571	severe		32							Large abraded fragment of tile, probably Roman. Upper face is concave, probably from wear. Only small part of base remains, it is densely fine sanded. Terminal edge is remnant, suggests form was a tegula
340	339	SFB 2	3	49	Brick	Brick	Roman	A/E	RQ	1	309	mod		32							Fragment of abraded tile, probably Roman. Upper face is smooth, shows wirecutting. Base is fairly regular and densely fine sanded. No edges.
347	288	SFB 3	3	27	Brick	Brick	?Roman	F	RF	1	197	severe		35	35						Edge fragment from a thick tile, probably Roman. Upper smoothed, base regular and sanded.
358	357	Tree Bowl	2		Brick	Brick	?Roman	B2	RM	2	157	mod		32	32						Terminal edge fragment from a thick tile, probably a Roman teg. Dark reduced colours. Smoothed upper, densely sanded base and end face.
382	379	Pit	4		Brick	Brick	?Roman	K	RQ	1	292	severe		36							Heavily abraded corner fragment of a thick tile, probably Roman. Could be a

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
																					tegula, however no scar for lost flange.
489	487	SFB 2	3	42	Brick	Brick	Roman	A	RQ	1	52	mod		30	30						Edge face fragment from a thick tile; probably the terminal edge of a tegula. Neatly formed, fairly sharp arrises; fine sanded base and edge, smoothed upper.
456	455	SFB 2	3	23	Tile	Box Flue	Roman	A	RQ	1	113	mod		14							Fragment of terminal end of a box flue tile; with combing and scar for return. Outer face is smoothed with combing, inner face is also smooth and finished, as is edge face. Inner face has a gouge through it. Combing is six 3mm grooves surviving in an S shaped curve perpendicular to terminal edge). Longest break is very clean edge, unclear if sawn or excavation break.
276	275	Pit	4		Mortar	Mortar	?Roman	Mort	Mortar	1	14	severe									
258	256	Pit	4		Tile	Flat	Med-Pmed	J	RQ	1	43	mod		18							Frag of poss med-pmed flat tile. No signs of sanding, both faces are smoothed
489	487	SFB 2	3	78	Undiag	Undiag	Undated	-	-	1	8	severe									undiag
489	487	SFB 2	3	80	Undiag	Undiag	Undated	-	-	1	6	severe									undiag
272	271	Pit	4		Tile	Curved or Pan	Lmed-Pmed	G	MF	2	727	slight		15	20						Refitting fragments of a curved tile. Fabric is not Roman-like and size and forming are odd if Roman; Med curved or pan rather than imbrex. Sizeable fragment formed by refit provides height. Outer face is smoothed and wirecut, some undulations. Inner face and edge faces are irregular with organic-like impressions. Inner and edge surfaces

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
																					have even covering of calc accretions with patchy mortar/?cement.
280	279	Ditch	3		Tile	Flat	Med	H	MF	1	62	slight		11	12						Fragment of flat tile. Upper bed is wirecut and appears to be smoothed by wear. Edge and base are densely fine sanded, base also had some organic impressions. They are irregularly formed, show little finish. Appears to be a Lmed tile.
492	490	SFB 1	3	136	Tile	Tegula	Roman	K	RQ	1	77	mod		17			27	42	D		Tegula flange fragment; neatly formed, rounded arrises, exacted faces, upper is smoothed base and flange outer patchy sanded. Double finger grooves at inner base of flange.
491	490	SFB 1	3	155	Undiag	Undiag	Undated	-	-	2	20	severe									Undiag scraps
314	313	Ditch	3		Tile	Flat	Med-Pmed	N	MF	1	21	mod		16							Fragment of 1/2 inch flat tile, smoothed upper and fine sanded base
388	385	Ditch	4		Tile	Peg	Lmed-Pmed	O	MF	1	18	severe		11							Fragment of lmed-pmed peg tile (D ~10mm). Neatly formed with dense fine sanded base.
348	288	SFB 3	3	4	Tile	Tegula	Roman	F	RF	1	206	mod		25			25	55	D/E		Fragment of tegula flange. Neatly made, smoothed uppers with shallow flange base groove. Outer faces are regular with dense fine sanding. Flange has rounded inward face.
500	499	Post Hole (SFB 1)	3	132	Tile	Tegula	Roman	D	RM	1	119	severe		18			20	40			Abraded fragment of tegula. Sheered flange, no full thickness, body present. Fairly neat forming, smoothed uppers, fairly regular outers dense fine sanding.

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
645	TP	Layer	0		Tile	Tegula	Roman	A	RQ	1	63	severe		22			15			LL	Fragment of tegula, terminal end and cutaway evident. Very abraded fragment but hallmarks of cutaway and flange scars. Fabric similar to poss id med-pmed fabrics.
492	490	SFB 1	3	102	Undiag	Undiag	Undated	-	-	1	6	severe									Undiag
492	490	SFB 1	3	105	Undiag	Undiag	Undated	-	-	1	4	severe									undiag
492	490	SFB 1	3	173	Tile	Undiag	Undated	B?	RM	1	88	severe		19							Fragment of severely abraded tile, unclear if med or Roman. Base is fine sanded, upper face is abraded and mostly lost - appears smoothed
391	389	Ditch	4		Brick		Med	I	MS	1	128	severe									Heavily abraded arris of a probable Lmed brick. Coarsely sanded fabric and sanded faces.
529	526	Pit	4		Tile	?Floor	?Med-Pmed	I/I1	MS	1	128	mod		22							Fragment of a near inch-thick flat tile, possibly a floor tile. Fairly neatly formed, fairly regular faces made in coarse sandy fabric. Same colouration as flat tile in 530, red-orange body with grey brown upper margin. Poss wear polish on upper face.
530	526	Pit	4		Tile	Flat	?Med-Pmed	I1	MS	1	59	mod		13							Fragment of half inch flat tile. Fairly neatly formed, smoothed upper, fairly regular and fine sanded base, no surviving edge faces. Probably Latest med to early Pmed. Mid Red-Orange body with dark brown-grey upper face. D or I type fabric - Roman or Pmed fabric but later form
498	497	Ditch	3		Undiag	Undiag	Undated	N/A	-	1	25	sev									Undiag frag of probable Pmed CBM

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
347	288	SFB 3	3	26	Brick	Brick	Roman	D	RM	1	549	mod		42							Fragment of a large tile or brick, probably Roman. Upper face is smoothed and has pink mortar(containing grog and grit) accretions. Base is fairly regular and densely fine sanded.
500	499	Post Hole (SFB 1)	3	163	Brick	Brick	Roman	T	RC	1	238	mod		30	28						Fragment of thick tile, poss besalis/pedalis or tegula. Terminal end. Upper face smoothed, no wirecut marks or directional striations, edge is less regular, base is irregular and pockmarked. Irregular rounded arrises.
530	526	Pit	4		Brick	Brick	Roman	U	RF	1	390	mod		34							Large fragment of a thick tile/thin brick, probably a Roman ped/bes or tegula variant. Abraded faces. Upper face fairly smooth and exacted, base irregular and part sanded. Accretions cover base and most breaks. Very coarse flint and stone chunks used.
553	552	Pit	2		Brick	Brick	?Roman	A	RQ	1	71	mod		25							Fragment of thick tile with smooth upper, poss wear polish. Base regular and dense fine sanded.
208	206	Well	4		Undiag	Undiag	Undated	-	-	1	6	severe									
587	TP	Layer	0		Brick	Brick	?Roman	B	RM	1	157	mod		34	35						Fragment of thick tile, poss besalis/pedalis or tegula. Terminal end. Upper face smoothed and grey-blueish, no wirecut marks or directional striations, edge and base less regular and densely sanded. Irregular fairly sharp arrises.
241	240	Ditch	4		Undiag	Undiag	Undated	?G	MF	1	12	severe									Fragment of CBM with only part of a sanded face remaining, no comeplete measurements.
581	580	Pit	4		Tile	Flat	?Med-Pmed	L	MR	1	52	Mod		20							Abraded frag of flat tile with organic impressions on base face. Neatly

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
																					formed, upper is smoothed, base has grain impressions.
391	389	Ditch	4		Tile	Peg	Lmed-Pmed	M	MP	1	14	slight		12							Frag of peg tile (round D:8mm). Lmed-Pmed.
437	389	Ditch	4		Brick	Place	Med	P	ME	8	1026	mod	110	45	50						Fragment of a soft Med place brick; poss esturine type. Clumsy form, where faces are smooth they have been wire cut, the header and the upper bed. Rest are irregaular. Arrises irregaular and rounded. Surfaces are populated by organic impressions (chopped grasses and chaff). Porous and soft fabric, poss organic temper.
437	389	Ditch	4		Brick	Undiag	Med-Pmed	I	MS	1	122	severe									Fragment of late brick, only one face surviving
258	256	Pit	4		Undiag	Undiag	Undated	-	-	1	5	severe									
258	256	Pit	4		Undiag	Undiag	Undated	L	MR	3	194	severe									Large heavily abraded CBM chunks
437	389	Ditch	4		Brick	Undiag	Med-Pmed	O	MF	1	279	mod									Upper bed and part of a side face of a late brick; mortar accretions on surviving faces
274	271	Pit	4		Undiag	Undiag	Undated	-	-	4	6	severe									
301	-	?Colluvium	0	30	Tile	Flat	?Roman	F	RF	1	366	mod		25							Body fragment of a large flat tile, probably Roman. Upper face is wirecut ad smooth base is irregaular and densely fine sanded.
232	231	Ditch	3		Tile	Flat	?Roman	J	RQ	1	23	severe									Fragment of CBM with only part of a smoothed face remaining, no comeplete measurements. Poss Roman; orange with grey core and refined silty clay
276	275	Pit	4		Undiag	Undiag	Undated	-	-	4	13	severe									Nugget of brown quartz rich calcy mortar with occ clay flecks
245	235	SFB 1	3		Tile	Flat	?Roman	E	RQ	1	111	mod		21							Fragment of tile, poss Roman. Mid Orange colour and sandy. Sanded base.

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
437	389	Ditch	4		Tile	Pan	Lmed-Pmed	I	MS	1	123	slight		15							Fragment of Lmed-Pmed pantile, characteristic s-curve apparent. Sanded inner and wirecut outer with patchy mortar.
440	439	Foundation	4		Brick	Undiag	Lmed-Pmed	G	MF	1	135	severe									Fragment of Lmed brick, probably related to brick in 441
440	439	Foundation	4		Tile	Flat	Lmed-Pmed	O	MF	1	127	mod		17	15						Fragment of Lmed flat tile, probably related to tile in 441
440	439	Foundation	4		Tile	Flat	Lmed-Pmed	O	MF	1	56	mod		14							Fragment of Lmed flat tile with sanding on both beds, probably related to tile in 441
391	389	Ditch	4		Tile	Thick	Undated	F	RF	1	82	mod		40							Edge fragment from a thick tile, poss Med Floor or Roman. Neatly formed with fine sanded edge face. No signs of sanding on either bed face, one is smoothed other is abraded (poss the sanded base).
391	389	Ditch	4		Undiag	Undiag	Undated	N/A	-	3	59	severe									Face fragments from larger objects
239	238	Ditch	4		Tile	Flat	?Roman	A	RQ	1	49	slight		23							Fragment of inch thick tile, upper face is wirecut and smoothed, base is densely fine sanded. Poss Roman.
440	439	Foundation	4		Undiag	Undiag	Lmed-Pmed	N/A	-	5	104	severe									
441	439	Foundation	4		Brick	Wall	Lmed-Pmed	G	MF	1	198	severe		52							Corner fragment of a Lmed brick. All faces sanded. Clumsy forming, rounded and irregular arrises. Upper bed is smooth, poss wear. Floor brick?
441	439	Foundation	4		Tile	Peg	Lmed-Pmed	I	MS	7	718	mod	166	15	15						Refitting fragments of a Lmed-Pmed double peg tile (D10mm). Five refitting fragments with relatively unabraded breaks, and some new breaks. Rare to fine near complete example from a context, suggests it arrived near complete. All faces coarsely sanded, some mortar or calcite accretions

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
441	439	Foundation	4		Tile	Flat	Lmed-Pmed	N	MF	7	261	severe		14							Fragments of at least five Lmed flat tiles. All made in similar fabrics
441	439	Foundation	4		Tile	Peg	Lmed-Pmed	O	MF	2	286	mod		15	13						Refitting fragments of a Lmed-Pmed peg tile (round, 15-10mm). Peg hole and corner. Fairly neat forming, arrises are ragged. Upper face is wire cut, base and edges are dense fine sanded. Patches of mortar.
441	439	Foundation	4		Tile	Flat	Lmed-Pmed	O	MF	3	215	mod		15	13						Fragments of a lmed-pmed flat tile. Neatly formed. Smoothed upper and fine sanded base and edges.
489	487	SFB 2	3	93	Tile	Pan	Pmed	O	MF	1	167	slight		20	20						Edge fragment of a pan tile; concave (inner) face is wirecut smooth and convex (outer) is densely fine sanded. Tile edge is knife trimmed and sanded. Fragment body has a gentle curve and it 2/3 inch thick.
491	490	SFB 1	3	149	Brick	Flat	E14-L15	G	MF	2	631	mod	>105	35	45						Refitting fragments of a medieval brick (~2inch thick x >5.5 x >4 inch). Irregularly made, arrises are very irregaular and rounded. Upper bed is wirecut smooth, edges and base are characterised by dense grass and grain impressions. Signs of handling, not particularly neat forming, finishing is reserved for upper face. Probably an E14th to E15th century type brick
491	490	SFB 1	3	148	Tile	Flat	Lmed-Pmed	L	MR	1	74	slight		18							Fragment of very neatly made tile. Exacted upper smooth face with faint wire lines, base is flat but irregular. No clear sanding. Accretions on all breaks.
492	490	SFB 1	3		Brick	?Floor	Lmed	G	MF	1	298	mod		32							Fragment of thin orange brick, poss floor tile. Upper face smoothed, edge has slight cut chamfer, base is fairly flat and fine sanded

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
492	490	SFB 1	3	134	Tile	?Pan	Med-Pmed	L	MR	1	40	mod		15							Fragment of thick half ~half inch tile. Dense fine sanded base with rare chaff, slightly concave smoothed upper face. Poss pantile.
498	497	Ditch	3		Brick	?Floor	Pmed	Q	MC	1	172	mod		32	35						Fragment of 1 1/4 inch brick; neatly formed, rounded arrises, exacted faces; base and edge are densely fine sanded; upper bed is worn smooth with slight concaveness to face
498	497	Ditch	3		Tile	?Pan	Lmed-Pmed	R	MCS	1	116	sev		20							Fragment of inch thick tile; coarse fabric, regular slightly sanded upper, irregaular and sanded base. Slight curve in the tile, poss pan tile?
441	439	Foundation	4		Undiag	Undiag	Undated	N/A	-	9	59	severe									
498	497	Ditch	3		Tile	Flat	Pmed	I	MS	1	131	mod		21							Fragment of inch thick tile; upper gave smoothed/wirecut, base dense coarse sanded. Both faces are exacted.
534	533	Quarry Pit	4		Tile	Flat	?Roman	J	RQ	1	23	mod		16							Small fragment of a flat tile, smooth poss polished upper face and irregular finely sanded base. Mid grey core with orange margins.
607	604	Pit	4		Tile	Flat	Pmed to Modern	V	MW	1	161	slight		12	10						Fragment of Pmed flat tile, Burwell Yellow Type fabric. Neatly formed, wirecut upper face, irregular and sanded base, irregaular overhanging arrises, slight curve/warp in the body.
581	580	Pit	4		Tile	Flat	?Roman	B	RM	1	69	mod		19							Abraded fragment of flat tile, poss teg body. Dense fine sanded base, with strip of mart or calc accretion along edge, remnant edge face show trimming along arrise, upper face is patchy but shows smoothing. Generic poss sand tempered silt fabric.
530	526	Pit	4		Undiag	Undiag	Undated	A1?	RQ	1	38	severe									Undiag CBM chunk

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
242	234	Eval Trench	5		Tile	Flat	?Roman	B	RM	1	75	Mod		20							Fragment of tile, poss Roman. Mid Orange colour and silty. Some sanding present, missing basal face.
242	234	Eval Trench	5		Tile	Flat	?Roman	C	RQ	1	76	Mod		20							Fragment of tile, poss Roman. Mid Red colour and silty. Missing basal face.
99999	-	Topsoil	0		Undiag	Undiag	?Roman	A?	RQ	1	76	severe									Undiag frag of poss Roman CBM
579	577	Pit	4		Undiag	Undiag	Undated	-	-	1	27	severe									Undiag fragment of CBM.
382	379	Pit	4		Undiag	Undiag	?Pmed	L	MR	1	18	severe									Undiag frag of probable Pmed CBM
99999	-	Topsoil	0		Undiag	Undiag	?Roman	E?	RQ	1	29	severe									Face fragment from poss Roman CBM
327	326	Ditch	3		Undiag	Undiag	?Roman	N/A	-	1	16	severe									Undiagnostic severely abraded chunk of CBM
625	TP	Colluvium	1		Tile	?Floor	Med-Pmed	N	MF	1	59	slight		21							Fragment of near inch-thick flat tile. Poss floor tile, upper bed has wear polish. Neatly formed, smoothed and regular upper, regular and densely sanded base. Remnant edge face is fairly regular and also densely sanded. Compact silty clay with rare sub-rounded very coarse stone inclusions.
488	487	SFB 2	3	11	Undiag	Undiag	?Roman	?F	RF	1	9										Undiag frag of poss Roman CBM
634	633	Ditch	4		Undiag	Undiag	Undated	-	-	1	7	severe									undiag
492	490	SFB 1	3	137	Undiag	Undiag	?Roman	?A	RQ	1	12	severe									Undiag frag of poss Roman CBM
492	490	SFB 1	3	135	Undiag	Undiag	?Roman	O	MF	1	77	severe									Fragment of severely abraded fragment of CBM. Date unclear, remnants of a dense fine sanded base
529	526	Pit	4		Brick	Undiag	?Roman	A	RQ	1	149	mod		>35							Fragment of fairly large tile, probably Roman. Surviving face is smoothed

Context	Cut	Feature	Phase	SF#	Form	Descr	Date	Fabric	Fabric Group	Frag No.	Weight (g)	Abrasion	W (mm)	Th (mm)	Edge Thickness (mm)	Cutaway length (mm)	Flange Thickness (mm)	Flange Height (mm)	Flange Type	Cutaway Type	Comment
																					and it is made in a compact silty clay; A type.
628	627	Ditch	4		Undiag	Undiag	?Roman	D?	RM	1	126	severe									Fairly large severely abraded fragment of CBM. Probably Roman.
638	636	Ditch	4		Undiag	Undiag	?Roman	F?	RF	1	34	severe									Undiag frag of poss Roman CBM

Table 47: Summary CBM Catalogue

B.12 Fired Clay

by Ted Levermore

Introduction

B.12.1 Archaeological excavation produced 20 fragments (272g) of fired clay. The most significant portion of this assemblage comprises a Saxon 'doughnut' warp-weight and small spindlewhorl recovered from SFBs 1 and 2 respectively. These are largely unabraded and indicate domestic weaving activity. Other less diagnostic material was also collected, but these fragments offer little archaeological information.

B.12.2 The quantified data and fabric descriptions are presented on an Excel spreadsheet held with the site archive. Summary tables for pertinent material are included in this report.

Methodology

B.12.3 The assemblage was quantified by context, fabric and form and counted and weighed to the nearest whole gramme. Fabrics were examined using a x20 hand lens and were described by main inclusions present. The quantified data and fabric descriptions are presented on an Excel spreadsheet held with the site archive. A summary catalogue of the clay assessed can be found in Table 49.

Results of Analysis

Fabrics

B.12.4 Five fabric groups (supplemented by a hard fired variant) were recorded (Table 48). The fabrics were composed of silty or fine sandy clays with quartz and sand sized inclusions; some had additional inclusions of clay flecks or calcareous pellets. The clays were probably sourced locally to the site, with any variation seen being related to geological variation or differences in paste preparation.

Code	Matrix	Fine inclusions	Coarse inclusions	Mixing	Comments
F1	Compact Silty; grey-brown	common rounded and sub-rounded brown and black quartz and grit, occ mica and rare reddish clay flecks	No visible	Mod	Spindlewhorl; probably a pot fabric
F2	Compact fine sandy; light pinkish-purple	occ fine quartz and mica	No visible	Mod	High fired
F3	Porous, gritty; orange-buff	common brown gritty material and calc flecks	No visible	Mod	Porous
F4	Loose fine sandy; grey-browns	common fine quartz and flint/?calc flecks, occ reddish flecks	occ reddish clay pellets and flint shards, rare sub-rounded pores	Mod	loose/porous
F5	Loose silty; mid orange-brown	common dark grit and calc flecks, occ reddish clay flecks	occ calc pellets and ?limestone chunks, rare rounded stones	Mod	Friable
F5a	*Hard fired version*				

Table 48: Fired Clay Fabrics

Assemblage

Objects Used in Textile Production

Warp Weights

B.12.5 Fragments of one or two Anglo-Saxon loomweights were collected from (492) in SFB 1 (4 fragments, 43g). Two of these fragments refitted to form around 15% of a ring weight, made with smooth but undulating outer faces containing rare organic impressions. The central perforation diameter was 40mm and the full outer diameter was estimated at 100mm; the body thickness varied from 30 to 60mm. From these surviving measurements the best preserved weight was classified as 'annular' or 'intermediate' in form. An 'intermediate' form can be identified when the thickness of the clay loop does not exceed the width of the central perforation (after Hurst 1959). An 'annular' weight is when the central perforation is larger in diameter than the thickness of the clay loop (*ibid*.). Needless to say, such classifications can be misleading as they suggest divisions where there is considerable variation. As such, the incomplete example may only present 'annular' traits in the fragment recovered whereas its complete form could be 'intermediate'. The other fragments may have derived from this weight or were small fragments of a second.

B.12.6 'Doughnut' shaped warp-weights are examples of domestic Anglo-Saxon weaving technology. These weights were used in sets and hung from a loom in rows, at the end of vertical 'warp' threads. This class of object are difficult to date precisely. This technology was largely made locally, on an ad hoc basis and with little investment (Petty 2014). Further, there have, so far, been few attempts to study the distribution of these objects nationally, meaning that there is no date series available. Nevertheless, it is suggested that the 'annular' shape is oldest, arriving in Britain with the earliest Saxons (Petty 2014; Hamerow 1993). At Mucking, Essex, where a considerable number of Saxon warp-weights were recovered, the 'annular' weights were gradually replaced by the 'intermediate' type. The use of such weights continues throughout the Anglo-Saxon period but an earlier date is not unlikely.

Spindlewhorl

B.12.7 SFB 2 (447) produced a single complete spindlewhorl (SF 135). This object was disc-shaped (D53mm, TH17mm) with rounded sides and a small central perforation (D10mm); perhaps a 'Form B' (after Walton-Rogers 1997). It was made in a grey brown compact silty fabric with common dark sand and rare fine reddish clay flecks. This small object would have been used in conjunction with a spindle to spin fibres into yarn. Spindlewhorls have a long history in the British archaeological record. Fired clay examples are usually associated with later Iron Age and Early Roman dates and are little used in the Anglo-Saxon period (Walton-Rogers 1997, 1741). Yet Roman spindlewhorls, and perforated Roman potsherds, have been found within Anglo-Saxon contexts, indicating the longevity of such objects into the post-Roman and Anglo-Saxon periods (Walton-Rogers 1997, 1735-1741, also see table 146). The size of the perforation in this example is, however, more in line with average for Anglo-Saxon examples (Walton-Rogers 1997, 1731). This example's form would not be out of place in Anglo-Saxon contexts, were it made in stone (Disc-shaped, *Form B*; Walton-Rogers

1997, 1735-1741). As such, assigning a date for this object based on form and medium alone is difficult.

Non-diagnostic material

B.12.8 The rest of the assemblage is less informative. The presence of fragments with flattened surfaces and organic impressions are signs of a greater number of objects and/or features related to domestic and craft activity at the site. However, conclusions are limited beyond their bulk and distribution at the site. The material was found in disuse and silting fills of pit **408** (Phase 3), quarry pits **526** and **604** (Phase 4) and ditch **324** (Phase 4).

Statement of Potential

B.12.9 This assemblage provides evidence for domestic weaving activity within the use-life of the sunken-featured buildings. The weights, although minimal in number, can be tentatively placed within the Early to Middle Anglo-Saxon periods. The spindlewhorl is probably of a similar date. Due to the small number and limited range of clay objects it is not possible to make many further conclusions about this assemblage. The rest of the material is limited. It can only be considered to be detrital remains of prehistoric to medieval domestic and craft activity.

Recommendations for further work

B.12.10 The loomweight and spindlewhorl should be considered for photography or illustration.

Retention and dispersal

B.12.11 The diagnostic objects should be retained. All amorphous fragments should be considered for discard/dispersal.

Context	Cut	Feature	Context	Phase	SF Number	Fabric type	Fragment type	Structural type	Object Class	Object Form	Date/Period	Notes	Width (mm)	Thickness (mm)	Perforation Diameter (mm)	No. refits	Count	Weight (g)
410	408	Pit	Silting	2		F3	a										3	4
325	324	Ditch	Silting	3		F3	a										1	2
447	446	SFB 2	Disuse; NE Q	3	135	F1	s	object	Textile Production	Spindlewhorl	A/S	Disc shaped spindlewhorl with rounded sides; "doughnut" shaped. Slightly asymmetrical profile, but characteristically disc shaped.	53	17	10		1	54
492	490	SFB 1	Midden; SE Q	3	109	F2	s	org				High fired fragment with deep organic impressions (grasses) on both surfaces					1	5
492	490	SFB 1	Midden; SE Q	3		F4	s	object	Textile Production	Annular Loomweight	A/S	Fragments of one or two ring weights. Two fragments refit to form inner and outer diameter. Smoothed but undulating outer faces with rare organic impressions. Two refits are 15% of whole (i.e. 173g).	100	~30	40		4	43
529	526	Pit	Disuse	4		F5a	s	fs				Face fragment made in a calc pellet rich silty clay. Light brown surface with light red-brown core					1	15
607	604	Pit	Backfill	4		F5	s	fs				Fragments of a ?blocky object, some remnant flattened surfaces. Chunky calc fabric.					9	149

Table 49: Summary Fired Clay Catalogue (a=amorphous, s=structural, fs=flattened surface)

B.13 Worked bone

by Ian Riddler

Introduction

B.13.1 A small assemblage of worked antler and bone objects, including a pin, three combs and a pin-beater, all came from fills of an Anglo-Saxon sunken-featured building (SFB2). It is likely that all five objects were deposited around the same time and by examining the potential date ranges of each object it is possible to suggest when they came together in the backfill of the structure. The pin and the pin-beater represent common object types of the period. The combs include two common forms but also a fragment of a more enigmatic, single-sided composite comb that is likely to be of Continental origin.

Pin

B.13.2 A fragmentary antler or bone pin (SF 125) includes a lateral moulding above the shaft but lacks most of its head. As a result, it cannot be placed securely within any of the ten types of small, imperforate bone pins known from the Early and Middle Anglo-Saxon periods (Riddler *et al*. forthcoming). However, the presence of a lateral collar and the rectangular section of the stub of the head suggest that it may originally have been either of a flattened, discoidal form, or spatulate in shape. A similar head and collar arrangement can be seen on a bone pin from the Eriswell settlements with a discoidal head, whilst a pin from Flixborough includes a collar and a spatulate head (Rogers 2009, fig 1.28.637; Riddler forthcoming).

B.13.3 Small imperforate antler and bone pins are a feature of the 7th- and 8th centuries and occur in both cemeteries and settlements. It is possible that the earliest examples just pre-date the 7th century, but the vast majority of the sample, which now exceeds 150 examples, were deposited either in that century, or up to *c*. AD 750. Their continuation into the middle of the 8th century is attested from a range of Middle Saxon sites (Riddler *et al*. forthcoming). This accords reasonably well with the dating of *c*. AD 625 – 750 provided previously by MacGregor (1985, 116; 1992, 58), albeit with a slightly earlier start date. They have been found in the graves of both males and females, and with children as well as adults. Within the graves of females they are mostly found around the chest or head, suggesting that they secured clothing. When found beyond the skeleton, they could have fastened small organic bags, containers or coverings. They are distinguished by their small size and fractured examples have usually lost the head part, as occurred here. The presence of a collar on a few examples also indicates that the head was separated from the shaft, in terms both of their design and conceivably also in use, with the head protruding from fabric and the shaft hidden.

SF 125
Fragmentary antler or bone pin, lacking most of its head, the shaft circular in section and lightly swollen over the lower part, tapering to a sharp point. A rectangular lateral moulding separates the shaft from the head, most of which is now missing.
Context 489

Combs

B.13.4 Three fragments of combs include two double-sided composites (SFs 50 and 126) and a single-sided composite (SF 55). The double-sided composite combs consist of a single tooth segment (SF 126) and a comb fragment. The tooth segment is similar to the comb fragment but has finer teeth that are not quite as long; and it probably stems from a separate comb. The comb fragment (SF 50) includes undecorated cylindrical connecting plates that taper lightly towards their ends. Undecorated double-sided composites with cylindrical connecting plates were in use in East Anglia across most of the Early Anglo-Saxon period, with the earliest examples emerging at Spong Hill and West Stow in contexts of the late 5th to early 6th century, and the latest seen in Cambridgeshire cemeteries at Barrington, Burwell, Cherry Hinton and Melbourn, and in settlements at Brandon and Carlton Colville (Riddler and Trzaska-Nartowski 2013, 139-40; Riddler *et al*. forthcoming). A series of contemporary, mostly undecorated double-sided composite combs from the Wenigumstadt cemetery in central Germany were analysed by Eva Stauch, who established that the earlier combs there were stout in proportions with a clear distinction between coarse and fine teeth, whilst the later combs were elongated and both sets of teeth were of similar fineness (Stauch 2004, 175-204). The Early Anglo-Saxon sequence appears to follow a similar trajectory and if the technology of these combs is also considered (and their riveting in particular) then subtle changes can be established amidst a group of combs that, at first sight, all appear to be basically alike.

B.13.5 A key component of this particular comb lies with the slight tapering of the connecting plates towards their ends. This is a late characteristic, not seen before the late 6th- to 7th century. A second feature also confirms this phasing for the comb. Over time it appears that the practice of incising long saw marks on both sides of the connecting plates diminished in significance and with this comb, there are just a few saw marks on both sides. The riveting of the comb is slightly unusual, with the end segment secured through its centre, the short adjacent tooth segment fastened on one edge and the remaining three segments, extending towards the centre of the comb, secured on both edges. As yet, the significance of different riveting schemes is not entirely clear. The earliest Anglo-Saxon double-sided composite combs were produced in a variety of riveting schemes and over time these schemes reduced in number and became more standardised, with the end segments increasingly fastened through their centres and the tooth segments mostly fastened on just one edge. This comb is moving towards that system but has not quite reached it. Comparable riveting schemes occur on combs from Broughton Lodge grave 91 and Middleton in Norfolk (Kinsley 1993, fig 82.18a). The Broughton Lodge comb can be assigned to *c*. AD 480-530, on the basis of the other objects in that grave, and this riveting scheme may largely have been of 6th-century date. However, it may also have continued into the 7th century and the sample is, as yet, too small to assess its significance.

B.13.6 An end segment (SF 55) survives from a single-sided composite comb. The intriguing feature of this comb is the lack of any extension of the segment above the comb back. The comb was not winged and this is very unusual for the Early Anglo-Saxon period, where almost all single-sided composite combs include winged end segments. There are just a few examples of Early Anglo-Saxon combs that do not have winged end

segments, and most of them come from the Cambridge area. An unusual comb from a bed burial within the Barrington cemetery can be described as 'centre handled' and its end segments are not winged; the comb can be placed in the period *c*. AD 650-690 (Malim and Hines 1998, fig 3.38.22). A second comb from the same cemetery, represented only by an end segment within grave 97, is not winged and may originally have been fastened by two iron rivets, one set above the other, suggesting that it was furnished with paired connecting plates. The grave can be placed in the late 6th- to 7th century (*ibid*, 288 and fig 3.62.97.3). More complete single-sided composite combs with end segments that are not winged were recovered by Neville from the Little Wilbraham cemetery and by Faussett at Kingston Down in Kent (Neville 1852, fig 168bis; Faussett 1856, pl XIII.4).

B.13.7 On the Continent, single-sided composite combs that are not winged are generally more common, occurring particularly in Frisia, but also in Frankish and Alemannic areas. The Frisian combs are distinctive for their decoration and the shape of their end segments. The assemblage from Elisenhof provides a good illustration of their development and they also form a significant component of the combs from Hessens (Tempel 1979; Siegmüller 2010, abb 74). Combs of Tempel's Groups A, B and D from Elisenhof, in particular, have end segments that closely resemble the form seen here. These groups have been placed in the first part of the 8th century, contemporary with the combs from Hessens (Tempel 1979, 167-8). They correspond with type 1 combs from Wijnaldum, which extend back into the 7th century in date (Prummel *et al*. 2013, 79-80). The Frisian type, therefore, can be regarded as belonging to the 7th and 8th centuries, although there is a lack of combs (of whatever type) from 6th-century contexts there.

B.13.8 The sequence of single-sided composite combs from southern German cemeteries includes a small number that are not winged, notably within cemeteries at Klepsau and Pleidelsheim (Koch 1990, taf 34.23; 2001, 253 and 262). They take the dating of this comb type back to the 6th century. Combs that are not winged but are also crested, with the tooth and end segments rising above the back of the comb, occur from around the middle of the 6th century onwards, whilst the form seen here, which has a straight baseline, a curved back and no cresting at all, is largely a feature of the 7th century and later, although its origins also go back to the 6th century (Koch 1990, 196). Within the southern German phasing scheme, large versions of these combs occur as type F74 in the graves of females and Y23 in the graves of males, and are assigned to SD phases 5-7, of *c*. AD 530-600. They tend to have broad, shallow connecting plates and are largely found in the graves of males (Koch 2001, 45 and abbn 15 and 23). Within the Pleidelsheim cemetery itself, graves with combs that do not have winged end segments are phased to SD 6 (graves 187 and 188) but also to SD 8-9 (grave 147) and there is a clear sense in which they continued into the 7th century (Koch 2001, 253 and 262). Single-sided composite combs without winged end segments from the lower Rhine follow a similar development from large, broad combs of the 6th century towards narrower and more heavily curved combs of the 7th century (Siegmund 1998, 115). The pervasive influence of Frisian forms can be seen within Merovingian cemeteries located further to the north, as at Eltville grave 139b,

where the one comb of this type looks distinctly Frisian (Blaich 2006, 158 and taf 70.139b.3).

B.13.9 It is likely that the end segment from Linton is of mid-6th- to 7th-century date and of Continental origin, although it is not clear where it was originally made. Blair has emphasised the close contacts between East Anglia and Frisia, and this segment would fit his model well (Blair 2018, 40-3). However, a Merovingian origin for this comb, and for the small Anglo-Saxon series as a whole, should certainly not be ruled out.

SF 50
Fragmentary antler double-sided composite comb, including an end segment and four tooth segments, fastened to parts of two connecting plates by four iron rivets, with traces of a further rivet hole. Connecting plates are D-shaped in section and taper slightly towards their ends, with occasional saw marks from the cutting of the teeth on both sides. Tooth segments are mostly secured on both edges, with the end segment fastened through its centre and the adjacent segment retaining just a single rivet on the edge. There are four teeth per centimetre on one side and four to five on the other side. The teeth taper lightly to blunt ends with traces of considerable wear on both sides. The end sets of teeth are graduated in a straight line across the end segment. Context 488

SF 126
Incomplete antler tooth segment from a double-sided composite comb, lacking some of its teeth. Originally fastened on one edge, with two sets of teeth, spaced at 4 and 5 teeth per centimetre. Both sets are graduated in length, indicating that this segment lay adjacent to an end segment, close to one end of a comb. Teeth tapering slightly to rounded ends and show traces of considerable wear on both side, with lateral lines throughout but no beading. Almost certainly from comb Sf 50. Context 489

SF 55
Complete antler end segment from a single-sided composite comb, with seven teeth graduated in a light curve. The comb had a straight baseline and a curved back and was not winged. The teeth taper lightly to blunt ends with traces of slight wear visible, in the form of light lateral lines set close to the connecting plate space. The segment was originally riveted through its centre and there are 3 to 3.5 teeth per centimetre. Context 489

Pin-beater

B.13.10 A complete antler double pointed pin-beater (SF 128) is square in section and tapers to sharp points at either end. It belongs to Form 2 within the Early Anglo-Saxon series, one of four distinct forms that can be identified for this period (Riddler *et al*. forthcoming). It is a short pin-beater, just 77mm in length, of similar dimensions to an example from Stonea in Cambridgeshire (Greep 1996, fig 201.75). Early Anglo-Saxon double pointed pin-beaters extend from 65mm to 207mm in length, but with only one example longer than 175mm. They have been separated into two groups by size and this pin-beater belongs to the shorter group A, which extends up to 120mm in length (Riddler 1996). The longest examples are relatively late in date, occurring from the 7th century onwards. Short pin-beaters, however, occur throughout the Early Anglo-Saxon period and can be seen also in Middle Saxon contexts. Despite its length, this pin-beater fits beautifully into the hand and would have functioned perfectly well on a loom.

SF 128
Complete antler double pointed pin-beater, square in section with rounded edges and tapering evenly to sharp points at either end. Polished throughout, with some cortile tissue visible on one side. Context 488

The Chronology of the Objects

B.13.11 It is difficult to be precise about the dating of these objects. The double pointed pin-beater belongs to a type that occurs across the entire Early Anglo-Saxon period. The fragmentary pin narrows the date range to the period *c*. AD 575 – 750 and the combs

confirm that dating, with the possibility that the double-sided composite (SF 50) is a 7th-century comb. The end segment from a single-sided composite comb (SF 55) lacks any connecting plates, which would narrow its dating, depending on their type.

Statement of Potential

B.13.12 The pin belongs to a relatively common type and might contribute to the dating of the site but does not provide much additional information. The pin-beater is also a common form but it is unusual to see a short example, and it suggests that weaving was taking place on site. The double-sided composite comb is a valuable addition to the series of these items and it adds significant information about the type and its development, even in its fragmentary state. The single-sided comb is indeed very likely to be Continental, even if it is difficult to track down its precise origins, as yet. Overall this is a small but very significant group from the Cambridgeshire area.

Recommendations for further work

B.13.13 No further work is required. Four of the objects should be illustrated (the pin, two semi-complete combs and pin-beater).

B.14 Clay tobacco pipe

By Carole Fletcher

Introduction and methodology

B.14.1 During the excavation, two fragments of white ball clay tobacco pipe were recovered from ditch **236** (Phase 4) and hollow way **247** (Phase 5). Terminology used in this report is taken from Oswald's simplified general typology (Oswald 1975, 37–41), and Crummy and Hind (Crummy 1988, 47-66).

Factual Data

B.14.2 A single undecorated stem fragment (0.004kg) was recovered from ditch **236**, fill 237. It is 39mm long, slightly oval, 9.1 x 9.6mm, tapering slightly, and moderately abraded.

B.14.3 Disuse deposit 253, in hollow way **247**, produced a moderate length of undecorated stem, 78mm long (0.011kg), broken close to the heel of the bowl. Approximately 12mm in diameter, tapering to 9.8mm, moving away from the flaring for heel/bowl. Slightly burnished and with neatly trimmed seams, it is uncertain if it is decorated; a line of marks look similar to scales, although this could be chattering from the mould seam trimming.

Discussion

B.14.4 The fragments of clay tobacco pipe, recovered from a ditch and the hollow way, represent what were most probably casually discarded pipes. The pipe fragments indicate the consumption of tobacco on, or in the vicinity of, the site at any time from the late 16th century onwards.

B.14.5 The statement above acts as a full record and the glass may be deselected prior to archival deposition.

Statement of potential

B.14.6 The plain and fragmentary nature of the total assemblage means it is of little significance.

Recommendations for further work

B.14.7 This statement acts as a full record for the archive. No further work is required.

Retention, dispersal and display

B.14.8 The clay tobacco pipe may be deselected prior to archival deposition.

APPENDIX C ENVIRONMENTAL ASSESSMENTS

C.1 Faunal Remains

By Hayley Foster

Introduction and methodology

C.1.1 This assessment details the animal bone recovered from Bartlow Road, Linton, Cambridgeshire. The assemblage was of a medium size, with 37kg of bone recovered via hand collection and from environmental samples. There were 594 identifiable fragments that could be assigned to a phase (Table 50), 21 of which were retrieved from environmental samples. A wide variety of species were represented including, cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*), horse (*Equus caballus*), pig (*Sus scrofa*), dog (*Canis familiaris*), cat (*Felis catus*), rabbit (*Oryctolagus cuniculus*), badger (*Meles meles*), red deer (*Cervus elaphus*), red /fallow deer (*Cervus/Dama*), frog (*Rana anura*), mole (*Talpa europea*), unidentified small rodent and bird species including goose (*Anser anser*), domestic fowl (*Gallus gallus*), pheasant (*Phasianus colchicus)* and teal (*Anas crecca*). Animal bone was recovered from features dating to the prehistoric, Anglo-Saxon, medieval and post-medieval/modern periods. A summary catalogue is presented in Table 55.

C.1.2 The method used to quantify this assemblage was based on that used for Knowth by McCormick and Murray (2007) which was modified from Albarella and Davis (1996).

C.1.3 Identification of the faunal remains was carried out at Oxford Archaeology East. References to Hillson (1992), Schmid (1972), von den Driesch (1976) and Cohen & Serjeantson (1996) were used where needed for identification purposes.

C.1.4 Dental ageing was recorded using Grant (1982), Payne (1973) and Higham (1967) and epiphyseal fusion was recorded in reference to Silver (1970).

C.1.5 Estimated shoulder heights were calculated according to Fock (1966) for cattle, Harcourt (1974) for dog and Kieswalter (1888) for horse.

Results of Analysis

C.1.6 The assemblage is in a fair condition with moderate to high levels of fragmentation. Material was mainly recovered from ditches, pits and sunken featured buildings (SFBs). The bulk of faunal material came from the Anglo-Saxon (Phase 3) and post-medieval/modern (Phase 5) phases. Therefore, for assessment purposes these phases will be highlighted in detail.

Species	Phase					
	1	2	3	4	5	Total
Cattle	4		148	6	24	182
Horse			18		24	42
Sheep/Goat	5		117	7	40	169
Pig	2		49	1	5	57
Dog			39		1	40

Species	Phase					
	1	2	3	4	5	Total
Cat			1		2	3
Rabbit			1		62	63
Badger				6		6
Red Deer			1			1
Red Deer/Fallow Deer			1			1
Frog	1		4			5
Bird			20		3	23
Small Rodent			1			1
Mole					1	1
Total	**12**		**400**	**20**	**162**	**594**

Table 50: Number of identifiable specimens (NISP) for the entire assemblage.

Phase 3 (Anglo-Saxon)

C.1.7 Cattle and sheep/goat dominated the Anglo-Saxon phase. There was a total of 400 identifiable fragments retrieved predominantly from SFBs (Tables 51-52).

Species	NISP	%NISP	MNI	%MNI
Cattle	148	37.0	7	18.4
Horse	18	4.5	2	5.3
Sheep/Goat	117	29.3	15	39.5
Pig	49	12.3	4	10.5
Dog	39	9.8	2	5.3
Cat	1	0.3	1	2.6
Rabbit	1	0.3	1	2.6
Red Deer	1	0.3	1	2.6
Red Deer/Fallow Deer	1	0.3	1	2.6
Frog	4	1.0	1	2.6
Bird	20	5.0	2	5.3
Small Rodent	1	0.3	1	2.6
Total	**400**	100.0	**38**	100

Table 51: Number of identifiable specimens (NISP) & minimum number of individuals (MNI) for phase 3

C.1.8 The Anglo-Saxon phase provided the widest range of species in the assemblage. There is a partial horse burial (pit **305**) from this phase, consisting of an articulated spinal column, ribs and lower extremities. Pit **552** contained the remains of a partially articulated dog. A calculated estimated shoulder height indicates a dog of approximately 60.9cm. Bird species represented include domestic fowl and goose and were entirely retrieved from the SFBs. Cattle made up the highest percentage of the NISP followed closely by sheep/goat, though sheep/goat made up a higher proportion of the MNI versus cattle.

C.1.9 There was a rare presence of small mammals, rodents and frogs from the SFBs retrieved via hand-collection and environmental samples.

	SFB 1	SFB 2	SFB 3
Species	**NISP**	**NISP**	**NISP**
Cattle	97	37	12
Horse	4	5	0
Sheep/Goat	70	25	11
Pig	28	14	7
Red Deer	0	1	0
Frog	2	0	2
Bird	6	12	2
Cat	0	0	2
Small Rodent	0	0	1
Total	**207**	**94**	**37**

Table 52: Number of identifiable specimens (NISP) for SFBs.

C.1.10 Each of the three SFBs contained animal bone. SFB1 contained the largest amount of faunal remains of the three buildings with 207 fragments retrieved. SFB1 consisted mainly of the main domestic species and contained a higher frequency of cranial elements, carpals/tarsals and phalanges. Disposal of these elements indicates a discard of primary butchery waste. Carnivore gnawing was noted on 19 fragments with very little evidence of weathering, thus suggesting mostly rapid burial. SFB2 contained a more even distribution of body parts with cattle and sheep/goat, again the best represented species. The presence of most body parts suggests the domesticates were slaughtered, consumed and disposed of here. SFB3 contained only 36 identifiable fragments and again was made up mainly of domesticate species. Cattle mandibles and cranial elements comprised 8 of the 12 fragments, again indicating primary butchery waste. Bird remains retrieved from the SFBs mostly belong to domestic fowl, with a probable goose bone also recovered.

Phase 5 (post-medieval/modern)

C.1.11 Rabbits, followed by sheep/goat were the best represented species in Phase 5 (Table 53). Rabbit remains consisted of an MNI of 7, the highest number of an individual species, mainly comprising limb elements.

Species	NISP	%NISP	MNI	%MNI
Cattle	24	14.8	1	5.0
Horse	24	14.8	3	15.0
Sheep/Goat	40	24.7	3	15.0
Pig	5	3.1	1	5.0
Dog	1	0.6	1	5.0
Cat	2	1.2	1	5.0
Rabbit	62	38.3	7	35.0
Bird	3	1.9	2	10.0
Mole	1	0.6	1	5.0
Total	**162**	100.0	**20**	100.0

Table 53: Number of identifiable specimens (NISP) & minimum number of individuals (MNI) for Phase 5

C.1.12 Sheep/goat dental ageing data suggests animals were slaughtered at 10-11 months and in adulthood; this may represent a mixed economy of both meat and secondary products. The small amount of cattle dental ageing data reveals two animals ageing to 31-32 months at death.

C.1.13 In Phase 5 sheep/goat were numerically predominant over cattle; however, with the relative sizes of cattle and sheep carcasses, beef would have probably contributed more to the diet than lamb or mutton. Pig played a minor role in this phase, suggesting they were less of an important food source. Birds only accounted for three fragments in this phase and comprised of domestic fowl and teal.

C.1.14 It should be noted that the small amount of faunal remains from phases 1 and 4 contained the same types of species as in the other phases, with the addition of badger remains from phase 4.

C.1.15 Taphonomic processes were present in the forms of butchery, burning, gnawing and pathology. Butchery evidence was present on only seven fragments, all from the Anglo-Saxon phase. Burning was present on six identifiable fragments, five from Phase 3 and one from Phase 1. Gnawing was present on 29 fragments in total from Phases 3 and 5. Pathological changes were noted on cattle phalanges, in the form of exostosis and extra bone growth (midden **235** and **490** from SFB1). A possible cyst on a sheep humerus and scapula as small depressions were noted on the joint articulation of both the proximal humerus and scapula (ditch **389**). An articulating horse astragalus and calcaneus (from pit **259**) were fused together by additional bone growth, a case of spavin. Spavin is a disease of the tarsus of the horse that limits movement, its aetiology can be hereditary, a concussion, or rotation of the lower section of the hind limb from the hock. Generally, spavin can cause a mild degree of lameness (Baker and Brothwell 1980).

C.1.16 At Bartlow Road, domestic mammals were the mainstay of the food economy, with cattle and sheep/goat remains being the most well represented species. Faunal remains consisted of butchery waste and mixed domestic refuse.

Statement of Potential

C.1.17 The material is a good representation of a predominantly Anglo-Saxon and post-medieval/modern domestic faunal assemblage. The data represents a good quantity of identifiable animal bone. When viewed against data from contemporary sites in the region, it can be stated that in terms of taxa representation the assemblage mostly conforms to regional patterns.

Recommendations for Further Work

Description	Performed by	Days
Research on comparative sites	Hayley Foster	1
Writing of report	Hayley Foster	3

Retention, Dispersal and Display

C.1.18 It would be recommended that the assemblage be retained as it can add to the regional picture of diet and husbandry practices in this area of Cambridgeshire. Those fragments that were unstratified or unphased should be recommended for dispersal.

Context	Phase	Species	Element	GL (mm)	EWH (cm)
340	3	Cattle	Radius	253	108.8
492	3	Cattle	Metatarsal 1	212	115.5
467	3	Cattle	Metacarpal 1	196	120.1
492	3	Cattle	Metacarpal 1	202	123.7
382	5	Horse	Metatarsal 1	246	131.2
382	5	Horse	Tibia	306	133.4
382	5	Horse	Tibia	308	134.3
492	3	Horse	Metatarsal 1	287	153.0
382	5	Horse	Humerus	337	164.2
553	3	Dog	Tibia	204	60.5
553	3	Dog	Femur	198	60.87

Table 54: Estimated withers heights (EWH) calculated using greatest length (GL) based on Harcourt (1974) for dog, Kieswalter (1888) for horse and Fock (1966) for cattle.

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
1	205		Pig	Loose Maxillary Tooth	0	0			
1	205		Sheep/Goat	Loose Mandibular Tooth	0	0			
1	205		Cattle	Loose Maxillary Tooth	0	0			
1	205		Sheep/Goat	Tibia	X	F			
1	205		Cattle	Loose Mandibular Tooth	0	0			
4	208		Horse	Radius	F	X			
4	208		Cattle	Mandible	F	X			
4	208		Cattle	Loose Mandibular Tooth	0	0		Carnivore	
3	210		Cattle	Loose Maxillary Tooth	0	0			
1	233		Cattle	Loose Mandibular Tooth	0	0			
1	233		Pig	Phalanx 2	UM	F	Blackened		
4	237		Cattle	Humerus	F	X			
4	241		Cattle	Loose Mandibular Tooth	0	0			
2	242	1	Horse	Loose Mandibular Tooth	0	0			
2	242	1	Cattle	Metapodial 1	X	F			
2	243	2	Sheep/Goat	Pelvis	X	F			
2	243	1	Cattle	Phalanx 1	F	F			
2	243	1	Cattle	Phalanx 2	F	F			
2	243	1	Sheep/Goat	Loose Maxillary Tooth	0	0			
2	243	1	Cattle	Tibia	UX	X			
2	243	1	Cattle	Phalanx 2	F	F			
2	243	1	Cattle	Astragalus	F	F			
2	243	1	Cattle	Radius	X	J			
2	243	1	Cattle	Navicular-cuboid	0	0		Carnivore	
2	243	1	Sheep	Horn core	0	0			
2	243	1	Sheep/Goat	Mandible	0	X		Carnivore	

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
2	243	1	Cattle	Loose Maxillary Tooth	0	0			
2	243	1	Sheep/Goat	Loose Maxillary Tooth	0	0			
2	243	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	243	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	243	1	Sheep/Goat	Pelvis	X	F			
2	243	1	GAG	Femur	X	F			
2	243	1	Cattle	Mandible	0	0			
2	243	1	Cattle	Loose Maxillary Tooth	0	0		Carnivore	
2	243	1	Pig	Humerus	X	UM			Chop
2	243	1	Cattle	Phalanx 1	F	F		Carnivore	
2	243	1	Sheep/Goat	Cranium	0	0		Carnivore	
2	243	1	Cattle	Calcaneus	F	X			
2	243	1	Cattle	Horn core	0	0			
2	243	1	Pig	Radius	F	X			
2	243	1	Sheep/Goat	Mandible	0	0			
2	243	1	Sheep/Goat	Mandible	0	0		Carnivore	
2	243	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	244	1	Cattle	Mandible	0	X		Carnivore	Chop
2	245	1	Cattle	Mandible	X	0			
2	245	1	Pig	Cranium	X	0			
2	245	1	Cattle	Loose Mandibular Tooth	0	0			
2	245	1	Sheep/Goat	Mandible	X	0			
2	245	1	Sheep/Goat	Mandible	X	0			
2	245	1	Sheep/Goat	Mandible	X	0			
2	245	1	Galliform (pheasant?)	Scapula	F	F			
2	245	1	Cattle	Phalanx 1	F	F			
2	245	1	Cattle	Phalanx 2	F	F			
2	245	1	Sheep/Goat	Metacarpal 1	F	X			
2	245	1	Pig	Mandible	X	0			
2	245	1	Sheep/Goat	Mandible	X	0			
2	245	1	Sheep/Goat	Mandible	X	0			
2	245	1	Cattle	Mandible	0	0			
2	245	1	Cattle	Loose Mandibular Tooth	0	0			
2	245	1	Domestic fowl	Coracoid	0	0			
2	245	1	Small bird ?	Tibia	X	F			
2	245	1	Cattle	Phalanx 2	F	F			
2	245	1	Sheep/Goat	Loose Maxillary Tooth	0	0			
2	245	1	Sheep/Goat	Mandible	0	X			
2	245	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	246	1	Sheep/Goat	Mandible	0	X			
2	246	1	Sheep/Goat	Mandible	X	0			
1	251		Cattle	Astragalus	F	F			
4	253		Sheep/Goat	Loose Mandibular Tooth	0	0			
4	253		Teal	Metatarsal 1	X	F			
4	258		Sheep/Goat	Mandible	X	0			
4	258		Cattle	Radius	F	X			
4	260		Horse	Calcaneus	F	X			

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
4	260		Horse	Astragalus	0	0		Carnivore	
2	270	2	Pig	Ulna	UM	X			
4	274		Sheep/Goat	Loose Maxillary Tooth	0	0			
4	274		Sheep/Goat	Mandible	X	0			
3	280		Pig	Loose Mandibular Tooth	0	0			
2	283		Rabbit	Metacarpal	F	X			
2	300	2	Pig	Loose Maxillary Tooth	0	0			
2	300	2	Sheep/Goat	Mandible	X	0			
2	306		Horse	Tibia	F	F			
2	306		Horse	Phalanx 1	F	F			
2	306		Horse	Phalanx 2	F	F			
2	306		Horse	Phalanx 3	F	F			
2	306		Horse	Atlas	0	0			
2	306		Horse	Calcaneus	F	F			
2	306		Horse	Astragalus	F	F			
2	306		Horse	Metatarsal 1	F	F			
2	307	2	Sheep/Goat	Tibia	UM	X			
2	307	2	Cattle	Navicular-cuboid	F	F			
2	309	2	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	309	2	Sheep/Goat	Scapula	X	F			
2	309	2	Cattle	Phalanx 2	F	F			
2	309	2	Cattle	Phalanx 3	0	0			
2	309	2	Sheep/Goat	Humerus	X	F			
2	309	2	Sheep/Goat	Metacarpal 1	X	UM			
2	309	2	Pig	Loose Maxillary Tooth	0	0			
2	309	2	Sheep/Goat	Humerus	X	UM			
2	309	2	Cattle	Phalanx 1	J	F			
2	309	2	Sheep/Goat	Phalanx 1	UX	F			
3	325		Sheep/Goat	Mandible	0	0			
3	325		Sheep/Goat	Loose Maxillary Tooth	0	0			
2	340	2	Cattle	Radius	F	F			
2	340	2	Sheep/Goat	Scapula	X	F			
2	340	2	Cattle	Scapula	X	F			
2	340	2	Pig	Metacarpal 4	F	X			
2	340	2	Sheep/Goat	Radius	X	F			
2	340	2	Cattle	Phalanx 3	0	0			
2	340	2	Sheep/Goat	Horn core	0	0			
2	340	2	Sheep/Goat	Humerus	UM	UM			
2	340	2	Pig	Phalanx 1	UM	F			
2	340	2	Pig	Metatarsal 3	F	UM			
2	340	2	Domestic fowl	Tibia	X	F			
2	341	2	Pig	Loose Mandibular Tooth	0	0			
2	344	3	Cattle	Pelvis	UM	X			
2	344	3	Sheep/Goat	Radius	F	X			
2	344	3	Sheep/Goat	Mandible	X	0			
2	344	3	Pig	Femur	UM	X			
2	344	3	Cattle	Mandible	X	0			
2	344	3	Pig	Loose Mandibular Tooth	0	0			
2	344	3	Cattle	Mandible	X	0			

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
2	347	2	Cattle	Horn core	0	0			
2	347	3	Domestic fowl	Metacarpal 1	F	X			
2	347	3	Sheep/Goat	Pelvis	F	F			
2	347	3	Pig	Ulna	0	0			
2	347	3	Pig	Cranium	X	0			
2	347	3	Sheep/Goat	Pelvis	X	UM			
2	347	3	Cattle	Tibia	X	UM			
2	347	3	Pig	Cranium	X	0			
2	347	3	Cattle	Horn core	0	0			
2	347	3	Cattle	Mandible	X	0			
2	347	3	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	348	3	Pig	Scapula	X	F			
2	348	3	Small Rodent	Loose Mandibular Tooth	0	0			
2	348	3	Frog	Femur	0	0			
2	348	3	Frog	Ulna	X	0			
2	358		Dog	Radius	X	F			
2	364		Horse	Radius	F	X			
2	364		Sheep/Goat	Pelvis	F	X			Chop
4	382		Horse	Pelvis	F	F			
4	382		Pig	Mandible	X	0			
4	382		Cattle	Loose Mandibular Tooth	0	0			
4	382		Horse	Tibia	F	F			
4	382		Horse	Metatarsal 1	F	F			
4	382		Horse	Femur	F	F		Carnivore	
4	382		Horse	Calcaneus	X	F			
4	382		Horse	Astragalus	0	0			
4	382		Horse	Tibia	F	F			
4	382		Horse	Patella	0	0			
4	382		Horse	Patella	0	0			
4	382		Horse	Humerus	F	F			
4	382		Horse	Astragalus	F	F			
4	382		Horse	Calcaneus	F	F			
4	382		Horse	Pelvis	F	F			
4	388		Mole	Mandible	0	0			
4	388		Cattle	Loose Maxillary Tooth	0	0			
4	388		Cattle	Humerus	X	F			
4	388		Cattle	Loose Maxillary Tooth	0	0			
4	388		Sheep/Goat	Metacarpal 1	F	X			
4	388		Rabbit	Femur	F	X			
4	388		Rabbit	Femur	F	X			
4	388		Rabbit	Femur	UM	UM			
4	388		Rabbit	Humerus	F	F			
4	388		Rabbit	Humerus	X	F			
4	388		Rabbit	Humerus	X	F			
4	388		Rabbit	Femur	X	F			
4	388		Cat	Radius	F	F			
4	388		Rabbit	Femur	UM	UM			
4	388		Rabbit	Pelvis	F	F			

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
4	388		Rabbit	Tibia	UM	F			
4	388		Rabbit	Tibia	UM	UM			
4	388		Rabbit	Tibia	F	X			
4	388		Rabbit	Tibia	UM	X			
4	388		Rabbit	Tibia	UM	X			
4	388		Rabbit	Ulna	UM	X			
4	388		Rabbit	Ulna	F	X			
4	388		Rabbit	Humerus	UM	UM			
4	390		Rabbit	Tibia	F	F			
4	390		Rabbit	Tibia	UM	X			
4	390		Rabbit	Humerus	UM	UM			
4	390		Horse	Loose Mandibular Tooth	0	0			
4	391		Horse	Metapodial 1	X	F			
4	391		Rabbit	Mandible	X	0			
4	391		Rabbit	Femur	UM	UM			
4	391		Rabbit	Femur	F	X			
4	391		Rabbit	Pelvis	F	F			
4	391		Rabbit	Pelvis	F	F			
4	391		Rabbit	Pelvis	F	F			
4	391		Rabbit	Pelvis	F	F			
4	391		Rabbit	Ulna	F	0			
4	391		Rabbit	Ulna	F	0		Carnivore	
4	391		Rabbit	Ulna	UM	0			
4	391		Rabbit	Femur	UM	UM			
4	391		Rabbit	Radius	F	F			
4	391		Rabbit	Radius	X	F			
4	391		Rabbit	Pelvis	F	X			
4	391		Rabbit	Scapula	X	F			
4	391		Rabbit	Femur	X	UM			
4	391		Rabbit	Femur	X	UM			
4	391		Rabbit	Humerus	UM	UM			
4	391		Rabbit	Metatarsal 2	F	F			
4	391		Rabbit	Metatarsal 5	F	UM			
4	391		Rabbit	Metatarsal 5	F	UM			
4	391		Rabbit	Metatarsal 3	F	UM			
4	391		Rabbit	Cranium	X	0			
4	391		Sheep/Goat	Loose Mandibular Tooth	0	0			
4	391		Cattle	Radius	X	F			
4	391		Cattle	Astragalus	F	F			
4	391		Sheep/Goat	Humerus	UX	UX			
4	391		Sheep/Goat	Humerus	UM	UX			
4	391		Sheep/Goat	Radius	UX	UX			
4	391		Sheep/Goat	Radius	UX	UM			
4	391		Sheep/Goat	Scapula	UM	UM			
4	391		Sheep/Goat	Scapula	X	UM			
4	391		Sheep/Goat	Femur	UM	UE			
4	391		Sheep/Goat	Femur	UM	X			
4	391		Sheep/Goat	Metacarpal 1	UM	UM			
4	391		Sheep/Goat	Metatarsal 1	UM	UM			
4	391		Sheep/Goat	Ulna	UM	X			

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
4	391		Sheep/Goat	Ulna	UM	X			
4	391		Sheep/Goat	Tibia	UM	UM			
4	391		Sheep/Goat	Tibia	UM	X			
4	391		Sheep/Goat	Metapodial 1	X	UE			
4	391		Sheep/Goat	Astragalus	UM	UM		Carnivore	
4	391		Sheep/Goat	Pelvis	UM	UM			
4	391		Sheep/Goat	Pelvis	X	F			
4	391		Sheep/Goat	Atlas	UM	UM			
4	391		Sheep/Goat	Atlas	UM	0			
4	391		Sheep/Goat	Mandible	0	0			
4	391		Sheep/Goat	Cranium	X	0			
4	391		Sheep/Goat	Phalanx 1	UM	F			
4	391		Sheep/Goat	Phalanx 2	UM	F			
4	391		Domestic fowl	Metacarpal 1	F	F			
4	393		Sheep/Goat	Metatarsal 1	UM	UM			
4	393		Rabbit	Humerus	F	F			
4	393		Rabbit	Humerus	F	X			
4	393		Rabbit	Humerus	F	F			
4	393		Rabbit	Humerus	X	F			
4	393		Rabbit	Ulna	UM	UM			
4	393		Rabbit	Ulna	UM	UM			
4	393		Rabbit	Ulna	UM	UM			
4	393		Rabbit	Tibia	UM	UM			
4	393		Rabbit	Pelvis	F	F			
4	393		Rabbit	Pelvis	X	0			
4	393		Rabbit	Astragalus	F	F			
4	393		Rabbit	Calcaneus	F	F			
4	393		Rabbit	Phalanx 1	F	F			
4	393		Rabbit	Phalanx 1	F	F			
4	393		Rabbit	Metatarsal 5	F	UM			
4	393		Rabbit	Metatarsal 3	F	F			
4	393		Rabbit	Metatarsal 3	F	UM			
4	393		Rabbit	Femur	UM	X			
2	414	2	Goose	Metatarsal 1	X	F			
4	440		Rabbit	Pelvis	F	F			
4	440		Pig	Loose Mandibular Tooth	0	0			
4	440		Sheep/Goat	Phalanx 1	F	F			
4	440		Cattle	Metatarsal 1	F	X			
4	441		Cattle	Loose Maxillary Tooth	0	0			
4	441		Cattle	Loose Maxillary Tooth	0	0			
4	441		Pig	Cranium	X	0			
4	441		Cattle	Phalanx 1	F	X			
4	441		Cattle	Metacarpal 1	F	X			
4	441		Cattle	Metacarpal 1	X	F			
2	447	2	Sheep/Goat	Pelvis	X	UM			
2	447	2	Cattle	Metacarpal 1	X	UM			
2	447	2	Cattle	Loose Mandibular Tooth	0	0			
2	447	2	Cattle	Phalanx 1	UM	F			
2	447	2	Cattle	Cranium	X	F			

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
2	447	2	Sheep/Goat	Pelvis	UM	UM			
2	447	2	Cattle	Metacarpal 1	F	X			
2	447	2	Pig	Cranium	X	0			
2	456	2	Domestic fowl	Furcula	0	0			
2	456	2	Cattle	Loose Mandibular Tooth	0	0			
2	456	2	Pig	Cranium	0	0			
2	456	2	Domestic fowl	Radius	F	F			
2	456	2	Domestic fowl	Furcula	0	0			
2	466	1	Cattle	Metatarsal 1	F	X			
2	467	1	Cattle	Pelvis	F	F			Chop
2	467	1	Cattle	Radius	X	F			
2	467	1	Cattle	Metacarpal 1	X	F			
2	467	1	Cattle	Metacarpal 1	F	F			
2	467	1	Cattle	Phalanx 2	F	F		Carnivore	
2	467	1	Cattle	Scapula	X	F			
2	467	1	Cattle	Loose Mandibular Tooth	0	0			
2	467	1	Pig	Cranium	X	0			
2	467	1	Pig	Mandible	X	0			
2	467	1	Sheep/Goat	Mandible	0	0			
2	467	1	Sheep/Goat	Mandible	0	0			
2	467	1	Sheep/Goat	Mandible	X	0			
2	467	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	467	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	467	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	467	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	467	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	467	1	Sheep/Goat	Loose Mandibular Tooth	0	0		Carnivore	
2	467	1	Cattle	Astragalus	F	F	Singed		
2	467	1	Pig	Pelvis	F	F			
2	467	1	Cattle	Astragalus	F	F		Carnivore	
2	467	1	Pig	Loose Mandibular Tooth	0	0			
2	467	1	Pig	Cranium	X	0			
2	467	1	Cattle	Phalanx 3	0	0			
2	467	1	Cattle	Metapodial 1	X	UM			
2	467	1	Cattle	Radius	F	X			
2	467	1	Cattle	Tibia	X	F			
2	467	1	Cattle	Pelvis	X	F			
2	470	3	Cattle	Loose Mandibular Tooth	0	0			
2	470	3	Pig	Pelvis	F	F			
2	470	3	Cattle	Mandible	0	X			
2	470	3	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	470	3	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	470	3	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	470	3	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	470	3	Cat	Femur	X	F			
2	472	2	Sheep/Goat	Humerus	X	F		Carnivore	
2	472	3	Cattle	Metatarsal 1	F	F			

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
2	472	3	Sheep/Goat	Pelvis	X	F		Carnivore	
2	473	3	Cattle	Mandible	X	0			
2	473	3	Cattle	Ulna	0	X			
2	473	3	Sheep/Goat	Mandible	X	0			
2	473	3	Domestic fowl	Radius	X	F			
2	473	3	Cattle	Mandible	0	0			
2	487	2	Cattle	Femur	F	X		Carnivore	
2	488	2	Domestic fowl	Tibia	X	F			
2	488	2	Horse	Radius	F	X			
2	488	2	Sheep/Goat	Femur	X	UM			
2	488	2	Horse	Cranium	X	0			Cut
2	488	2	Cattle	Loose Maxillary Tooth	0	0			
2	488	2	Cattle	Astragalus	F	F			
2	488	2	Sheep/Goat	Cranium	X	0			
2	488	2	Domestic fowl	Furcula	0	0			
2	488	2	Cattle	Mandible	0	0			
2	488	2	Cattle	Mandible	0	X			
2	489	2	Pig	Calcaneus	UM	F			
2	489	2	Sheep/Goat	Pelvis	X	UM			
2	489	2	Cattle	Metatarsal 1	F	X			
2	489	2	Pig	Mandible	X	0			
2	489	2	Cattle	Calcaneus	UM	F			
2	489	2	Domestic fowl	Femur	F	X			
2	489	2	Goose	Femur	F	F			
2	489	2	Domestic fowl	Coracoid	F	F			
2	489	2	Cattle	Calcaneus	X	F			
2	489	2	Sheep/Goat	Radius	X	UM			
2	489	2	Cattle	Phalanx 2	F	F			
2	489	2	Cattle	Mandible	X	0			
2	489	2	Cattle	Femur	UE	X			
2	489	2	Cattle	Mandible	0	X			
2	489	2	Cattle	Mandible	X	0			
2	489	2	Cattle	Humerus	X	F			
2	489	2	Domestic fowl	Femur	F	F			
2	489	2	Horse	Pelvis	F	F			
2	489	2	Cattle	Metacarpal 1	F	F			
2	489	2	Sheep/Goat	Radius	F	X			
2	489	2	Cattle	Horn core	0	0			
2	489	2	Cattle	Loose Mandibular Tooth	0	0			
2	489	2	Sheep/Goat	Ulna	F	F			
2	489	2	Pig	Loose Mandibular Tooth	0	0			
2	489	2	Sheep/Goat	Radius	F	X			
2	489	2	Cattle	Phalanx 2	F	F			
2	489	2	Horse	Metacarpal 1	F	X			

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
2	489	2	Cattle	Mandible	0	X			
2	489	2	Sheep/Goat	Humerus	F	X			
2	489	2	Cattle	Mandible	X	0			
2	489	2	Domestic fowl	Radius	F	X			
2	489	2	Cattle	Loose Maxillary Tooth	0	0			
2	489	2	Horse	Scapula	X	F			
2	489	2	Cattle	Mandible	X	0			
2	489	2	Sheep/Goat	Mandible	0	0			
2	489	2	Cattle	Phalanx 1	F	F			
2	489	2	Pig	Mandible	X	0			
2	489	2	Red Deer	Antler	0	0			
2	489	2	Pig	Metatarsal 3	F	F			
2	491	1	Domestic fowl	Radius	F	F			
2	491	1	Cattle	Loose Mandibular Tooth	0	0			
2	491	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	492	1	Cattle	Phalanx 1	F	F			
2	492	1	Cattle	Phalanx 2	F	F			
2	492	1	Cattle	Phalanx 2	F	F			
2	492	1	Cattle	Loose Maxillary Tooth	0	0			
2	492	1	Sheep/Goat	Radius	F	X			
2	492	1	Sheep/Goat	Humerus	X	F			
2	492	1	Pig	Calcaneus	UM	F			
2	492	1	Pig	Cranium	0	0			
2	492	1	Cattle	Astragalus	F	F			
2	492	1	Sheep/Goat	Ulna	F	F		Carnivore	
2	492	1	Cattle	Loose Mandibular Tooth	0	0			
2	492	1	Cattle	Loose Maxillary Tooth	0	0			
2	492	1	Sheep/Goat	Femur	X	UX			
2	492	1	Cattle	Tibia	X	F		Carnivore	
2	492	1	Pig	Ulna	0	0			
2	492	1	Sheep/Goat	Cranium	X	0			
2	492	1	Cattle	Tibia	X	UM			
2	492	1	Sheep/Goat	Scapula	X	F			
2	492	1	Sheep/Goat	Mandible	X	0			
2	492	1	Sheep/Goat	Mandible	X	0			Chop
2	492	1	Cattle	Navicular-cuboid	0	0			
2	492	1	Cattle	Metacarpal 1	F	X			
2	492	1	Cattle	Metacarpal 1	F	X			
2	492	1	Cattle	Radius	F	X			
2	492	1	Cattle	Phalanx 3	0	0			
2	492	1	Pig	Mandible	X	0			
2	492	1	Cattle	Loose Mandibular Tooth	0	0			
2	492	1	Sheep/Goat	Loose Maxillary Tooth	0	0			
2	492	1	Sheep/Goat	Loose Maxillary Tooth	0	0			
2	492	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	492	1	Pig	Loose Mandibular Tooth	0	0			
2	492	1	Cattle	Mandible	X	0			

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
2	492	1	Cattle	Loose Mandibular Tooth	0	0			
2	492	1	Sheep/Goat	Mandible	X	0			
2	492	1	Pig	Metacarpal 4	F	X			
2	492	1	Frog	Urostyle	F	F			
2	492	1	Frog	Pelvis	0	0			
2	492	1	Cattle	Phalanx 1	F	F			
2	492	1	Cattle	Astragalus	F	F			
2	492	1	Cattle	Phalanx 1	F	F			
2	492	1	Cattle	Phalanx 1	F	F			
2	492	1	Cattle	Loose Maxillary Tooth	0	0			
2	492	1	Cattle	Loose Maxillary Tooth	0	0			
2	492	1	Cattle	Navicular-cuboid	0	0			
2	492	1	Sheep/Goat	Loose Maxillary Tooth	0	0			
2	492	1	Cattle	Metatarsal 1	F	X			
2	492	1	Cattle	Metacarpal 1	F	X			
2	492	1	Horse	Pelvis	F	F			
2	492	1	Cattle	Loose Mandibular Tooth	0	0			
2	492	1	Pig	Ulna	0	0			
2	492	1	Horse	Astragalus	0	0			
2	492	1	Sheep/Goat	Pelvis	X	F			
2	492	1	Sheep/Goat	Loose Maxillary Tooth	0	0			
2	492	1	Sheep/Goat	Mandible	X	0			
2	492	1	Sheep/Goat	Mandible	X	0			
2	492	1	Sheep/Goat	Metacarpal 1	F	X			
2	492	1	Cattle	Metacarpal 1	F	F			
2	492	1	Cattle	Metatarsal 1	F	F			
2	492	1	Horse	Metatarsal 1	F	F			
2	492	1	Sheep/Goat	Cranium	0	0			
2	492	1	Cattle	Scapula	X	F			
2	492	1	Cattle	Radius	X	UE	Singed		
2	492	1	Cattle	Metacarpal 1	X	F			
2	492	1	Cattle	Astragalus	F	F			
2	492	1	Cattle	Femur	F	X			
2	492	1	Cattle	Phalanx 3	0	0			
2	492	1	Cattle	Calcaneus	F	X	Singed		
2	492	1	Cattle	Navicular-cuboid	F	F			
2	492	1	Cattle	Navicular-cuboid	0	0			
2	492	1	Cattle	Cranium	X	0			
2	492	1	Cattle	Mandible	0	X			
2	492	1	Sheep/Goat	Mandible	0	0			
2	492	1	Cattle	Horn core	0	0		Carnivore	
2	492	1	Sheep/Goat	Mandible	X	0			
2	492	1	Sheep/Goat	Mandible	X	0		Carnivore	
2	492	1	Sheep/Goat	Mandible	X	0			
2	492	1	Sheep/Goat	Mandible	0	0			
2	492	1	Domestic fowl	Tarso-Metatarsal	UM	UM			
2	492	1	Sheep/Goat	Pelvis	F	F			
2	492	1	Cattle	Phalanx 1	F	F			

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
2	492	1	Cattle	Metacarpal 1	F	X			
2	492	1	Pig	Radius	F	X			
2	492	1	Cattle	Phalanx 2	F	F			
2	492	1	Cattle	Loose Mandibular Tooth	0	0			
2	492	1	Cattle	Astragalus	F	F			
2	492	1	Cattle	Phalanx 3	F	F	Blackened		
2	492	1	Cattle	Pelvis	F	X			
2	492	1	Pig	Cranium	X	0		Carnivore	
2	492	1	Sheep/Goat	Mandible	X	0		Carnivore	
2	492	1	Sheep/Goat	Mandible	X	0			
2	492	1	Cattle	Phalanx 1	F	F			
2	492	1	Cattle	Phalanx 1	F	F			
2	492	1	Cattle	Tibia	X	F			
2	492	1	Sheep/Goat	Humerus	X	F			
2	492	1	Sheep/Goat	Radius	F	X			
2	492	1	Cattle	Calcaneus	X	F			
2	492	1	Cattle	Phalanx 1	F	F		Carnivore	
2	492	1	Cattle	Humerus	X	F	Blackened		
2	492	1	Pig	Cranium	X	0			
2	492	1	Pig	Cranium	0	X			
2	492	1	Pig	Cranium	X	0			
2	492	1	Pig	Loose Mandibular Tooth	0	0			
2	492	1	Pig	Loose Mandibular Tooth	X	0			
2	492	1	Pig	Loose Mandibular Tooth	0	0			
2	492	1	Cattle	Loose Mandibular Tooth	0	0			
2	492	1	Pig	Humerus	X	F			
2	492	1	Cattle	Loose Mandibular Tooth	0	0			
2	492	1	Pig	Cranium	0	X			
2	492	1	Cattle	Loose Mandibular Tooth	0	0			
2	492	1	Sheep/Goat	Pelvis	F	F			
2	492	1	Sheep/Goat	Cranium	X	0			
2	492	1	Cattle	Loose Mandibular Tooth	0	0			
2	492	1	Sheep/Goat	Mandible	0	0			
2	492	1	Sheep/Goat	Mandible	X	0			
2	492	1	Pig	Cranium	X	0			
2	492	1	Sheep/Goat	Mandible	X	0			
2	492	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	492	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	492	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	492	1	Sheep/Goat	Loose Mandibular Tooth	0	0			
2	492	1	Pig	Calcaneus	X	F		Carnivore	
3	494		Cattle	Loose Mandibular Tooth	0	0		Carnivore	
3	494		Sheep/Goat	Scapula	X	F			
3	494		Sheep/Goat	Mandible	0	X			
3	496		Badger	Femur	F	X			
3	496		Badger	Tibia	F	F			
3	496		Badger	Calcaneus	F	F			

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
3	496		Cattle	Radius	F	UX			
3	496		Cattle	Ulna	F	F			
3	496		Sheep/Goat	Mandible	0	0			
3	496		Badger	Pelvis	F	F			
3	496		Badger	Pelvis	X	F			
3	496		Badger	Metacarpal 4	F	F			
3	498		Cattle	Loose Mandibular Tooth	0	0			
2	500	1	Cattle	Metatarsal 1	F	X		Carnivore	
5	501		Sheep/Goat	Loose Maxillary Tooth	0	0			
5	501		Sheep/Goat	Loose Mandibular Tooth	0	0			
5	501		Cattle	Ulna	F	X			
5	501		Sheep/Goat	Mandible	X	0			
1	509		Cattle	Mandible	X	0			
4	522		Cattle	Humerus	X	F			
4	529		Pig	Ulna	0	0			
4	529		Cattle	Mandible	0	X			
4	529		Sheep/Goat	Metatarsal 1	F	X		Carnivore	
4	529		Sheep/Goat	Metapodial 1	X	F			
4	534		Cattle	Mandible	0	0			
4	534		Domestic fowl	Radius	F	X			
4	544		Cattle	Cranium	X	0			
2	553		Dog	Fibula	F	F			
2	553		Dog	Femur	F	F			
2	553		Dog	Tibia	F	F			
2	553		Dog	Tibia	F	X			
2	553		Dog	Radius	X	F			
2	553		Dog	Radius	X	F			
2	553		Dog	Ulna	F	X			
2	553		Dog	Radius	F	X			
2	553		Dog	Fibula	F	X			Chop
2	553		Dog	Fibula	F	X			
2	553		Dog	Astragalus	0	0			
2	553		Dog	Calcaneus	F	F			
2	553		Dog	Femur	X	F			
2	553		Dog	Pelvis	F	X			
2	553		Dog	Phalanx 3	0	0			
2	553		Dog	Phalanx 3	0	0			
2	553		Dog	Phalanx 3	0	0			
2	553		Dog	Phalanx 3	0	0			
2	553		Cattle	Metacarpal 2	F	F			
2	553		Dog	Metacarpal 5	F	F			
2	553		Dog	Metatarsal 3	F	F			
2	553		Dog	Metatarsal 2	F	F			
2	553		Dog	Metatarsal 5	F	F			
2	553		Dog	Metatarsal 4	F	F			
2	553		Dog	Metacarpal 3	F	F			
2	553		Dog	Metacarpal 5	F	F			
2	553		Dog	Metacarpal 4	F	F			
2	553		Dog	Metacarpal 4	F	F			

Phase	Context	SFB Number	Species	Element	Fusion proximal	Fusion distal	Burning	Gnawing	Butchery
2	553		Dog	Metapodial 1	X	F			
2	553		Dog	Phalanx 1	F	F			
2	553		Dog	Phalanx 1	F	F			
2	553		Dog	Phalanx 1	F	F			
2	553		Dog	Phalanx 1	F	F			
2	553		Dog	Phalanx 1	F	F			
2	553		Dog	Phalanx 1	F	F			
2	553		Dog	Phalanx 1	F	F			
2	553		Dog	Phalanx 1	F	F			
2	553		Dog	Phalanx 1	F	F			
2	553		Dog	Phalanx 2	F	F			
2	553		Dog	Phalanx 2	F	F			
2	553		Red/Fallow deer	Antler	0	0			
4	576		Pig	Mandible	X	0			
4	576		Horse	Astragalus	0	0			
4	579		Sheep/Goat	Mandible	X	0			
4	581		Cat	Humerus	X	F			
4	581		Dog	Mandible	0	0			
4	581		Sheep/Goat	Loose Mandibular Tooth	0	0			
4	581		Horse	Mandible	X	0			
4	581		Horse	Tibia	X	F			
4	597		Horse	Loose Maxillary Tooth	0	0			
4	597		Horse	Loose Maxillary Tooth	0	0			
4	597		Horse	Loose Maxillary Tooth	0	0			
4	612		Cattle	Tibia	F	X			
4	612		Cattle	Pelvis	F	F			
1	625		Sheep/Goat	Mandible	X	F			
4	628		Sheep/Goat	Loose Mandibular Tooth	0	0			
1	645		Sheep/Goat	Phalanx 1	X	F			
2	653		Sheep/Goat	Metacarpal 1	F	X			
2	653		Sheep/Goat	Metacarpal 1	F	X			
2	653		Sheep/Goat	Metatarsal 1	F	X			
2	653		Sheep/Goat	Metatarsal 1	F	X			
2	653		Sheep/Goat	Tibia	X	F			
2	653		Sheep/Goat	Phalanx 1	F	F			
2	653		Sheep/Goat	Cranium	0	0			
2	653		Sheep/Goat	Cranium	0	0			
2	653		Sheep/Goat	Mandible	X	0			
2	653		Cattle	Horn core	0	0			
2	653		Sheep/Goat	Loose Mandibular Tooth	0	0			
1	661		Sheep/Goat	Mandible	X	0			
1	661		Sheep/Goat	Mandible	X	0			
1	670		Sheep/Goat	Femur	X	UE			
1	679		Frog	Atlas	0	0			

Table 55: List of identifiable fragments from Bartlow Road, Linton

C.2 Environmental Samples

By Rachel Fosberry

Introduction

C.2.1 A total of 114 samples were taken from layers and deposits within the excavated areas. The purpose of this assessment is to determine whether plant remains are present, their mode of preservation and whether they are of interpretable value with regard to domestic, agricultural and industrial activities, diet, economy and rubbish disposal.

Methodology

C.2.2 The samples were processed by tank flotation using modified Siraff-type equipment for the recovery of preserved plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. A magnet was dragged through each residue fraction for the recovery of magnetic residues prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds.

C.2.3 The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains is presented in Tables 56-59. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers *et al*. 2006) and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (2010) for other plants. Carbonised seeds and grains, by the process of burning and burial, become blackened and often distort and fragment leading to difficulty in identification. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

Quantification

C.2.4 For the purpose of this assessment, items such as seeds and cereal grains have been scanned and recorded qualitatively according to the following categories:

= 1-5, ## = 6-25, ### = 26-100, #### = 100+ specimens

C.2.5 Items that cannot be easily quantified such as charcoal and molluscs have been scored for abundance

+ = rare, ++ = moderate, +++ = abundant

U=untransformed, f = fragment

Results

C.2.6 Plant remains are present in most of the samples, mostly in the form of poorly preserved, carbonised cereal grains that are abraded and/or fragmented. Charcoal

volumes are mainly low and chaff and weed seeds are extremely rare within these assemblages.

Phase 1: Prehistoric

C.2.7 Samples taken from prehistoric deposits include samples from test pits in the flint scatters near the river. Several of the samples contain charred plant remains, mainly as single specimens of cereal grains. It is suspected that these remains are intrusive due to alluvial or colluvial action and bioturbation. This theory is supported by a radiocarbon date from a charred nutshell, recovered from TPG3 (context 674), which returned a date of 635-765 cal. AD (1352 ± 30 BP; SUERC-87380; 95.4% probability), dating the shell to the Middle Anglo-Saxon period. The sample with the largest assemblage of charred plant remains is Sample 80 from fill 661 of one of the test pits and contains moderate wheat (*Triticum* sp.), oat (*Avena* sp.) and barley (*Hordeum* sp.) grains and occasional peas (*Pisum*/*Lathyrus* sp.). Preservation of the plant remains is extremely poor which is another indication that the material could be intrusive.

Cut No.	Context No.	Sample No.	Feature Type	Volume processed (L)	Flot Volume (ml)	Cereals	Legumes	Weed Seeds	Snails from flot	Charcoal volume (ml)	Flot comments	Pottery
531	532	59	pit	9	10	0	0	0	+++	<1	sparse charcoal only	0
629	630	73	tree throw	6	5	0	0	0	0	3	sparse charcoal only	0
N/A	251	15	layer	9	1	#	0	0	+	<1	single wheat grain	0
N/A	252	16	layer	8	5	#	0	0	+++	1	occasional wheat grains	0
N/A	584	61	layer	18	10	#	0	0	++	<1	occasional wheat grains	0
N/A	585	62	layer	17	1	0	0	0	++	0	no preservation	0
N/A	586	63	layer	20	10	0	0	0	+++	<1	sparse charcoal only	0
N/A	487	64	layer	10	5	#f	0	0	+++	0	indet grain	0
N/A	588	65	layer	10	3	#	0	0	++	<1	indet grain	0
N/A	589	66	layer	10	1	#	0	0	+	<1	occasional wheat grains	0
N/A	590	67	layer	10	<1	0	0	0	++	0	no preservation	0
N/A	591	68	layer	10	1	0	0	0	+	0	no preservation	0
N/A	592	69	layer	9	1	#	0	#	++	<1	occasional wheat grains	0
N/A	317	70	layer	18	10	0	0	#	+++	<1	single cleaver seed	0
N/A	611	71	pit	9	5	#	0	0	++	2	occasional wheat grains	0
N/A	663	82		9	5	0	0	0	+++	<1	sparse charcoal only	0
N/A	687.01	111	Test pit	8	5	0	0	0	+	<1	sparse charcoal only	0
N/A	687.02	112	Test pit	9	5	0	0	0	0	<1	sparse charcoal only	0
N/A	687.03	113	Test pit	8	5	0	0	0	+	<1	sparse charcoal only	0
N/A	670	114	pit	9	4	0	0	0	++	<1	sparse charcoal only	0
N/A	685	115	colluvial hillwash	8	5	0	0	0	0	0	no preservation	0
N/A	225	1	deposit	10	25	0	0	0	+++	<1	sparse charcoal only	0
N/A	234	4	layer	28	5	0	0	0	++	<1	sparse charcoal only	0
652	653	116	Test pit	8	20	0	0	0	+	15	moderate charcoal	0
N/A	655	74	Test pit	18	5	#	0	0	+++	<1	occasional wheat and oat grains	0
N/A	656	75	Test pit	8	5	#	0	0	++	<1	occasional indet grain	0

Cut No.	Context No.	Sample No.	Feature Type	Volume processed (L)	Flot Volume (ml)	Cereals	Legumes	Weed Seeds	Snails from flot	Charcoal volume (ml)	Flot comments	Pottery
N/A	657	76	Test pit	19	5	#	0	0	+++	<1	single wheat grain	0
N/A	658	77	Test pit	10	5	0	0	0	0	0	no preservation	0
N/A	659	78	Test pit	8	10	0	0	0	++	<1	sparse charcoal only	0
N/A	660	79	Test pit	18	15	#	0	0	+++	<1	single oat grain	0
N/A	661	80	Test pit	18	15	##	0	0	++	6	moderate wheat grains. Poor preservation	#
N/A	662	81	Test pit	17	5	###	#	#	+++	2	moderate wheat, oat and barley grains. Occasional legumes. Poor preservation	0
N/A	664	83	Test pit	16	1	#	0	0	++	<1	single indet grain	0
N/A	665	84	Test pit	20	5	#	0	0	++	<1	single barley grain	0
N/A	666	85	Test pit	20	5	0	0	0	+	0	no preservation	0
N/A	571	86	Test pit	8	1	0	0	0	0	<1	sparse charcoal only	0
N/A	646	88	Test pit	16	1	0	0	0	+	0	no preservation	#
N/A	645	89	Test pit	8	5	#	0	0	+	<1	single indet grain	#
N/A	644	90	Test pit	16	5	#	0	0	+++	2	occasional oat and wheat grains	0
N/A	635	91	Test pit	18	2	#	0	0	++	0	single barley grain	
N/A	672	92	Test pit	14	5	0	0	0	+++	<1	sparse charcoal only	
N/A	671	93	Test pit	8	1	#	0	0	0	0	single indet grain	0
N/A	673	94	Test pit	16	5	#	0	0	++	<1	occasional oat and wheat grains	0
N/A	674	95	Test pit	8	5	0	0	0	++	0	single indet nutshell	0
N/A	668	96	Test pit	8	10	#f	0	0	0	<1	single indet grain	0
N/A	675	97	Test pit	8	5	0	0	0	0	<1	sparse charcoal only	0
N/A	676	98	Test pit	8	10	#f	0	0	+	0	single indet grain	0
N/A	677	99	Test pit	9	5	#	0	0	+	<1	occasional wheat grains	0
N/A	678	100	Test pit	8	0	0	0	0	0	0	no preservation	0
N/A	679	101	Test pit	17	2	#	0	0	+	<1	occasional wheat grains	0
N/A	680	102	Test pit	14	5	#	0	0	0	0	occasional oat and barley grains	0
N/A	681	103	Test pit	17	15	##	0	0	+++	<1	occasional wheat and barley grains	0
N/A	682	104	Test pit	16	5	#	0	0	0	0	occasional wheat grains	0
N/A	683	105	Test pit	16	10	#	0	0	+	4	occasional wheat grains	0
N/A	684	106	Test pit	9	5	#f	0	0	0	<1	single barley grain	0
N/A	648	107	Test pit	16	2	#	0	0	+	0	occasional wheat grains	0
N/A	650	108	Test pit	10	2	0	0	0	0	0	no preservation	0
N/A	651	109	Test pit	20	1	#	0	0	0	0	single oat grain	0
N/A	686	110	Test pit	9	10	0	0	0	0	<1	sparse charcoal only	0

Table 56: Phase 1 samples

Phase 3: Anglo-Saxon

C.2.8 Samples were taken from the deposits of three sunken-featured buildings (SFBs) and associated features. SFB **235** (SFB 1), SFB **424** (SFB 2) and SFB **485** (SFB 3) all produced

a scatter of charred cereal grains (wheat, barley, rye (*Secale cereale*) and oat) and occasional legume fragments.

C.2.9 SFB **235** also produced a tentative indicator of cess in the form of a calcitic nodule. These items are frequently found in cess deposits and are thought to be formed naturally in a calcium-rich environment. More of these nodules were recovered from this SFB during the evaluation and were frequent in an associated pit (**21**) which also contained mineralised seeds as further cess indicators (Fosberry in Clarke 2014).

Cut No.	Context No.	Sample No.	Master Number	Feature Type	Volume processed (L)	Flot Volume (ml)	Cereals	Legumes	Weed Seeds	Snails from flot	Charcoal volume (ml)	Flot comments	Pottery
266	264	19	0	pit	9	20	##	0	0	+	5	occasional wheat and barley grains	0
281	283	13	0	pit	8	10	#	0	0	+	<1	single barley grain	#
281	285	14	0	pit	9	5	0	0	0	+	2	sparse charcoal only	##
363	364	30	0	pit	10	5	#	0	0	+	<1	occasional indet grain	0
408	410	32	0	pit	9	1	#f	0	0	+	<1	single barley grain	0
446	447	52	0	SFB	8	1	0	0	0	+	0	no preservation	0
235	243	5	235	SFB	8	25	##	0	0	+++	<1	poor preservation of indet grain	#
235	244	6	235	SFB	8	5	#f	0	0	+++	1	fragment of indet grain	0
235	244	7	235	SFB	1	1	0	0	0	0	<1	sparse charcoal only	0
235	245	8	235	SFB	10	60	#	#	#	++	30	single specimens of oat, barley, wheat, pea, bean and a germinated brome seed	#
235	246	9	235	SFB	10	1	#	#	0	+	<1	indet grain and legume fragment	0
465	467	37	235	SFB	9	5	#	#f	0	+	<1	Charred root/stem, calcitic nodule,oat, barley, rye and wheat grains, legume fragment	#
465	466	44	235	SFB	9	1	0	0	0	+	<1	sparse charcoal only	0
490	492	45	235	SFB	6	2	#	0	0	++	1	single rye grain	0
490	491	57	235	SFB	9	2	0	0	0	+	<1	sparse charcoal only	#
499	500	58	235	post hole	9	5	0	0	0	++	<1	sparse charcoal only	0
269	270	17	424	SFB	9	2	#f	0	0	+	<1	single barley grain	0
299	300	18	424	post hole	9	5	#	0	0	+	2	single rye grain	#
307	308	20	424	SFB	8	1	0	0	0	+	<1	sparse charcoal only	0
307	309	21	424	SFB	10	1	#	0	0	+	<1	occasional indet grain	0
337	338	22	424	post hole	8	1	0	0	0	+	0	no preservation	0
338	340	33	424	SFB	9	2	#f	0	0	+	<1	single barley grain	0
339	341	34	424	SFB	8	10	#	0	0	+	5	occasional wheat grains	0
411	412	35	424	post hole	1	<1	0	0	0	+	0	no preservation	0
413	414	36	424	post hole	8	<1	0	0	0	+	0	sparse charcoal only	0
455	456	38	424	SFB	10	1	0	0	0	+	<1	sparse charcoal only	0
482	483	53	424	post hole	5	1	#	0	0	+	0	single wheat grain	0
482	484	54	424	post hole	6	5	#	0	0	++	<1	single wheat grain	0

Cut No.	Context No.	Sample No.	Master Number	Feature Type	Volume processed (L)	Flot Volume (ml)	Cereals	Legumes	Weed Seeds	Snails from flot	Charcoal volume (ml)	Flot comments	Pottery
485	486	51	424	post hole	4	1	0	0	0	+	0	no preservation	0
487	488	55	424	SFB	8	2	#	0	0	+	<1	single wheat grain	#
487	489	56	424	SFB	8	10	#	0	0	+	<1	occasional wheat and barley grains	0
288	344	24	485	pit	8	15	#	0	0	+	5	occasional wheat grains	0
288	343	25	485	pit	8	1	#	0	0	+	<1	single wheat grain	#
288	342	26	485	pit	9	1	#	0	0	+	<1	single indet grain	0
288	348	27	485	pit	8	1	0	0	0	+	<1	sparse charcoal only	0
288	347	28	485	pit	8	5	#	0	0	+	<1	single barley grain	0
288	470	39	485	pit	8	15	#	0	0	+	10	single wheat/rye grain	0
288	469	40	485	pit	8	10	0	0	#	+++	1	single cleaver seed	0
288	468	41	485	pit	9	1	#	0	0	+	<1	fragments of oat and indet grain	0
288	473	42	485	pit	8	5	0	0	0	+	1	sparse charcoal only	0
288	472	43	485	pit	9	15	#	#f	0	0	2	single wheat grain, legume fragment and untransformed grape seed	0

Table 57: Phase 3 samples

Phase 4: Medieval

C.2.10 Samples taken from Phase 4 deposits produced sparse charred plant remains in the form of single cereal grains and charcoal.

Cut No.	Context No.	Sample No.	Feature Type	Volume processed (L)	Flot Volume (ml)	Cereals	Weed Seeds	Snails from flot	Charcoal volume (ml)	Flot comments	Pottery
229	230	2	gully	9	10	0	#	+++	<1	sparse charcoal only	0
231	232	3	ditch	9	10	#	0	+++	<1	single FT wheat grain	+NR
279	280	12	ditch	9	10	0	0	0	2	sparse charcoal only	0
324	325	23	ditch	9	5	#	0	+	<1	single oat grain	0
361	362	29	gully terminus	6	2	#	0	+	<1	single wheat grain	0
493	494	49	pit	9	5	#	0	+	<1	indet grain	#
497	498	50	ditch	8	5	0	0	++	<1	sparse charcoal only	0

Table 58: Phase 4 samples

Phase 5: Post-Medieval and Modern

C.2.11 Only one sample from Phase 5 deposits produced a moderate assemblage of charred plant remains; poorly-preserved grains of barley and wheat were recovered from dump layer 612.

Cut No.	Context No.	Sample No.	Feature Type	Volume processed (L)	Flot Volume (ml)	Cereals	Legumes	Snails from flot	Charcoal volume (ml)	Flot comments	Pottery
271	274	10	pit	8	5	#	0	+++	<1	indet grain and hazelnut shell fragment	0
271	272	11	pit	9	5	#	#f	0	0	indet grain and legume fragment	0
389	391	31	ditch	10	20	0	0	++++	<1	sparse charcoal only	#
439	441	60	foundation	8	30	0	0	+++	5	occasional charcoal	#
N/A	612	72	dump layer	8	10	###	0	+++	4	moderate wheat and barley grains. Poor preservation	0
N/A	647	87	surface	18	5	#	0	++	0	no preservation	0

Table 59: Phase 5 samples

Discussion

C.2.12 The samples taken from this site are disappointing in their content, particularly the samples from the SFBs. These features are often used as convenient depositories for midden material; the occasional charred food remains and cess indicators present in the SFBs on this site are probably scarce due to the high level of truncation. It is possible that rubbish disposal was carried out elsewhere, off site. The cereal types recovered are typical for the Anglo-Saxon and medieval period with free-threshing bread wheat and rye being typically utilised in flour form for bread. Barley and oats may have been consumed as whole grains and were also used as fodder. Barley was the most common cereal type used for brewing, evidence of which was not found at this site.

C.2.13 It is interesting to note that whilst Iron Age and Roman pottery (Phase 2) was recovered from this site, there is no evidence of hulled wheat in the form of charred glume bases that are often preserved in settlement sites of these periods.

Recommendations for further work

C.2.14 The samples have been fully assessed and no further analysis is recommended.

Statement of potential

C.2.15 The samples do not have any potential for further study. The use of preserved plant remains for radiocarbon dating is considered unreliable due to the lack of deliberate deposition within well-sealed deposits.

C.3 Mollusca

By Carole Fletcher

Introduction and methodology

C.3.1 A total of 0.086kg of marine shells were collected by hand from features, including a ditch, pits, SFBs and a well. The shell recovered is all oyster, *Ostrea edulis*, from estuarine and shallow coastal waters. The shell is moderately to poorly preserved and has suffered post-depositional damage.

C.3.2 The shell was weighed and recorded by species, with right and left valves noted, when identification could be made, using Winder (2011) as a guide. The minimum number of individuals (MNI) was not established, due to the small size of the feature assemblage. Two oyster shells show evidence of damage, in the form of a small 'V' or 'U' shaped hole on the outer edge of the left or right valve. This damage is likely to have been caused by a knife during the opening, or 'shucking', of the oyster, prior to its consumption. This damage has been recorded in the catalogue. The shell is recorded in the catalogue (Table 60).

Factual Data

C.3.3 Each of the features that contained shell produced only a single example, in total nine shells, six right valves and three left valves. Two shells were shucked, a left valve from SFB 235 and a right valve from pit **580**. None of the shells were complete and several are only partial valves.

Discussion

C.3.4 The shell represents general discarded food waste and the small and fragmentary nature of the total assemblage means it is of little significance beyond indicating transportation of a marine food source to the site and the ability to access food sources outside the immediate area and surrounding hinterland. However, the paucity of shells would suggest that either shellfish were not an important food source or perhaps that the shells are residual, reworked and redistributed Roman food debris (Roman ceramic building material was recovered from the site).

Statement of potential

C.3.5 The quantity recovered is too small to represent anything other than casual disposal of rubbish of uncertain date.

Recommendations for further work

C.3.6 This statement acts as a full record for the archive. No further work is required.

Retention, dispersal and display

C.3.7 The shell may be deselected prior to archival deposition.

Context	Cut	Feature	Species	Common Name	Habitat	No of shells or frags	No. of shucked shells	No. of left valve	No. of shucked left valve	No. of right valve	No. of shucked right valve	Description/Comment	Total Weight (kg)
208	**206**	**Well**	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1				1		Near-complete small right valve, slight damage to the ventral edge	0.007
245	**235**	**SFB**	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1	1	1	1			Partial small-medium shell. Almost all the posterior edge is missing and there is a shallow W shuck mark on the ventral edge	0.010
467	**465**	**SFB**	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1				1		Partial right valve, somewhat powdery, with possible shuck mark on the ventral edge	0.002
492	**490**	**SFB**	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1		1				Near-complete left valve somewhat weathered, the outer surface has been smoothed. Moderate damage to the surface by marine worm borings	0.015
498	**497**	**Ditch**	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1				1		Incomplete medium right valve heavily weathered and somewhat smoothed. All the ventral edge has been lost	0.017
544	**543**	**Gully**	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1				1		Incomplete small right valve, damaged on the ventral edge	0.003
557		**Test pit**	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1		1				Incomplete small-medium left valve, in poor condition, flaky and powdery and missing much of the ventral edge and damaged on the posterior edge	0.006
576	**575**	**Pit**	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1				1		Near complete medium right valve with good survival of horny scale, slight damage to the ventral edge and the posterior ventral edge	0.017
581	**580**	**Pit**	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1	1			1	1	Near complete small-medium right valve slight damage to the anterior dorsal margin and a clear V-shaped shuck mark on the ventral edge, some survival of horny scale	0.009
Total						**9**	**2**	**3**	**1**	**6**	**1**		**0.086**

Table 60: Mollusca by context and cut

C.4 Geological Setting of the River Granta valley at Linton, Cambridgeshire

by Steve Boreham

C.4.1 The area around Linton is characterised by low rolling hills, often with thin chalky soils overlying Chalk bedrock. The River Granta is a valley-confined stream with a meandering single-thread morphology, which joins the River Cam near Great Shelford *c*.12km downstream (north-west) of Linton. The Rivers Cam and Granta appear to be dip-slope streams draining the degraded Chalk escarpment of the southern Cambridgeshire/Essex border.

C.4.2 The geology of the Granta valley was first described in detail by White (1932) who recognised the general dip of the Cretaceous bedrock strata towards the south-east. The bedrock in the Linton area comprises the New Pit Chalk Formation (Moorlock *et al*., 2003), which is equivalent to the Middle Chalk of the former classification (Matthews & Harvey, 1965, Forbes, 1965).

C.4.3 The lithostratigraphy of the Pleistocene deposits in the valley of the Rivers Cam and Granta was described by Boreham in Bowen (1999). Boreham (2002) described the Pleistocene geology and palaeoenvironments of the Cambridge District, and the relationship of the Cam valley deposits to the Wash fluvial network is discussed in Boreham *et al*. (2010).

C.4.4 Glacial till (boulder clay) was identified by Worssam and Taylor (1969) as one of the oldest Pleistocene deposits of the Cambridge District and is attributed to the Barrington Works Member of the glaciogenic Elsterian Lowestoft Formation (LF). The 'valley gravels' of the Cam system were separated by elevation into numbered terraces (3rd, 2nd, 1st) using a morphostratigraphic paradigm (Dixon 1980, Clayton 1981). These fluviogenic deposits are placed in the Cam Valley Formation (CVF). Other older gravel deposits (some of Elsterian age) are found capping hills and interfluves throughout the area (for example at Rivey Hill, Linton).

C.4.5 The oldest course of the River Granta is shown by the fragmentary 3rd terrace correlated with the Arbury Member of the Cam Valley Formation (present just downstream of Linton and at Great Abington). It appears to span the pre-Ipswichian and early Devensian (MIS 7 - MIS 5a) interval.

C.4.6 The mid-Devensian (MIS 3-4) course of the River Granta (2nd terrace – Sidgwick Avenue Member) is hard to distinguish from the late-Devensian (MIS 2) (1st terrace - Barnwell Station Member) course, and is mapped by the BGS flanking both sides of the Holocene floodplain both upstream and downstream of Linton village as 'undifferentiated 1st-2nd terrace deposits'. In reality, these terrace deposits are probably more extensive than has been mapped because they are often masked by periglacial and colluvial deposits from the valley sides. They are also often hidden beneath the Holocene floodplain.

C.4.7 In late-Devensian times (MIS 2) the River Granta incised a channel-form that later became the inherited course of the Holocene floodplain. Basal gravels beneath the Holocene deposits within the incised channel-form are identified as the Midsummer Common Member of the Cam Valley Formation. The Holocene deposits of the Granta

valley are represented by floodplain alluvium and peat that are placed in the Jesus Green Member.

C.4.8 The situation at the Bartlow Road site on the northern flank of the River Granta is shown in Fig. C.4.1 below (adapted from a remarkably similar situation at Hauxton in the River Cam valley – Boreham and Rolfe 2009). Although the BGS map (Sheet 205) barely shows undifferentiated 1st-2nd terrace deposits at the site, the Soil Survey indicates deeper phase sandy deposits across the whole valley side. On the ground it is clear that a complex of valley-side runnels and periglacially disturbed pellet chalk and silty-sandy slopewash occurs immediately to the south of Bartlow Road (visible as a series of wide, parallel, linear features in Plate 10). There is a well-defined break in slope across the site where the undifferentiated 1st-2nd terrace deposits form a relatively flat surface.

C.4.9 Although the terrace deposits mostly comprise sands and angular gravels, there is some evidence for a silt-filled channel that runs north-west to south-east across the site. On top of the terrace surface are bodies of silt and sand forming lobate fans originating from the valley-side runnel systems and similar deposits that appear to fill slight depressions on the terrace surface that relate to pools or marshy areas. The edge of the terrace is clearly defined with a further break in slope leading down to the floodplain surface. Beneath the floodplain there is invariably a channel-form filled with gravel, overlain by Holocene peats and capped by alluvium (Romano-British Silt) dating from the early Iron Age onwards.

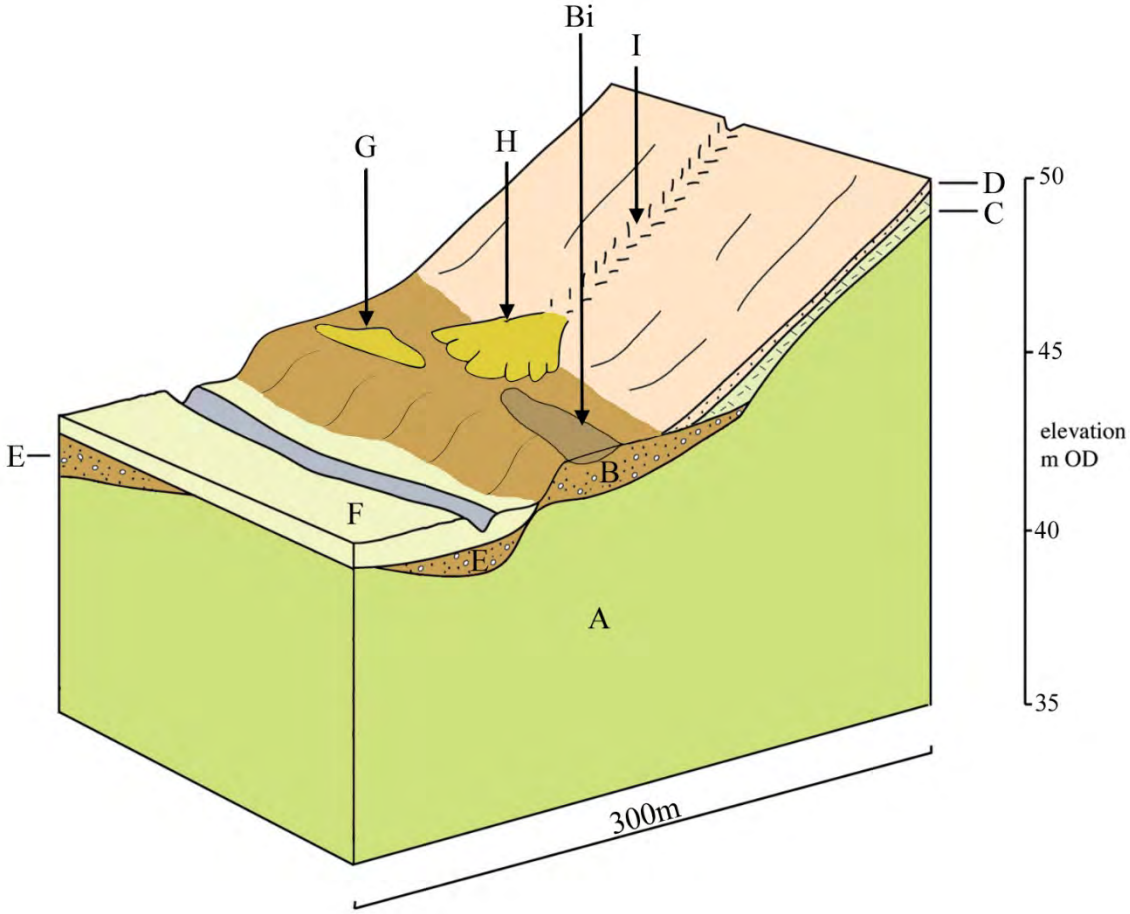


Figure B.4.1: Block section of the Granta valley upstream of Linton village showing:

A – Chalk bedrock of the New Pit Chalk Formation

B – Undifferentiated 1st - 2nd terrace deposits comprising angular gravels and (Bi) silt-filled palaeochannels

C – Late Glacial periglacial pellet chalk of the valley side (solifluction deposit)

D – Early Holocene sandy-silty colluvial deposits

E – Late Devensian river gravels

F – Holocene floodplain deposits

G – Holocene pool/marsh deposits on the terrace surface

H – Late Glacial Holocene silty-sandy lobate debris fan on the terrace surface

I – Valley-side gully often filled with Late Glacial silts and sands

C.5 Radiocarbon Dating Certificate

Scottish Universities Environmental Research Centre
Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow G75 0QF, Scotland, UK
Director: Professor F M Stuart Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

19 July 2019

Laboratory Code	SUERC-87380 (GU51662)
Submitter	Zoe Ui Choileain Oxford Archaeology East 15 Trafalgar Way Bar Hill Cambridgeshire CB23 8SQ
Site Reference	Linbar 18
Context Reference	674
Sample Reference	93
Material	cpr : nut shell
$\delta^{13}C$ relative to VPDB	-23.1 ‰
Radiocarbon Age BP	1352 ± 30

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

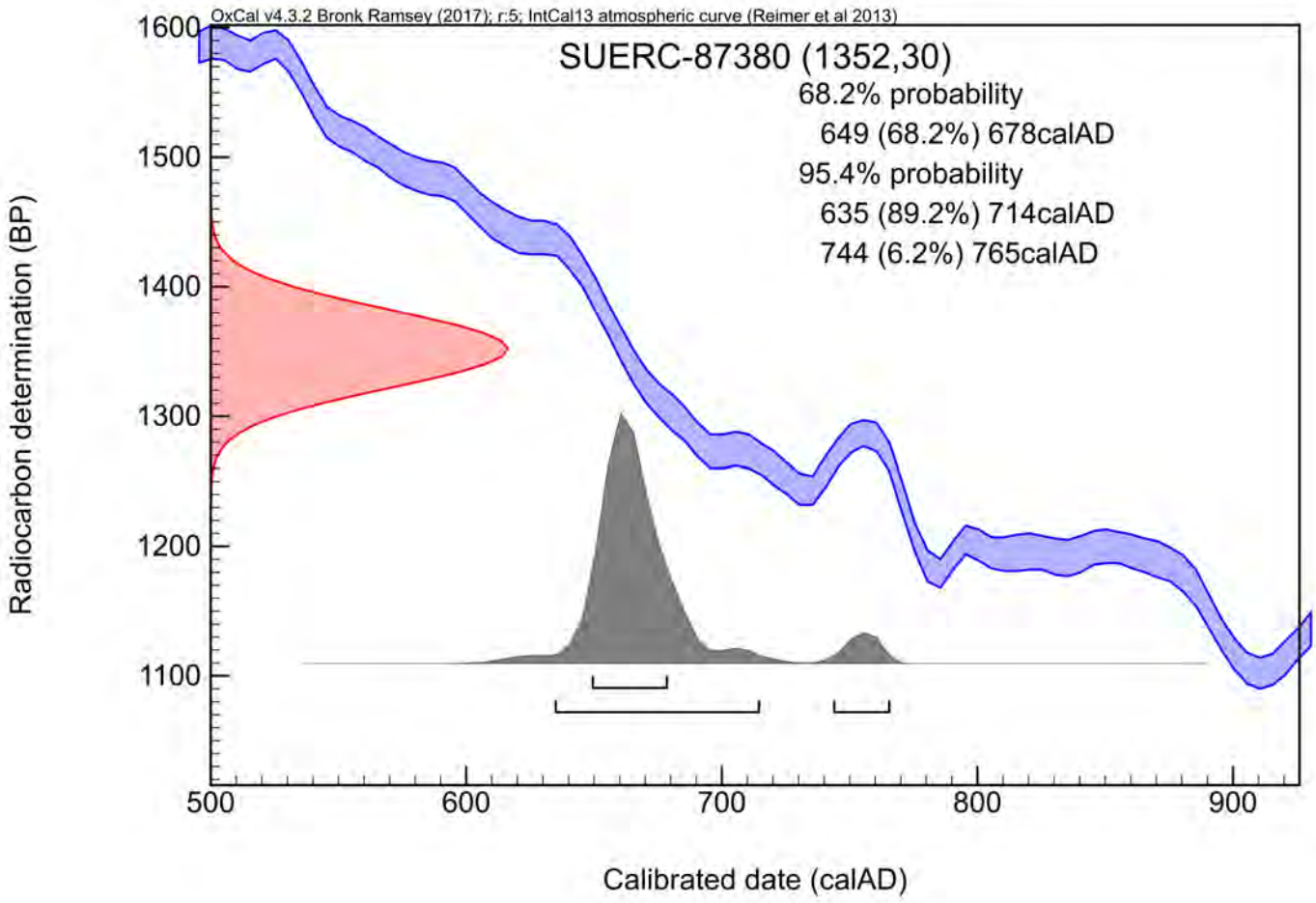
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by :



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

APPENDIX D RISK LOG

D.1.1 The table below lists potential risks for the PX analysis work.

No.	Description	Probability	Impact	Countermeasures	Estimated time/costs	Owner	Date updated
1	Specialists unable to deliver analysis report due to over running work programmes/ ill health/other problems	Medium	Variable	OA has access to a large pool of specialist knowledge (internal and external) which can be used if necessary	Variable		
2	Non-delivery of full report due to field work pressures/ management pressure on co-authors	Medium	Medium-high	Liaise with OA management team	Variable		

APPENDIX E HEALTH AND SAFETY

E.1.1 All OA post-excavation work will be carried out under relevant Health and Safety legislation, including the Health and Safety at Work Act (1974). A copy of the Health and Safety Policy can be supplied. The nature of the work means that the requirements of the following legislation are particularly relevant:

- Workplace (Health, Safety and Welfare) Regulations 1992 – offices and finds processing areas
- Manual Handling Operations Regulations (1992) – transport: bulk finds and samples
- Health and Safety (Display Screen Equipment) Regulations (1992) – use of computers for word-processing and database work
- COSSH (1988) – finds conservation and environmental processing/analysis

APPENDIX F OASIS REPORT FORM

Project Details

OASIS Number	oxfordar3-343907
Project Name	Land to the south of Bartlow Road, Linton, Cambridgeshire

Start of Fieldwork	22/10/19	End of Fieldwork	26/02/19
Previous Work	Yes	Future Work	No

Project Reference Codes

Site Code	LINBAR18	Planning App. Number	S/1963/15/OL
HER Number	ECB5519	Related Numbers	

Prompt	Direction from Local Planning Authority
Development Type	Urban Residential

Techniques used (tick all that apply)

☐	Aerial Photography – interpretation	☒	Open-area excavation	☐	Salvage Record
☐	Aerial Photography - new	☐	Part Excavation	☐	Systematic Field Walking
☐	Field Observation	☐	Part Survey	☐	Systematic Metal Detector Survey
☒	Full Excavation	☐	Recorded Observation	☒	Test-pit Survey
☐	Full Survey	☒	Remote Operated Vehicle Survey	☐	Watching Brief
☐	Geophysical Survey	☐	Salvage Excavation		

Monument	Period
Ditch	Post Medieval (1540 to 1901)
Ditch	Medieval (1066 to 1540)
Pit	Medieval (1066 to 1540)
Quarry	Medieval (1066 to 1540)
Quarry	Post Medieval (1540 to 1901)
Trackway	Post Medieval (1540 to 1901)
Trackway	Medieval (1066 to 1540)
Well	Post Medieval (1540 to 1901)
Sunken Featured Building	Early Medieval (410 to 1066)
Artefact Scatter (NT)	Late Mesolithic (- 7000 to - 4000)

Object	Period
Lithic implement	Mesolithic (- 10 000 to - 4000)
Adze	Mesolithic (- 10 000 to - 4000)
Animal remains	Post Medieval (1540 to 1901)
Animal remains	Medieval (1066 to 1540)
Animal remains	Early Medieval (410 to 1066)
Comb	Early Medieval (410 to 1066)
Coin	Medieval (1066 to 1540)
Pot	Medieval (1066 to 1540)
Pot	Early Medieval (410 to 1066)
Pot	Post Medieval (1540 to 1901)
Brooch	Roman (43 to 410)
Pot	Late Prehistoric (- 4000 to 43)

Pot boiler	Late Prehistoric (- 4000 to 43)
Needle	Early Medieval (410 to 1066)
Spindle Whorl	Early Medieval (410 to 1066)

Insert more lines as appropriate.

Project Location

County	Cambridgeshire
District	South Cambs
Parish	Linton
HER office	Cambridge
Size of Study Area	1.6ha
National Grid Ref	TL 57242 46443

Address (including Postcode)

Bartlow Road
Linton
Cambs
CB21 4LY

Project Originators

Organisation	Oxford Archaeology East
Project Brief Originator	Kasia Gdaniec (CCC HET)
Project Design Originator	Nicholas Gilmour (OAE)
Project Manager	Nicholas Gilmour (OAE)
Project Supervisor	Anthony Haskins (OAE)

Project Archives

	Location	ID
Physical Archive (Finds)	CCCHET Store	ECB5519
Digital Archive	OAE/ADS	LINBAR18/ECB5519
Paper Archive	CCCHET	ECB5519

Physical Contents	Present?	Digital files associated with Finds	Paperwork associated with Finds
Animal Bones	☒	☒	☐
Ceramics	☒	☒	☐
Environmental	☒	☒	☐
Glass	☐	☐	☐
Human Remains	☐	☐	☐
Industrial	☐	☐	☐
Leather	☐	☐	☐
Metal	☒	☐	☐
Stratigraphic		☐	☐
Survey		☐	☐
Textiles	☐	☐	☐
Wood	☐	☐	☐
Worked Bone	☒	☒	☐
Worked Stone/Lithic	☒	☒	☐
None	☐	☐	☒
Other	☐	☐	☐

Digital Media		Paper Media	
Database	☒	Aerial Photos	☐
GIS	☒	Context Sheets	☒

Geophysics	☐	Correspondence	☐
Images (Digital photos)	☒	Diary	☐
Illustrations (Figures/Plates)	☒	Drawing	☒
Moving Image	☐	Manuscript	☐
Spreadsheets	☒	Map	☐
Survey	☐	Matrices	☐
Text	☒	Microfiche	☐
Virtual Reality	☐	Miscellaneous	☒
		Research/Notes	☐
		Photos (negatives/prints/slides)	☐
		Plans	☒
		Report	☒
		Sections	☒
		Survey	☐

Further Comments

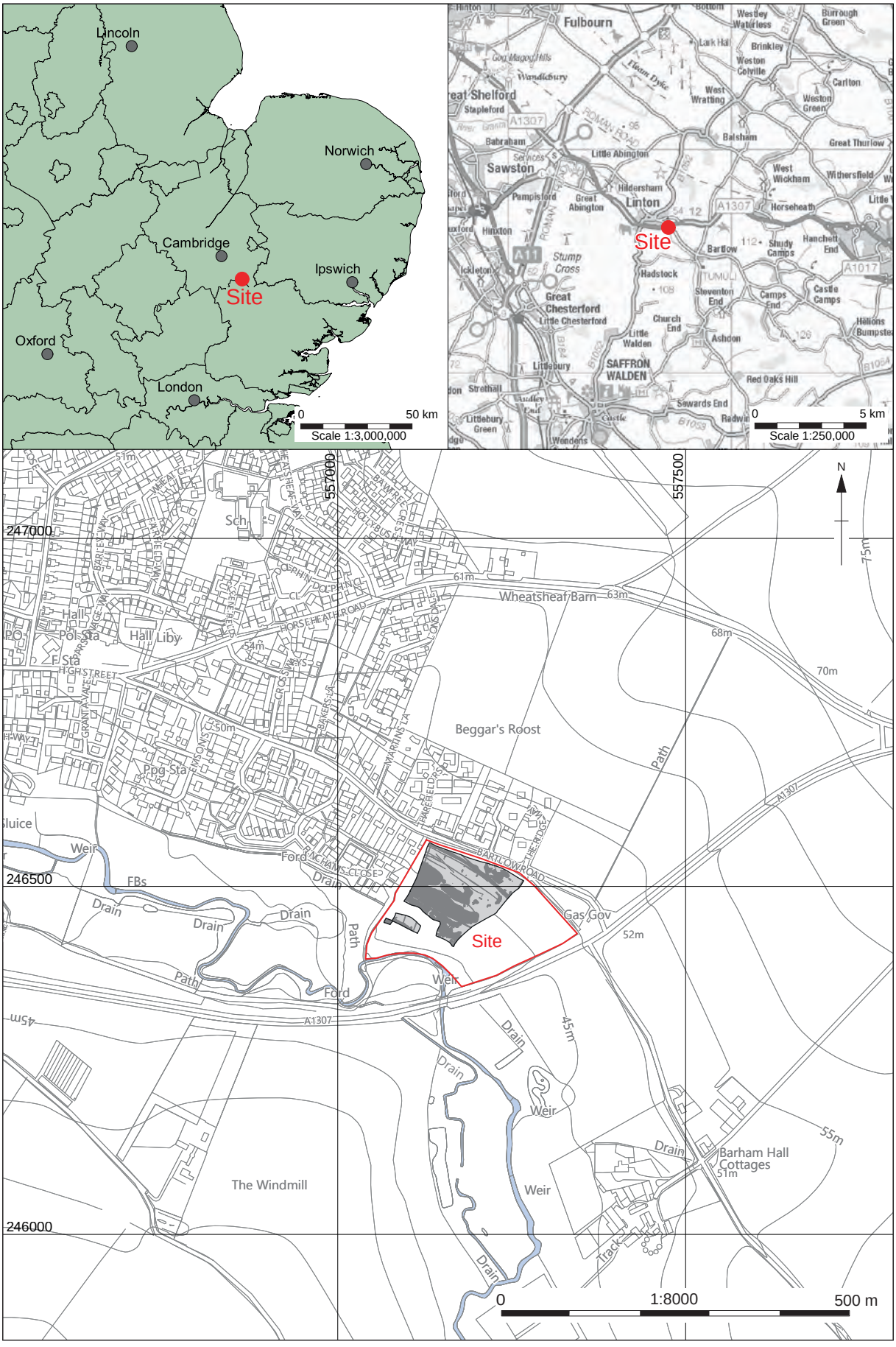


Figure 1: Site location showing archaeological excavation area (black) in development area (red)

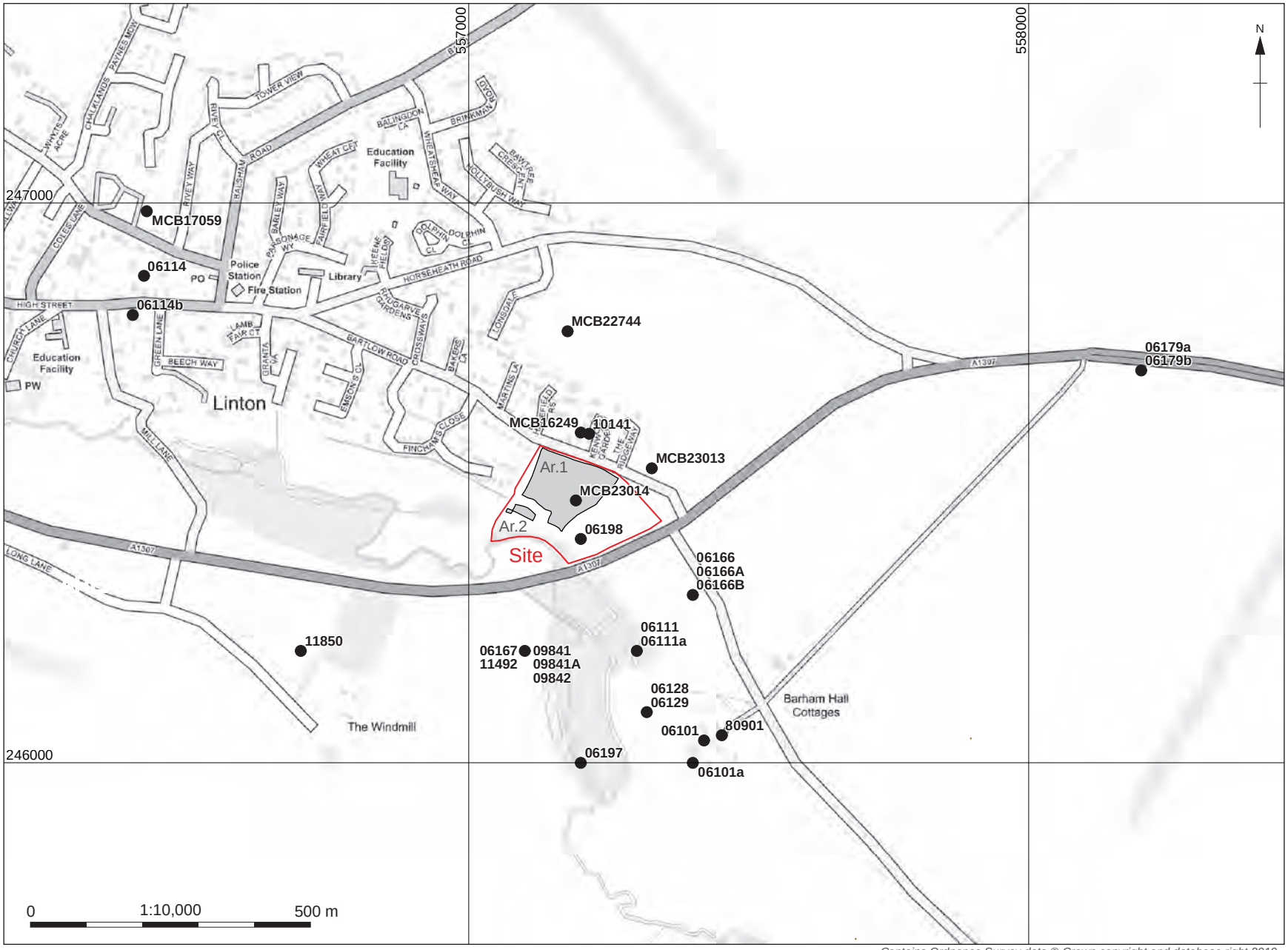


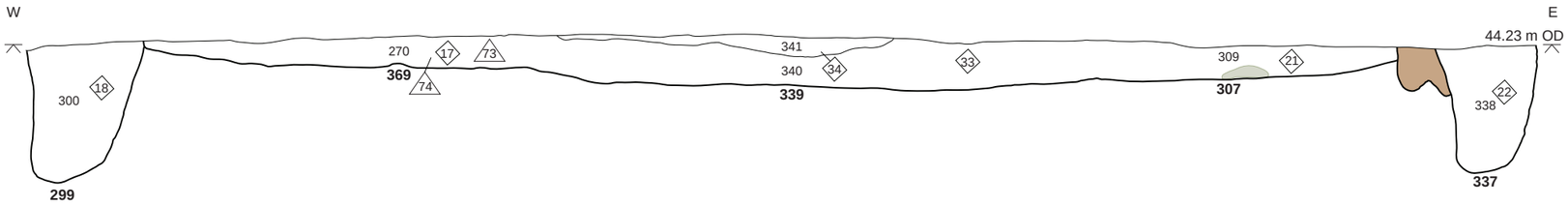
Figure 2: Cambridgeshire Historic Environment Record entries

Figure 3: Geophysical survey results

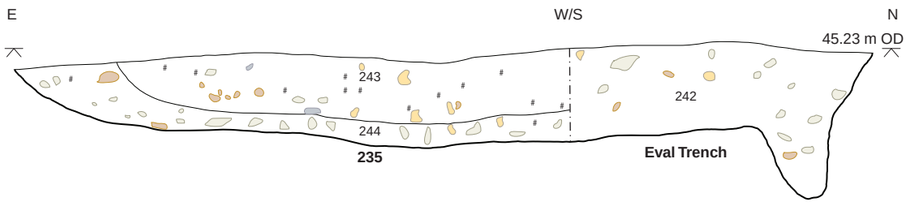
Figure 4: Site plan: geological boundaries, colluvium, alluvium and Phase 1 features

Figure 5: Site plan: Phases 3 – 5

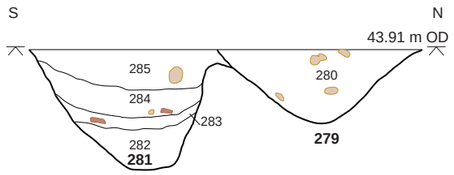
Section 62
SFB2 (Phase 3)



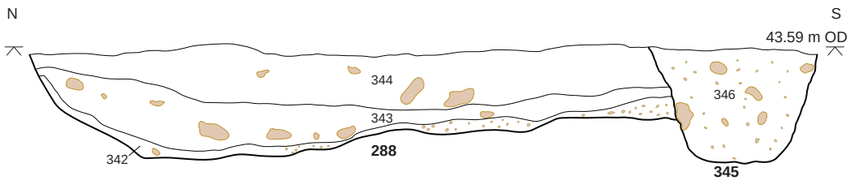
Section 13
SFB1 (Phase 3)



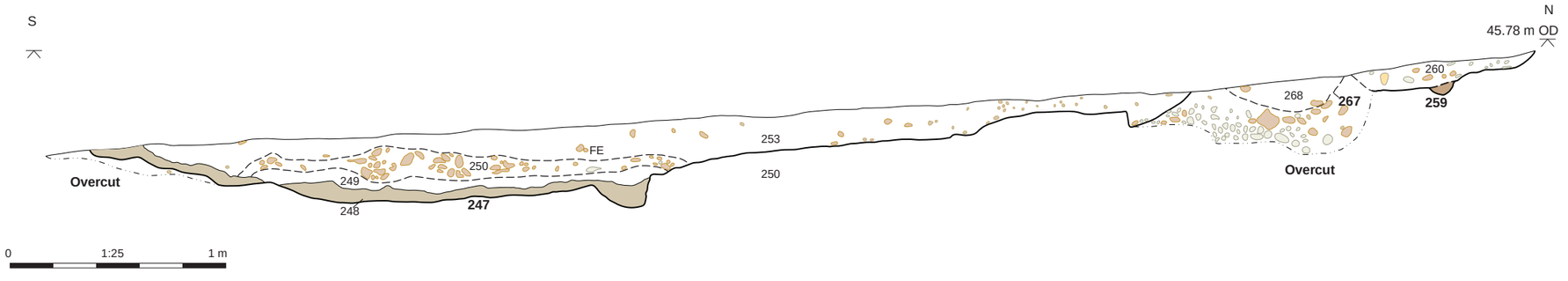
Section 16
Pit 281 (Phase 3), ditch 279 (Phase 4)



Section 43
SFB3 (Phase 3)



Section 11
Hollow-way 247 (Phase 5)



Key

- Cut
- Deposit Horizon
- Deposit Horizon conjectured
- Intrusion/Truncation
- 117 Cut Number
- 116 Deposit Number
- 6 Sample number
- 1 Small find number
- Chalk
- Chalk Flecks
- Bone
- Burnt Bone
- Flint
- Gravel
- Gravel Layer
- # Charcoal
- Pot
- FE Iron
- Rooting
- OD Level

Figure 6: Selected Sections

Plate 1: Overview of excavation area from the east

Plate 2: Chequer-board excavation of flint deposit (TPG 2), from the east

Plate 3: Chequer-board excavation of flint deposits (TPG 2), from the south-east

Plate 4: Sunken Featured Building 1, from the north

Plate 5: Sunken Featured Building 2, from the west

Plate 6: Sunken Featured Building 3, from the west

Plate 7: Horse burial in pit **305** from the south

Plate 8: Post-medieval hollow-way **247**, with metalled surface visible, from the west

Plate 9: Quarry pit **580**, from south

Plate 10: UAV image

oxfordarchaeology

Head Office/Registered Office/ OA South

Janus House
Osney Mead
Oxford OX2 0ES

t: +44 (0) 1865 263 800
f: +44 (0) 1865 793 496
e: info@oxfordarchaeology.com
w: http://oxfordarchaeology.com

OA North

Mill 3
Moor Lane
Lancaster LA1 1QD

t: +44 (0) 1524 541 000
f: +44 (0) 1524 848 606
e: oanorth@oxfordarchaeology.com
w: http://oxfordarchaeology.com

OA East

15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

t: +44 (0) 1223 850500
e: oaeast@oxfordarchaeology.com
w: http://oxfordarchaeology.com

REGISTERED ORGANISATION CIfA

Director: Gill Hey, BA PhD FSA MCIfA
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