

# Fulbourn Primary School, Fulbourn, Cambridgeshire



## Excavation Report



Feb 2018

**Client: Kier on behalf of  
Cambridgeshire County Council**

OA East Report No: 2131

OASIS No: oxfordarch3-301688

NGR: TL 5970 7365

**Fulbourn Primary School, Fulbourn, Cambridgeshire**

*Archaeological Excavation*

*By Daria Tsybaeva BA (Hons) MA ACIfA*

*With contributions by Carole Fletcher HND BA (Hons) ACIfA, Rachel Fosberry ACIfA,  
Ted Levermore BA, Hayley Foster BA MA PhD, Lawrence Billington BA PhD, Denis Sami  
PhD, Nick Gilmour MA (cantab) MA ACIfA*

*Editor: Aileen Connor BA (Hons) ACIfA*

*Illustrators: Daria Tsybaeva BA (Hons) MA ACIfA, Gillian Greer BSc MAAIS*

*Report Date: January 2018*

**Report Number:** 2131  
**Site Name:** Fulbourn Primary School, Fulbourn, Cambridgeshire  
**HER Event No:** ECB5148  
**Date of Works:** July 2017  
**Client Name:** Kier on behalf of Cambridgeshire County Council

**Planning Ref:** S/0231/17/CC  
**Grid Ref:** TL 5970 7365  
**Site Code:** FULPRS17  
**Finance Code:** FULPRS17EX  
**Receiving Body:** CCC Stores

**Prepared by:** Daria Tsybaeva  
**Position:** Archaeological Field Supervisor  
**Date:** October 2017

**Checked by:** Aileen Connor  
**Position:** Senior Project Manager  
**Date:** Date  
**Signed:**



**Disclaimer**

*This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.*

**Oxford Archaeology East,**  
15 Trafalgar Way,  
Bar Hill,  
Cambridge,  
CB23 8SQ

t: 01223 850500  
f: 01223 850599  
e: oaeast@thehumanjourney.net  
w: <http://thehumanjourney.net/oaeast>

© Oxford Archaeology East 2011  
Oxford Archaeology Limited is a Registered Charity No: 285627

## Table of Contents

<b>Summary</b> .....	<b>6</b>
<b>1 Introduction</b> .....	<b>8</b>
1.1 Location and scope of work.....	8
1.2 Geology and topography.....	8
1.3 Archaeological and historical background.....	8
1.4 Acknowledgements.....	10
<b>2 Aims and Methodology</b> .....	<b>11</b>
2.1 Aims.....	11
2.2 Site Specific Research Objectives.....	11
2.3 Additional Research Objectives.....	11
2.4 Methodology.....	12
<b>3 Results</b> .....	<b>13</b>
3.1 Introduction.....	13
3.2 Prehistoric.....	13
3.3 Roman (1 <sup>st</sup> to 4 <sup>th</sup> century).....	13
3.4 Late Saxon to Early Medieval (Mid 11 <sup>th</sup> to mid 12 <sup>th</sup> century).....	14
3.5 Modern.....	16
3.6 Finds Summary.....	16
3.7 Environmental Summary.....	17
<b>4 Discussion and Conclusions</b> .....	<b>18</b>
4.1 Prehistoric.....	18
4.2 Roman.....	18
4.3 Late Saxon to early medieval.....	18
4.4 Boundary ditch.....	19
4.5 Significance.....	19
<b>Appendix A. Context Descriptions and Spot Dates</b> .....	<b>21</b>
<b>Appendix B. Finds Reports</b> .....	<b>29</b>
B.1 Later Neolithic pottery.....	29
B.2 Iron Age, Roman and medieval pottery.....	30
B.3 Ceramic Building Material.....	35
B.4 Baked Clay.....	35
B.5 Spindle whorl.....	36
B.6 Flint.....	36

---

<b>Appendix C. Environmental Reports</b> .....	<b>38</b>
C.1 Environmental samples.....	38
C.2 Animal bone.....	45
<b>Appendix D. Bibliography</b> .....	<b>48</b>
<b>Appendix E. OASIS Report Form</b> .....	<b>51</b>

### List of Figures

- Fig. 1 Site location map  
Fig. 2 Site plan  
Fig. 3 Phase plan  
Fig. 4 Hall Farm (Bradley-Lovekin 2008) and current excavation  
Fig. 5 Selected sections

### List of Plates

- Plate 1 Photogrammetry of excavation area  
Plate 2 Well **34** and ditch **187**, view from south-east  
Plate 3 Wheel ruts **80** and **82**, view from north-west  
Plate 4 Group of post holes and pits (**38, 40, 42, 44**), view from south-west  
Plate 5 Thermal imaging of the deeper post hole structures (blue) and shallower wheel ruts (red), view from north-west  
Plate 6 Pit **146**, view from west  
Plate 7 Pit **86**, view from north-west  
Plate 8 Gully **32**, view from south-east

### List of Tables

- Table 1 Quantification of prehistoric pottery by fabric  
Table 2 Fabrics present in the pottery assemblage  
Table 3 Quantification and description of the flint assemblage  
Table 4 Environmental bulk samples from ECB 5148  
Table 5 Species distribution for Fulbourn Primary School  
Table 6 Number of identifiable specimens (NISP) by element and species

---

## Summary

*In July 2017 Oxford Archaeology East has carried out a small area excavation at the playing fields of Fulbourn Primary School prior to development. The excavation confirmed prehistoric and Roman activity in the area and revealed part of a Saxo-Norman settlement dated to 10th-12th century.*

*Two post hole built rectangular houses, a well and pits represented a phase of Late Saxon occupation. This was replaced by a possible trackway leading towards the 11th to 12th century settlement at Hall Farm to the east. Finally a large boundary ditch was dug that appeared to disregard the former settlement layout.*

*The results of the excavation correlate to the findings from nearby Hall Farm excavations (Bradley-Lovekin 2008) where post hole and beam slot buildings, ditches, wells and a hearth were found to have a number of similarities, including alignment.*

*Fragments of animal bones, baked clay and pottery sherds mainly dated to mid 11th-mid 12th century have been retrieved from the site. An assemblage of likely residual Late Neolithic Grooved Ware, along with small numbers of Iron Age and Roman pottery sherds have also been found. Two pits produced residues of peat-burning, vegetables, legumes and other domestic waste as well as a 9th-10th century ceramic spindle whorl.*





## 1 INTRODUCTION

### 1.1 Location and scope of work

- 1.1.1 An archaeological excavation was conducted at the playing fields of Fulbourn Primary School, Fulbourn, Cambridgeshire in July 2017 (Fig. 1; centred on TL 5188 5617).
- 1.1.2 This open-area excavation was undertaken in accordance with a Brief issued by A. Thomas (2017) of Cambridgeshire County Council (CCC; Planning Application S/0231/17/CC), supplemented by a Specification prepared by OA East (Collie & Connor 2017).
- 1.1.3 The work was designed to mitigate the impacts of the proposed development on significant archaeological remains, in accordance with the guidelines set out in National Planning Policy Framework (Department for Communities and Local Government March 2012).
- 1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

### 1.2 Geology and topography

- 1.2.1 The village of Fulbourn lies about four miles east of the centre of Cambridge (Fig. 1). The site is located within the historic village core, just south of the High Street and to the south-west of St Vigor's church.
- 1.2.2 The underlying geology comprises West Melbury Marly Chalk Formation with Totternhoe Stone Member chalk and Zag Chalk Formation to the east and south (BGS). The site lies on relatively flat ground of the playing fields at Fulbourn Primary School (Connor and Macaulay, 2017).

### 1.3 Archaeological and historical background

- 1.3.1 A full search of the Historic Environment Records was commissioned and provided as an appendix to the Brief (Thomas 2017). The section below summarises the most relevant records.

#### ***Prehistoric***

- 1.3.2 Known prehistoric sites within 1km of the subject site are sparse. Remains of this period have mostly been found in the fields surrounding the village. Prehistoric finds were recovered from the adjacent excavation at Stack Yard Court (ECB2716, MCB 17979) however these are thought to be residual and not from primary contexts.

#### ***Roman***

- 1.3.3 Significant Romano-British remains have been recorded within and around Fulbourn, with Roman remains being known to extend northwards, up to and beyond the railway line. Roman pottery findspots are common along Station Road (CHER 06287) and a Roman mosaic appears to have been located at the Station itself, found in 1940. An archaeological evaluation undertaken on land off Cox's Drove, 230m to the northwest of the development site recorded a number of boundary ditches dated to the Roman period (Moan 2015).
- 1.3.4 An excavation at Fulbourn School was undertaken by Joyce Pullinger in 1987 (ECB4452, MCB 20383) and she recorded at least three complete pottery vessels, glass and painted wall plaster. The reference to wall plaster may indicate that these

finds were of Roman date but this has not been confirmed and the location of the finds is unknown.

- 1.3.5 Roman finds were recovered from the adjacent excavation at Stack Yard Court (ECB2716, MCB 17979) however these are thought to have been residual.

#### ***Saxon and Medieval***

- 1.3.6 Fulbourn itself is recorded in a charter of AD 907 and in the Domesday Book. Two churches were within the same churchyard in the village, but with separate parishes. All Saints was demolished in the 18th century, though St Vigor's still stands. Several moated sites are known within Fulbourn parish which may relate to the four main medieval manors. Excavations in 2005 and 2006 at The Chantry (MCB17229) found evidence of medieval smithing and animal butchery along with buildings, fence lines and cobbled surfaces. A number of medieval listed buildings are located within 1km of the development area, including an inn and three houses.
- 1.3.7 Saxon findspots within Fulbourn are few, but include a small amount of Saxon pottery recovered from features during an evaluation at Cox's Drove (Moan 2015). A late Saxon cross fragment associated with the demolished church of All Saints was found within 200m of the churchyard (CHER 6483a).
- 1.3.8 In 2007 an archaeological excavation was carried out to the northeast of the Fulbourn Primary School at Stack Yard Court, Hall Farm (ECB2716, MCB1779). This investigation uncovered the remains of at least seven timber framed buildings, refuse pits, ditched enclosures and two wells. The settlement was dated to the Saxo-Norman period from the 11th to 12th centuries and represents a significant and important discovery. Saxo-Norman settlements are not often uncovered, despite the early medieval origins of most Cambridgeshire villages.

#### ***Post-medieval***

- 1.3.9 A deer park (MCB17543) with a boundary bank was adjacent to the south-east of Fulbourn Manor. Other post-medieval remains relate to buildings of the 17th century and later, with evidence showing that the village had extended mainly to the west along Apthorpe Street, Cow Lane and Pierce Lane (Connor and Macaulay, 2017).

#### ***Previous archaeological work***

- 1.3.10 An excavation was carried out about 50m south-east of the site at Stackyard Court, Hall Farm, School Lane, Fulbourn in June 2008 (Bradley-Lovekin 2008, Fig. 3). This investigation revealed a Saxo-Norman rural settlement dating from the mid-11th century to the last quarter of the 12th century. This excavation is particularly relevant as a number of linear features appeared to be heading in the direction of the current excavation area.
- 1.3.11 In 2014 OA East carried out an archaeological watching brief (Moan 2014) on the development of a new car park for the Fulbourn Primary School, 120m south of the current site, adjacent to St Vigor's Road. No archaeological features or artefacts were recovered.
- 1.3.12 Prior to this excavation OA East carried out an archaeological evaluation on site in the spring of 2017 (Birnie 2017). A substantial ditch and a post hole were revealed in one trench. The features lacked datable evidence but demonstrated a moderate potential for environmental preservation

## **1.4 Acknowledgements**

- 1.4.1 OAEast would like to thank Kier for commissioning this project on behalf of Cambridge County Council and Andy Thomas from CCC Historic Environment Team who provided the Brief, advice and ensured the works were carried out in accordance with current standards and guidance. The project was managed on behalf of Oxford Archaeology East by Aileen Connor and directed on site by Daria Tsybaeva who was assisted by Andrew Radford, Anne-Marie Woolley, Meghan French and Paddy Lambert. The survey was carried out by Gareth Rees, and the illustrations were prepared by Daria Tsybaeva. Thanks are also extended to the teams of OAEast staff who prepared and processed finds and environmental samples under the management of Natasha Dodwell and Rachel Fosberry, and to Katherine Hamilton who prepared the archive.

## 2 AIMS AND METHODOLOGY

### 2.1 Aims

2.1.1 The original aims of the project were set out in the Brief and Written Scheme of Investigation (Collie & Connor 2017) and further refined in the Updated Project Design and Post Excavation Assessment (Tsybaeva 2017),

2.1.2 The main aims of this excavation were

- To mitigate the impact of the development on the surviving archaeological remains. The development would have severely impacted upon these remains and as a result a full excavation was required, targeting the areas of archaeological interest highlighted by the previous phases of evaluation.
- To preserve the archaeological evidence contained within the excavation area by record and to attempt a reconstruction of the history and use of the site.
- To preserve by record archaeological evidence contained within the footprint of the development area, and investigate the origins, date, phasing, spatial organisation, character, function, status, and significance of the remains revealed, and place these in their local, regional and national archaeological context.

2.1.3 The aims and objectives of the excavation were developed with reference to National, Regional and Local Research Agendas (Glazebrook 1997, Brown & Glazebrook 2000, Medlycott 2011).

### 2.2 Site Specific Research Objectives

2.2.1 What is the date of the ditch and what is its relationship with the historic development of Fulbourn?

2.2.2 Analysis of molluscs from the adjacent excavations at Hall Farm suggest that the site was located in a dry, open, short-turfed environment during the Saxo-Norman period. Suitable samples should be sought that can further enhance our understanding of the past environment.

2.2.3 A sample of charred seeds, probably derived from culinary waste, was recovered during the evaluation suggesting that there may be potential for this site to provide evidence for the local plant based economy. Further samples can enhance our understanding of the local economy.

2.2.4 A possible Roman settlement is implied by an HER record relating to artefacts discovered in 1987. Evidence will be sought to further explain/clarify this possibility.

### 2.3 Additional Research Objectives

2.3.1 The post-excavation assessment showed that all the original aims and objectives of the excavation stated above could be met through the analysis of the excavated materials.

2.3.2 The post-excavation assessment process also identified new objectives drawn from national (English Heritage 1997), regional and local (Glazebrook 1997, Brown & Glazebrook 2000, Medlycott 2011) research assessments and agendas. These are outlined below.

- What date are the buildings and can their function and development be determined? Analysis of the possible Saxon building(s) should contribute towards our understanding of Saxon settlement morphology, especially when

combined with the results of earlier excavation east of the site (Bradley-Lovekin 2008).

## **2.4 Methodology**

- 2.4.1 The methodology used followed that outlined in the Brief (Thomas 2017) and detailed in the Written Scheme of Investigation (Collie & Connor 2017).
- 2.4.2 The excavation area coincided with the footprint of the proposed development area, the location of the development footprint had originally been proposed slightly south of its final position and as such a large ditch identified by evaluation was only partially exposed.
- 2.4.3 The stripping of topsoil, subsoil and made-up ground was executed using a 6-tonne 360 mechanical excavator with a toothless bucket and a small dumper truck under supervision of a qualified and experienced archaeologist. The area was machined in 0.10m thick spits to the top of archaeological deposits. Prior to stripping, the excavation area was scanned with a CAT scanner and metal detector.
- 2.4.4 All archaeological features were excavated by hand. Recording was completed using pro-forma context sheets, and sections were drawn at an appropriate scale (1:10 or 1:20) and tied into OS National Datum. Each feature was photographed at least once with a chalk board and without, and further site photos were taken as part of photogrammetric recording. The site plan was achieved using a survey-grade differential GPS and tied into the OS National Grid.
- 2.4.5 All finds were bagged, labelled and retained for inspection. Bulk samples were taken on site for assessment of environmental remains and separate incremental bulk samples were taken for mollusc identification. The excavation area and arising spoil were regularly scanned with a metal detector.
- 2.4.6 Site visits were organised for school staff and pupils throughout the excavation under supervision of the site supervisor.
- 2.4.7 The weather conditions were mostly sunny and dry.

### 3 RESULTS

#### 3.1 Introduction

- 3.1.1 The results of the excavation are presented below and include a brief stratigraphic description of archaeological features. A full account of all features with dimensions can be found in Appendix A. Finds specialist reports and spot dates are tabulated in Appendix B.
- 3.1.2 Archaeological features were mainly limited to the south-western half of the excavation area, and a few natural features (rooting and tree throws) were visible in the north-eastern half. All remains were grouped on the basis of their morphology and spot dating. There is evidence of activity dating to the Late Neolithic in the form of a single ditch from which approximately half (by sherd count) of the total pottery assemblage from the site was recovered. Two pits are tentatively dated as Roman but the majority of the features are almost certainly Late Saxon to early medieval in date. Features belonging to his period include rectangular post hole structures, pits and ditches.
- 3.1.3 The soil sequence was fairly uniform and archaeological features, where present, were easy to identify against the underlying natural geology. The natural geology of chalk was overlain by a mid yellowish brown sand subsoil (0.12-0.30m thick), which in turn was overlain by a light greyish brown chalky silt of modern backfill (0.30-0.35m) and a mid greyish brown silty sand topsoil (0.20-0.40m thick). This backfill was the result of intentional levelling when the school created playing fields.
- 3.1.4 No finds were retrieved from features unless stated otherwise. Any obviously modern metal finds from modern deposits and were not retained.

#### 3.2 Prehistoric

- 3.2.1 A small secondary flint flake retrieved from pit **146** is of a broad Mesolithic or Neolithic date and provides evidence for earlier prehistoric activity in the area, although it is residual to this site.
- 3.2.2 A shallow ditch (**98, 115**) aligned approximately north to south was slightly curvilinear along the south-eastern side of excavation area. The gully had gradually sloping sides and a concave base, around 0.65m wide and 0.20m deep, and terminated in a shallow rounded terminus (**98**) at its north end. It was truncated by ditches **100/113 and 107/105/171**. These later ditches have been assigned to an early medieval phase but it is worth noting that only two sherds of pottery (dated 840-1150) were recovered from the later ditches. Ditch terminus **98** was filled with a mid brownish grey sandy silt (99) from which 27 sherds (118g) of Grooved Ware pottery was recovered. This represents over half of the total pottery assemblage from the site by sherd count and approximately 37% by weight. The position of the pottery at the terminus of the ditch possibly indicates a deliberate deposit, however, all of the pottery is extremely abraded and is more likely to be residual, perhaps incorporated here from an earlier feature that is no longer extant. A section through the remainder of the ditch (**115**) showed that it was filled with a similar mid brownish grey sandy silt (116) but no further finds were recovered.

#### 3.3 Roman (1<sup>st</sup> to 4<sup>th</sup> century)

- 3.3.1 Two possible Roman features were observed to the north-east of excavation on the edge of archaeological activity. Pit **129** was sub-circular in plan with steep sides and a

concave base, measuring 0.60m in diameter and 0.15m deep. It contained a dark brownish grey sandy silt, and a fragment of mid 2<sup>nd</sup>- 4<sup>th</sup> century mortaria was retrieved from it. Pit **111** was sub-circular in plan with gently sloping sides and a concave base, approximately 0.60m in diameter and 0.08m deep. Its fill (112) was a mid greyish brown silt and contained a fragment of mid 1<sup>st</sup> - 4<sup>th</sup> century Sandy Greyware. It was truncated by gully **109**. Both features were very shallow and the pottery sherds were very small and abraded suggesting they were residual and could not necessarily date the features.

### **3.4 Late Saxon to Early Medieval (Mid 11<sup>th</sup> to mid 12<sup>th</sup> century)**

The majority of the features probably belong to this period. They comprise two adjacent rectangular post-built structures (Building 1 and Building 2), a series of shallow ditches possibly representing a trackway and a

#### ***Building 1***

- 3.4.1 Building 1 is situated in the southern corner of the site and extends beyond the edge of excavation. The structure is rectangular in shape and consists of a series of post holes (**76, 78, 125, 127, 131, 133, 135, 138, 140, 142, 154, 157, 159, 161, 163**). The post holes did not produce any dating evidence and are grouped together based on their morphology. The post holes were sub-circular in plan with steep sides and an irregular to concave base. They measured around 0.19m to 0.36m in diameter, with depth from 0.05m to 0.3m. The fills of these post holes had similar composition; a friable dark greyish brown silty sand with small fragments of natural flint and chalk. The post holes situated to the north (**154, 157, 159, 161, 163**) had a greater overall depth (0.08m - 0.3m) than the post holes (**76, 125, 127, 131, 133, 135**) on the south side (0.05m - 0.1m). A trackway (group 3) truncated the building.

#### ***Building 2***

- 3.4.2 Building 2 was rectangular in plan defined by a series of post holes (**38, 40, 42, 44, 54, 56, 58, 60, 62, 64, 66, 68, 74, 94, 96, 102, 144, 165, 167, 173, 175, 177, 179**) and was located immediately to the north-west of building 1. Except for a few flecks of charcoal in post holes **44** and **62**, no finds were retrieved from these post holes. Post holes **175** and **177** contained possible remains of post pipes. The postholes were sub-circular in plan with steep sides, a concave base, and contained a light greyish brown silty sand with small fragments of chalk and flint. They varied from 0.16m to 0.37m in diameter, and were 0.05m to 0.34m deep. Similar to building 1, the northern post holes were on average greater in depth (0.16m to 0.34m) than the southern ones (0.05m to 0.11m). The natural slope of the site explains the difference in depth between northern and southern sides of buildings 1 and 2, and can be the reason for the lack of post holes in the south-west and south-east corners of building 2.

#### ***Well 34***

- 3.4.3 Well **34** was located in the south-western corner of the excavation area and probably cut ditch **187**. The well was sub-circular in plan, around 2m in diameter, with vertical or slightly undercutting sides. The base is unknown as the well was only excavated to the depth of 1.12m (the base of the proposed development). The full depth of the well (2.18m) was augured. The well contained at least one fill (192) which was a mid greyish brown clayey sand with chalk fragments. Pottery fragments dating to late Saxon-early medieval period and fragments of cattle teeth were retrieved from the fill as well as a fragment of Iron Age pot which is likely to be residual. The upper fills of the well were the same as that of the ditch **34** resulting in limited confidence in their relationship.

### **Large post holes**

- 3.4.4 North-east of the buildings and trackway a group of four post holes (**90, 185, 188, 190**) formed a sub-rectangular structure. The post holes were sub-circular in plan with steep sides and irregular to concave bases, measuring 0.40m – 0.55m in diameter and 0.07m – 0.20m in depth. They contained a mid greyish brown sandy silt fill and produced no finds.

### **Pits**

- 3.4.5 In the middle of the excavation were two substantial pits (**86** and **146**) which exhibited evidence that burning had been carried out near the site. Pit **86** was sub-circular in plan with steep to vertical sides and a flat base, 1.1m in diameter and 0.68m deep. Its fill (87) was a dark greyish black silt with lenses of whitish chalk and orangey brown clay. It is likely that the pit was gradually backfilled over time. Frog bones were retrieved from its fill. Pit **146** was also sub-circular in plan with undercutting sides and a flat base, 1.30m in diameter and 0.98m deep. It contained seven distinct fills of different deposition events. The basal fill (147) was a mid greyish brown silty clay, 0.08m thick. It was overlain by a black deposit of silt (148), 0.18m thick. This was followed by fill 149 which was a mid greyish brown sandy clay, 0.20m thick, and in turn overlain by another layer of black silt (150), 0.20m thick. The sequence of sandy clay and silt repeated once more (151 and 152) until it was sealed off by the final fill of the pit (153) which was mid greyish brown sandy, 0.40m thick and produced a soindle whorl of 9<sup>th</sup> to 10<sup>th</sup> century date. Pit **146** was truncated by gully **171**.

Pit **146** (150, 153) produced a large quantity of baked clay most of which was undiagnostic although sufficient pieces with structural characteristics were present to suggest that the assemblage had derived directly from a nearby structure such as a hearth (appendix 00). The baked clay was found in conjunction with other burnt materials including animal bones, a flint cobble and possibly burnt peat and ash. Samples (Appendix 00) from both pits (fills 150 and 153 from pit **146** and fill 87 from pit **86**) produced evidence for processed cereals (oats, barley, wheat and rye), peas, possibly lentils, turnips and cabbages, evidence for hay and peat was also found. The peat may have been used as fuel.

### **Trackway**

- 3.4.6 The trackway was situated parallel south-western side of excavation across buildings 1 and 2. The trackway is defined by several shallow wheel ruts (**52, 72, 80, 82, 84**) orientated north-west to south-east and a parallel drainage gully (**24, 70**) situated to the north-east. No finds except cattle molar and a small fragment of undatable Coarse Sandy Ware were retrieved from the trackway. The average width of the wheel ruts was 0.32m – 0.53m, with depth from 0.02m to 0.1m. The ruts had gently sloping sides, a relatively flat base and were filled with a mid greyish brown chalky silt with small fragments of chalk. The drainage gully was linear in plan with steep sides and a flat base, measuring 0.45m wide and 0.1m deep. It contained a dark greyish brown sandy silt fill. The average width of the trackway measured across the wheel ruts to the drainage gully is c.3m.
- 3.4.7 A shallow gully (**32, 171, 105, 109, 100, 113**) oriented north to south before turning a corner and running east to west was situated in the middle of the excavation area, parallel with and approximately six metres north of the trackway. It truncated an earlier ditch (**98**) and was possibly segmented (**171**) though it is more likely the gully was truncated by ploughing rather than deliberately terminating. It had gently sloping sides and a concave base, 0.40-0.60m wide and 0.12-0.20m deep. Its fill was a mid brownish



grey silty sand with a few fragments of animal bone and late Saxon-early medieval pottery retrieved from it. It appeared to be avoiding or respecting a structure that has not survived in the archaeological record.

### **Ditch 187**

- 3.4.8 A large boundary ditch (**6, 187**) orientated north-north-west to south-south-east was observed in evaluation trench 4 (Birnie 2017) and the south-western corner of the excavation. The ditch was linear in plan measuring around 2.8m wide and 0.7m deep. It had steep sides and a concave base. The ditch had been filled during several episodes of silting as well as slumping of chalk (5, 193) from a possible bank of which no other evidence had survived. The ditch produced a very small fragment of late Saxon-early medieval ware and animal bones. The ditch truncated well **34**, but the upper fills of both features were very similar resulting in limited confidence in their relationship.

### **Other features**

- 3.4.9 A few post holes (**7, 26, 28, 30, 169**) were found on site that could not be attributed to a particular structure. The post holes were sub-circular in plan with steep sides and concave to irregular bases, measuring in diameter 0.13m – 0.40m and 0.12-0.20m in depth. They contained a mid greyish brown sandy silt (8, 27, 29, 31, 170) and produced no finds.
- 3.4.10 A small chalk extraction pit (**117**) was partially visible along the south-western side of excavation. It was irregular in plan and profile with undercutting to gradually sloping sides and a stepped base. It was about 2.70m wide and 0.70m deep. It was gradually filled over a period of time with chalk and clayey sand (118-122); the final fill produced early Saxon-late medieval pottery fragments.
- 3.4.11 Pits **48, 88** and **92** were spread throughout the site. Pit **48** was found on the same alignment as the trackway and building 2 though no stratigraphic relationship can be determined and the pit produced no finds. It was sub-circular in plan with gradually sloping sides and a concave base, 1.35m in diameter and 0.38m deep. It contained a dark greyish brown sandy silt (49). Pit **92** was just to the north of building 2 and produced fragments of mid 11<sup>th</sup> – mid 12<sup>th</sup> century pot. It was sub-circular in plan with gradually sloping sides and a concave base, 0.40m in diameter and 0.13m deep. It had a dark brownish grey clayey sand fill (49). Pit **88** was to the north of other features and produced no finds. It was sub-circular in plan with steep sides and a concave base, 0.7m in diameter and 0.38m deep. Its fill was a mid greyish brown clayey sand (89).

## **3.5 Modern**

- 3.5.1 Two modern features were found on the site: a stake hole **123**, 0.22m in diameter and 0.44m deep, near the south-eastern corner of the site and a small sub-circular pit **46** near the western edge of excavation. The post hole contained a dark blackish brown sandy silt (124) with flecks of charcoal, modern nails and wood fragments. The pit contained 20<sup>th</sup> century waste including broken glass and was not excavated.

## **3.6 Finds Summary**

- 3.6.1 The pottery assemblage (53 sherds, 0.316kg) comprised two main period mid 11<sup>th</sup> – mid 12<sup>th</sup> century and late Neolithic Grooved Ware, a few sherds of Late Iron Age and Roman pottery were also found. The Grooved Ware was all recovered from fill 99 of ditch **98** which suggests it is likely to be residual. The material was all very small and abraded suggesting high levels of residuality. The late Saxon-early medieval pottery is contemporary with the rural settlement to the south-east of the current site (Bradley-

Lovekin 2008). A single undiagnostic fragment (12g) of ceramic building material (CBM) was in ditch **187**.

- 3.6.2 An assemblage of baked clay (51 fragments, 1460g) collected from pit **146** is indicative of a nearby structure, perhaps a hearth or wall, it contained well preserved rod impressions. A single ceramic spindle whorl (9th-10th century) from pit **146** (context 153) relates to the production of cloth, probably on a domestic scale. A single worked flint and a fragment of unworked burnt flint were recovered also from pit **146**. The worked piece is a small secondary flake suggestive of a broad Mesolithic or Neolithic date and provides evidence for earlier prehistoric activity in the area.

### **3.7 Environmental Summary**

- 3.7.1 The plant remains preserved from this site represent the burning and disposal of food remains mixed with other vegetation. It is likely that vegetables and herbs would have been grown in small plots close to dwellings whereas the grain is likely to have been brought into the site fully processed. The crop and dryland weed assemblages are similar to those from contemporary deposits at Hall Farm (Bradley-Lovekin 2008). The site has additional evidence of the exploitation of fenland resources, possibly in the form of peat which would have been brought into the site, probably from one of the Fens that lie less than a kilometre to the north and east of Fulbourn village (*cf.* map of Fulbourn c. 1800 in Wareham and Wright 2002).
- 3.7.2 A small assemblage of animal bone (41 fragments, 0.915kg) consisted of cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*), pig (*Sus scrofa*) and frog (*Rana temporaria*). These types of species are typical of rural Saxon settlement sites and are similar to nearby sites of Hall Farm (Holmes 2008) and the Chantry (Germany 2007). The assemblage exhibited some evidence of burning as well as carnivore gnawing which highlights the presence of dogs on site even though no physical evidence of dog remains was recovered.

## 4 DISCUSSION AND CONCLUSIONS

### 4.1 Prehistoric

4.1.1 The presence of Late Neolithic Grooved Ware pottery found in one shallow ditch is likely to be residual. The pottery itself is small and abraded suggesting it was not found in its primary place of deposition, although it presumably had not travelled far. One possibility is that an earlier feature, perhaps a tree-throw or shallow pit had been disturbed by the later ditch. One worked flint, also found as residual in a later feature is limited evidence for earlier activity in the area.

### 4.2 Roman

4.2.1 The HER (HER MCB20383) records a possible Roman settlement at Fulbourn Primary School based on artefacts recovered from the school site during building works in 1987. Evaluation at the school (Birney 2017) and the recent excavation have found only very limited evidence for Roman activity in the school grounds. Two small shallow pits may be Roman based on small abraded fragments of pottery, but these could easily be residual and evidence only that the land had been cultivated in the Roman period (manuring). This lack of finds during the recent investigations brings into question the accuracy of the HER entry. There were three schools in Fulbourn and it is possible that the location has been erroneously ascribed to St Vigor's primary school. Excavations at the Chantry (Germany 2007) to the north of the site coupled with crop marks mapped in the HER suggest that the focus of any Roman settlement was probably further north of the present excavations.

### 4.3 Late Saxon to early medieval

4.3.1 Two post hole structures (Buildings 1 and 2) are clear evidence for settlement activity on the site, although their precise date has not been established. No direct dating evidence was found associated with the buildings though are likely to be late Saxon-early medieval based on their morphology, the dating of pottery found in nearby features and the date of similar post hole structures on nearby Hall Farm. These structures were rectangular buildings, about 5m wide and 7.7m long, similar to and on the same alignment as the post hole structures at Hall Farm (Bradley-Lovekin 2008, Buildings 1 and 3). The Hall Farm buildings have also produced little pottery but enough to be broadly dated to the 11<sup>th</sup>-12<sup>th</sup> century. The primary school buildings were subtly different in their construction; Building 1 was more regular in plan, its post holes evenly spaced and forming strong straight walls on three sides (the fourth side beyond the scope of the investigation), Building 2 in contrast was broadly rectangular but its post holes were spaced at irregular intervals, often in clusters and its walls were not complete straight. The two buildings appeared to respect one another and were probably in use at the same time but it is likely that one was built before the other.

4.3.2 Two circular steep-sided pits to the north of the post hole buildings (**86** and **146**) were filled with residues of burnt peat, various grains, legumes and vegetables such as cabbages and turnips. A small number of burnt animal bones, mostly relating to cranial elements, were also found indicating consumption of sheep, cattle and pig. Small sherds of pottery were present along with a spindle whorl of possibly 9<sup>th</sup> or 19<sup>th</sup> century date in the final fill of **146**. Even though no remains of *in-situ* burning have been discovered on the site, it is likely that this activity took place nearby within a domestic context. The peat was probably brought in from one of the nearby Fens that abut the village to the north and east, probably as fuel. Hay may have been used as bedding and/or animal feed. While the legumes and vegetables are likely to have been grown in

small plots close to dwellings, with the hay and processed cereals brought in from nearby fields. Pit **146** also contained an assemblage of baked clay that had clearly derived from a structure, possibly a wall, but given the rest of the assemblage more likely an oven or hearth associated with cooking. Whilst the relationship of the pits with the two buildings is not certain, it would seem most likely that they are associated with each other.

- 4.3.3 A third pit, probably a well (**34**) located to the south of the buildings may also be associated with them, two wells of a similar date were found at Hall Farm (Bradley-Lovekin 2008). Water is an important resource, in constant demand, heavy and awkward to move great distances manually so the presence of wells is further evidence for nearby habitation.
- 4.3.4 A set of four large post holes (**90, 185, 188, 190**) formed a sub-rectangular structure that could have been a small shed or wind-break associated with the houses and the pits.
- 4.3.5 A series of very shallow segmented gullies ran north-east to south-west across the excavation area and directly through the footprint of the two post hole buildings. Unfortunately it was not possible to determine which was earlier (they were clearly not contemporary). They have been interpreted as being later and that they indicate a trackway. The gullies produced no dating evidence during this excavation but a series of similar features on the same alignment and interpreted as beam slots on the Hall Farm excavations to the east were dated to late Saxon-early medieval period. The gullies on the St Vigor's school site are unlikely to have been structural as they were very shallow with gently sloping sides and do not form closed structures, although they are parallel to each other, they are more suggestive of wheel ruts. A projection of their alignment (Fig. 4) shows that they appear to form a continuation of Hall Farm Phase 3c.i ditches dated as mid 11<sup>th</sup> to 12<sup>th</sup> century (Bradley-Lovekin 2008, fig. 4).
- 4.3.6 Approximately six metres further north, another shallow ditch ran on the same alignment for approximately 10 metres before swinging slightly north and then turning sharply to the south as though avoiding or respecting a structure that has left no trace in the archaeological record. Any such structure would have also been located close to the four post structure and pit (**146**) that contained evidence for a nearby oven or hearth.

#### **4.4 Boundary ditch**

- 4.4.1 A large boundary ditch (**6/187**) discovered during evaluation and investigated further during excavation is difficult to date precisely, only one sherd of early medieval pottery was recovered from it, along with another undated piece. The ditch was aligned north-north-west to south-south-east which differs to the alignment of the trackway and buildings, all orientated north-west to south-east. A much better dated well **34** (mid 11<sup>th</sup>-mid 12<sup>th</sup> century) was truncated by the boundary ditch which suggests that the ditch was later possibly after the mid 12<sup>th</sup> century when the focus of activity had moved away from this site (Bradley-Lovekin 2008).

#### **4.5 Significance**

- 4.5.1 The excavation at Fulbourn St Vigor's Primary School has been able to confirm the presence of prehistoric and Roman activity though its focus is likely to be elsewhere.
- 4.5.2 The results of the excavation have shown that Saxo-Norman settlement may have been quite extensive in Fulbourn and that further evidence may exist in gardens and open areas behind the modern settlement. The presence of domestic buildings and a

possible trackway in areas away from the modern road pattern show that the village must have been subject to changes in layout after the 12<sup>th</sup> century although some elements of alignment have remained.

- 4.5.3 Overall, this site has produced significant results despite its small size and will add to the growing corpus of knowledge of the area.

APPENDIX A. CONTEXT DESCRIPTIONS AND SPOT DATES

Group	Cut	Context	Category	Width (m)	Depth (m)	Feature Type	Description	Orientation	Finds
		1	Layer		0.25	Topsoil	Loose, mid brown, silty sand with occasional small stones.		
		2	Layer		0.38	Subsoil	Soft, light greyish brown, silty sand with rare pieces of chalk and small stones.		
		3	Natural			Natural	Very compact, white chalk.		
		4	Layer	1.8	0.38	Consolidation	Loose, very mixed, silty sand with chalk pieces and brick rubble.		
		5	Layer	3.2	0.37	Consolidation	Very compact, white with some yellow, rare silt with chalk.		
		10	Layer	2.6	0.32	Tertiary	Compact, light to mid greyish brown, silt with occasional charcoal flecks and small chalk fragments.		
		20	Layer		0.15	Topsoil	Loose, light greyish brown, silty sand with rare small stones.		
		21	Layer		0.35	Backfill/ Consolidation	Compact but soft, very light greyish brown, chalky silt with large amounts of chalk, stones and rare pieces of modern brick pipe.		Y
		22	Layer		0.38	Subsoil	Soft, light greyish brown, silty sand with rare pieces of chalk and small stones.		
		23	Natural			Natural	Very compact, white chalk.		
1	76	76	Cut	0.2	0.05	Post hole	Sub-Circular, steep sides, irregular base.		
1	76	77	Fill	0.2	0.05	Post hole	Compact but soft, light greyish brown, silty sand with rare small chalk		
1	78	78	Cut	0.24	0.05	Post hole	Sub-Circular, gentle sides, concave base.		
1	78	79	Fill	0.24	0.05	Post hole	Compact but soft, light greyish brown, silty sand with rare small		
1	125	125	Cut	0.24	0.06	Post hole	Sub-Circular, steep sides, irregular base.		
1	125	126	Fill	0.24	0.06	Post hole	Firm, mid grey sandy silt with rare small flint <5%.		
1	127	127	Cut	0.28	0.13	Post hole	Sub-Circular, steep sides, irregular base.		
1	127	128	Fill	0.28	0.13	Post hole	Firm, mid grey sandy silt with rare small flint <5%.		
1	131	131	Cut	0.3	0.1	Post hole	Sub-Circular, steep sides, irregular base.		
1	131	132	Fill	0.3	0.1	Post hole	Firm, dark greyish brown, silty sand with rare small flint.		
1	133	133	Cut	0.36	0.1	Post hole	Sub-Circular, steep sides, irregular base.		
1	133	134	Fill	0.36	0.1	Post hole	Firm, dark greyish brown, silty sand with rare small flint.		
1	135	135	Cut	0.32	0.1	Post hole	Sub-Circular, steep sides, irregular base.		
1	135	136	Fill	0.32	0.1	Post hole	Firm, dark greyish brown, silty sand with rare small flint.		
1	138	138	Cut	0.11	0.2	Post hole	Circular (100%), steep sides, concave base.		
1	138	139	Fill	0.11	0.1	Post hole	Firm, dark greyish brown, silty sand with rare small flints.		

Group	Cut	Context	Category	Width (m)	Depth (m)	Feature Type	Description	Orientation	Finds
1	140	140	Cut	0.27	0.09	Post hole	Sub-Circular, steep sides, irregular base		
1	140	141	Fill	0.27	0.09	Post hole	Firm, dark greyish brown, silty sand with rare small flint.		
1	142	142	Cut	0.3	0.11	Post hole	Sub-Circular, steep sides, irregular base		
1	142	143	Fill	0.3	0.11	Post hole	Firm, dark greyish brown, silty sand with rare small flint.		
1	154	154	Cut	0.19	0.11	Post hole	Sub-Circular, steep sides, irregular base		
1	154	156	Fill	0.19	0.11	Post hole	Firm, dark greyish brown, silty sand with rare small flint.		
1	157	157	Cut	0.32	0.19	Post hole	Sub-Circular, steep sides, irregular base		
1	157	158	Fill	0.32	0.19	Post hole	Firm dark greyish brown, silty sand with rare small flints.		Y
1	159	159	Cut	0.26	0.09	Post hole	Sub-Circular, steep sides, irregular base		
1	159	160	Fill	0.26	0.09	Post hole	Firm, dark greyish brown, silty sand with rare small flint.		
1	161	161	Cut	0.22	0.08	Post hole	Sub-Circular, steep sides, irregular base		
1	161	162	Fill	0.22	0.08	Post hole	Firm, dark greyish brown, silty sand with rare small flint.		
1	163	163	Cut	0.3	0.22	Post hole	Sub-Circular, steep to vertical sides, concave base.		
1	163	164	Fill	0.3	0.22	Post hole	Firm, dark greyish brown, silty sand with rare small flint.		
1	183	183	Cut	0.27	0.25	Post hole	Sub-Circular, steep sides, irregular base.		
1	183	184	Fill	0.27	0.25	Post hole	Firm, mid greyish brown, sandy silt with rare rounded flint <2%.		
2	38	38	Cut	0.28	0.16	Pit/ Posthole	Circular, steep sides, near flat base.		
2	38	39	Fill	0.28	0.16	Pit/ Posthole	Soft, light greyish brown, silty sand with rare small chalk/stone.		
2	40	40	Cut	0.22	0.06	Post hole	Sub-Circular, steep sides, slightly concave base.		
2	40	41	Fill	0.22	0.06	Post hole	Soft, light greyish brown, silty sand with rare small chalk/ stone		
2	42	42	Cut	0.37	0.14	Pit	Sub-Circular, steep breaking into gradual sloping sides, concave base.	NW-SE	
2	42	43	Fill	0.37	0.14	Pit	Soft, light greyish brown, silty sand with rare small pieces of chalk and stone.		
2	44	44	Cut	0.28	0.16	Post hole	Sub-Circular, steep NW side and undercut on SE side, flat base.		
2	44	45	Fill	0.28	0.16	Post hole	Soft, light greyish brown, silty sand with rare small chalk/stone and flecks of charcoal.		
2	50	50	Cut	0.37	0.06	Post hole	Circular, steep sides, concave base.		
2	50	51	Fill	0.37	0.06	Post hole	Compact, mid grey, silt.		
2	54	54	Cut	0.25	0.11	Post hole	Sub-Circular, vertical NW side and steep SE side, irregular base.		
2	54	55	Fill	0.25	0.11	Post hole	Soft, light greyish brown, silty sand with rare small chalk		

Group	Cut	Context	Category	Width (m)	Depth (m)	Feature Type	Description	Orientation	Finds
2	56	56	Cut	0.28	0.07	Post hole	Sub-Circular, steep sides, irregular base.		
2	56	57	Fill	0.28	0.07	Post hole	Soft, light greyish brown, silty sand with rare small chalk		
2	58	58	Cut	0.17	0.06	Post hole	Sub-Circular, steep sides, concave base.		
2	58	59	Fill	0.17	0.06	Post hole	Soft, light greyish brown, silty sand with rare small chalk		
2	60	60	Cut	0.27	0.05	Post hole	Sub-Circular, gradual NW side, steep SE side, irregular base.		
2	60	61	Fill	0.27	0.05	Post hole	Soft, light greyish brown, silty sand with rare small chalk		
2	62	62	Cut	0.16	0.08	Post hole	Sub-Circular, steep sides, concave base.		
2	62	63	Fill	0.16	0.08	Post hole	Soft, light greyish brown, silty sand with rare small chalk and flecks of charcoal.		
2	64	64	Cut	0.28	0.06	Post hole	Sub-Circular, steep W side and gradual E side, irregular base.		
2	64	65	Fill	0.28	0.06	Post hole	Compact but soft, light greyish brown, silty sand with rare small chalk		
2	66	66	Cut	0.22	0.07	Post hole	Sub-Circular, steep SW side and vertical NE side, irregular base.		
2	66	67	Fill	0.22	0.07	Post hole	Compact but soft, light greyish brown, silty sand with rare small chalk		
2	68	68	Cut	0.24	0.06	Post hole	Sub-Circular, gentle sides, concave base.		
2	68	69	Fill	0.24	0.06	Post hole	Compact but soft, light greyish brown, silty sand with rare small chalk		
2	74	74	Cut	0.2	0.05	Post hole	Circular, gentle sides, concave base.		
2	74	75	Fill	0.2	0.05	Post hole	Compact but soft, light greyish brown, silty sand with rare small chalk		
2	94	94	Cut	0.28	0.29	Post hole	Circular, steep nearly vertical sides, concave base.		
2	94	95	Fill	0.28	0.29	Post hole	Friable, mid to dark greyish brown, clayey sand with rare flint.		
2	96	96	Cut	0.36	0.20	Post hole	Circular, steep sides, concave to flat base.		
2	96	97	Fill	0.36	0.20	Post hole	Friable, mid to dark greyish brown, clayey sand.		
2	102	102	Cut	0.26	0.23	Pit	Irregular, sharp NW side and more gentle SE side, concave base.		
2	102	103	Fill	0.26	0.23	Pit	Friable, mid to dark brownish grey, clayey sand with charcoal		
2	144	144	Cut	0.23	0.12	Post hole	Sub-Circular, steep sides, irregular base.		
2	144	145	Fill	0.23	0.12	Post hole	Sub-Circular, steep sides, irregular base.		
2	165	165	Cut	0.28	0.2	Post hole	Sub-Circular, steep sides, irregular base.		
2	165	166	Fill	0.28	0.2	Post hole	Firm, mid greyish brown, sandy silt with rare rounded flint <2%.		
2	167	167	Cut	0.34	0.28	Post hole	Sub-Circular, steep sides, irregular base.		
2	167	168	Fill	0.34	0.28	Post hole	Firm, mid greyish brown, sandy silt with rare rounded flint <2%.		



Group	Cut	Context	Category	Width (m)	Depth (m)	Feature Type	Description	Orientation	Finds
2	173	173	Cut	0.3	0.28	Post hole	Sub-Circular, steep sides, irregular base.		
2	173	174	Fill	0.3	0.28	Post hole	Firm, mid greyish brown, sandy silt with rare rounded flint <2%.		
2	175	175	Cut	0.33	0.24	Post hole	Sub-Circular, steep sides, convex base.		
2	175	176	Fill	0.3	0.17	Post hole	Firm, mid greyish brown, sandy silt with rare rounded flint <2%.		
2	175	181	Fill	0.33	0.3	Post hole	Firm, dark greyish brown, sandy silt.		
2	177	177	Cut	0.29	0.31	Post hole	Sub-Circular, steep sides, irregular base.		
2	177	178	Fill	0.2	0.13	Post hole	Firm, mid greyish brown, sandy silt.		
2	177	182	Fill	0.29	0.18	Post hole	Firm, mid greyish brown, clayey sand.		
2	179	179	Cut	0.23	0.34	Post hole	Sub-Circular, steep sides, irregular base.		
2	179	180	Fill	0.23	0.34	Post hole	Firm, light greyish brown, sandy silt.		
3	24	24	Cut	0.43	0.1	Gully	Linear, steep sides, mostly flat base.	N-S	
3	24	25	Fill	0.43	0.1	Gully	Compact but soft, dark greyish brown, silt with infrequent flint.		Y
3	52	52	Cut	0.53	0.1	Gully	Linear, very shallow to moderate sides, flattish base.	NW-SE	
3	52	53	Fill	0.55	0.1	Gully	Compact, mid grey, silt.		
3	70	70	Cut	0.45	0.1	Gully	Linear, steep sides, flat base.	NW-SE	
3	70	71	Fill	0.45	0.1	Gully	Compact, mid greyish brown, silt with occasional small stones.		
3	72	72	Cut	0.37	0.05	Trackway/ Wheel Rut	Linear, very shallow sides, flattish base.	NW-SE	
3	72	73	Fill	0.37	0.05	Trackway/ Wheel Rut	Compact, mid grey chalky silt with some chalk.		
3	80	80	Cut	0.32	0.05	Trackway/ Wheel Rut	Linear, very gentle sloping sides, flat base.	NE-SW	
3	80	81	Fill	0.32	0.05	Trackway/ Wheel Rut	Compact but soft, light greyish brown, chalky silty sand with rare small stones.		
3	82	82	Cut	0.32	0.02	Trackway/ Wheel Rut	Linear, very gentle sloping sides, flat base.	NE-SW	
3	82	83	Fill	0.32	0.02	Trackway/ Wheel Rut	Compact but soft, light greyish brown, chalky silty sand with rare small stones.		
3	84	84	Cut	0.38	0.02	Trackway	Linear, very shallow and unclear sides, flattish base.	NW-SE	
3	84	85	Fill	0.38	0.02	Trackway	Compact, mid grey, chalky silt with chalk patches.		

Group	Cut	Context	Category	Width (m)	Depth (m)	Feature Type	Description	Orientation	Finds
4	34	34	Cut	1.1	2.18	Well	Sub-Circular (partly under bulk), very steep/undercutting sides, not based.		
4	34	192	Fill		-	Well	Friable, mid greyish brown, clayey sand with moderate chalk fragments.		Y
5	6	6	Cut	3.3	0.5	Ditch	Linear, moderately steep sides, concave base.	NW-SE	
5	6	9	Fill	2.1	0.2	Ditch	Moderately loose, light to mid grey silty clay with some chalk and charcoal.		
5	6	11	Fill	1.65	0.21	Ditch	Firm, very light whitish grey, silty clayey chalk.		
5	6	12	Fill	1.08	0.31	Ditch	Loose, light grey, silty clay with some chalk.		Y
5	6	13	Fill	1.1	0.19	Ditch	Firm, mid to light greyish brown, silty clay with chalk.		
5	187	35	Fill	0.6	0.22	Ditch	Quite compact yet soft, mid brownish grey, silt with chalk and small stones.		Y
5	187	36	Fill	0.6	0.15	Ditch	Compact, dark greyish black, silt with frequent charcoal and small stones.		Y
5	187	37	Fill	1.1	0.7	Ditch	Compact, dark brownish grey, silt with bone, pottery and small stones.		Y
5	187	187	Cut	2.8	0.7	Ditch	Linear, gradual to steep sides, concave base.	NW-SE	
5	187	193	Fill	/	0.3	Ditch	Firm, light yellowish brown, clayey sand with frequent chalk.		
6	90	90	Cut	0.4	0.07	Pit/ Posthole?	Circular, gradual sides, flat base.		
6	90	91	Fill	0.4	0.07	Pit/ Posthole	Friable, dark greyish brown, clayey sand with frequent flecks of charcoal.		
6	185	185	Cut	0.55	0.2	Post hole	Sub-Circular, steep sides, irregular base.		
6	185	186	Fill	0.55	0.2	Post hole	Firm, mid greyish brown, sandy silt.		
6	188	188	Cut	0.39	0.17	Post hole	Sub-Circular, steep sides, concave base.		
6	188	189	Fill	0.39	0.17	Post hole	Firm, dark greyish brown, sandy silt.		
6	190	190	Cut	0.52	0.16	Post hole	Sub-Circular, steep sides, irregular base.		
6	190	191	Fill	0.52	0.16	Post hole	Firm, mid greyish brown, sandy silt with rare flint <2%.		
7	86	86	Cut	1.1	0.68	Pit	Sub-Circular, steep to undercut sides, slightly rounded base.		
7	86	87	Fill	1.1	0.68	Pit	Soft, patchy fill of grey with parts of white orange-brown and black, silt with some bone, charcoal and occasional stones.		Y
7	146	146	Cut	1.3	0.98	Pit	Sub-Circular, undercut bell shaped sides, flat base.	N-S	
7	146	147	Fill	1.48	0.08	Pit	Soft, mid greyish brown, soft clay with rare large stone, fired clay (rare).		Y
7	146	148	Fill	1.5	0.18	Pit	Very soft, black, charcoal with abundant fired clay and rare large stones.		Y
7	146	149	Fill	1.36	0.2	Pit	Firm, mid greyish brown, sandy clay with abundant fired and unfired clay deposits, large burnt stones and rare chalk.		Y
7	146	150	Fill	1.38	0.2	Pit	Very soft, black, charcoal with large amounts of fired and unfired clay		Y

Group	Cut	Context	Category	Width (m)	Depth (m)	Feature Type	Description	Orientation	Findings
							deposits, rare burnt stone and chalk.		
7	146	151	Fill	1.32	0.15	Pit	Firm, mid greyish brown, sandy clay with abundant fired and unfired clay, rare stone (some burnt) and chalk.		Y
7	146	152	Fill	1.16	0.2	Pit	Very soft, black, charcoal with rare burnt stone, fired clay, bone and very rare pottery.		Y
7	146	153	Fill	1.3	0.4	Pit	Compact but soft, mid greyish brown, sandy clay with abundant fired and unfired clay deposits and moderate amounts of large stones.		Y
8	7	7	Cut	0.48	0.14	Post hole	Sub-circular, steep sides, flat base.		
8	7	8	Deposit	0.48	0.14	Post hole	Firm, light to mid greyish brown, silty sand with very occasional charcoal flecks.		
8	26	26	Cut	0.25	0.12	Post hole	Circular, steep sides, irregular base.		
8	26	27	Fill	0.25	0.12	Post hole	Compact but soft, light greyish brown, silty sand with rare small chalk		
8	28	28	Cut	0.13	0.2	Post hole	Sub-Circular, steep sides, concave base.		
8	28	29	Fill	0.13	0.2	Post hole	Compact but soft, light greyish brown, silty sand with rare small chalk		
8	30	30	Cut	0.17	0.2	Post hole	Sub-Circular, steep sides, concave base.		
8	30	31	Fill	0.17	0.2	Post hole	Compact but soft, light greyish brown, silty sand with rare small chalk		
8	32	32	Cut	0.38	0.12	Gully	Linear, very gently sloping sides, concave base.		
8	32	33	Fill	0.38	0.12	Gully	Compact but soft, light greyish brown, silty sand with rare small stones and chalk.		Y
8	46	46	Cut	0.54	0.06	Modern Pit	Circular		
8	46	47	Fill	0.54	0.06	Modern Pit	Loose, dark greyish brown, silty sand with fragments of glass, metal and pottery		Y
8	48	48	Cut	1.35	0.38	Pit	Sub-Circular, even moderate sides, concave base.	N-S	
8	48	49	Fill	1.35	0.38	Pit	Compact, dark greyish brown, sandy silt with small stones.		
8	88	88	Cut	0.7	0.38	Pit	Sub-Circular, vertical sides, flat base.		
8	88	89	Fill	0.7	0.38	Pit	Friable, mid greyish brown, clayey sand with occasional small stones.		
8	92	92	Cut	0.4	0.13	Small Pit	Sub-rectangular, gradual sides, concave base.	E-W	
8	92	93	Fill	0.4	0.13	Small Pit	Friable, mid to dark brownish grey, clayey sand with charcoal flecks and pottery.		Y
8	98	98	Cut	0.6	0.15	Ditch	Linear, moderate sides, rounded base.		

Group	Cut	Context	Category	Width (m)	Depth (m)	Feature Type	Description	Orientation	Finds
						terminus			
8	98	99	Fill	0.6	0.15	Ditch terminus	Quite hard, mid brownish grey, silt with small stones, pottery, bone and charcoal.		Y
8	100	100	Cut	0.63	0.14	Ditch	Linear, shallow and gentle sides, rounded base.	N-S	
8	100	101	Fill	0.63	0.14	Ditch	Quite compact, mid brownish grey, silt with some small stones.		
8	105	105	Cut	0.3	0.2	Ditch/ Gully	Sub-Circular to Linear, moderate sides, 'V' shaped base.	E-W	
8	105	106	Fill	0.3	0.2	Ditch/ Gully	Compact, mid brown with white and grey, chalky silt with occasional small stones.		
8	109	109	Cut	0.5	0.18	Gully/ Ditch Terminus	Linear, gentle sides, slightly rounded base.	N-S	
8	109	110	Fill	0.5	0.18	Gully/ Ditch Terminus	Compact, mid brownish grey, silt with small stones.		
8	111	111	Cut	0.6	0.08	Gully Terminus	Linear, gentle sides, gently rounded base.	N-S	
8	111	112	Fill	0.6	0.08	Gully Terminus	Compact, mid greyish brown, silt.		Y
8	113	113	Cut	0.6	0.26	Ditch/Gully	Linear, moderate sides, rounded base.	N-S	
8	113	114	Fill	0.6	0.26	Ditch/ Gully	Compact, mid greyish brown, silt with some stones, bone and pottery.		Y
8	115	115	Cut	0.7	0.2	Gully	Linear, gentle sides, rounded base.	N-S	
8	115	116	Fill	0.7	0.2	Gully	Compact, mid greyish brown, silt with some small stones.		
8	117	117	Cut	2.3	0.7	Pit	Irregular, steep to gradual sides with some undercutting, concave to flat base.		
8	117	118	Fill	/	0.16	Pit	Friable, light greyish brown, clayey sand with moderate chalk fragments.		
8	117	119	Fill	/	0.12	Pit	Firm, light brownish white, silty sandy chalk with frequent chalk fragments.		
8	117	120	Fill	/	0.16	Pit	Friable, mid greyish brown, clayey sand with moderate chalk fragments.		
8	117	121	Fill	/	0.18	Pit	Friable, light yellowish/ whitish brown, clayey sand with frequent chalk fragments.		
8	117	122	Fill	/	0.4	Pit	Friable, mid greyish brown, clayey sand with occasional flecks of charcoal and fragments of chalk.		Y
8	123	123	Cut	0.22	0.44	Post hole	Sub-Circular, steep sides, base unknown.		
8	123	124	Fill	0.22	0.44	Post hole	Firm, dark blackish brown, sandy silt with charcoal flecks at <15%.		

Group	Cut	Context	Category	Width (m)	Depth (m)	Feature Type	Description	Orientation	Finds
8	129	129	Cut	0.6	0.15	Pit	Sub-Circular, quite steep sides, concave base.		
8	129	130	Fill	0.6	0.15	Post hole	Soft, dark brownish grey, sandy silt with occasional small stones.		Y
8	169	169	Cut	0.17	0.15	Post hole	Sub-Circular, steep sides, irregular base.		
8	169	170	Fill	0.17	0.15	Post hole	Firm, mid greyish brown, sandy silt with rare rounded flint <2%.		
8	171	171	Cut	0.3	0.06	Gully Terminus?	Curvilinear, rounded terminus, gradual sides, slightly concave base.	E-W	
8	171	172	Fill	0.3	0.06	Gully Terminus?	Friable, mid greyish brown, clayey sand with occasional small stones and moderate charcoal flecks.		

APPENDIX B. FINDS REPORTS

**B.1 Later Neolithic pottery**

*By Nick Gilmour MA (cantab) MA ACIfA*

**Introduction**

- B.1.1 The excavation yielded 27 sherds of Later Neolithic pottery (118g) with a low mean sherd weight (MSW) of 4.4g. The pottery was recovered from a single context, fill 99 of ditch **98**.
- B.1.2 All of the pottery displays features characteristic of Grooved Ware ceramics, together with fabrics typically associated with this ceramic tradition in the region.
- B.1.3 The pottery is in moderate to poor condition. Most sherds are small and abraded, as reflected by the low MSW.

**Methodology**

- B.1.4 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 gram) 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 (Collared Urn, Deverel-Rimbury etc.)
- B.1.5 All pottery was subject to sherd size analysis. Sherds less than 4cm in diameter were classified as ‘small’ (25 sherds); sherds measuring 4-8cm were classified as ‘medium’ (two sherds), and sherds over 8cm in diameter classified as ‘large’ (none). The quantified data is presented on an Excel data sheet held with the site archive under stie code FULPRS17.

**Prehistoric pottery fabrics**

- B.1.6 G1: Moderate coarse grog (mainly <3mm in size). Clay matrix includes sand and rare flint.
- B.1.7 G2: Spare to moderate fine to medium grog (mainly <2mm in size). Clay matrix includes sand and rare flint.

Fabric	Fabric group	No. sherds	Weight (g)	% fabric (by wt.)	MNV
G1	Grog	4	51	43.2	1
G2	Grog	23	67	56.8	1
<b>TOTAL</b>	-	<b>27</b>	<b>118</b>	<b>100.0</b>	<b>2</b>

Table 1. Quantification of prehistoric pottery by fabric. MNV calculated as the total number of different rims and bases (nine rims, five bases).

### **Grooved Ware pottery**

- B.1.8 All of the pottery (27 sherds, 118g) examined within this report is Grooved Ware. The assemblage is characterised by sherds in soft grog tempered fabrics G1 and G2, which are not unusual within Grooved Ware from the south-east of Cambridgeshire.
- B.1.9 All of the pottery came from a single context (99) in ditch **98**. This is likely to derive from at least two vessels. These include five similar rim sherds (22g), of which three re-fit and a single fragment (34g) which appears to have been decorated with applied cordons.
- B.1.10 The rim sherds are all in fabric G2 and consist of a pointed rim. Three of these five rim sherds can be re-fitted and the other two are almost certainly from the same vessel. All of the sherds are small, however, they show the same decoration, consisting of four horizontal grooves immediately below the rim on the exterior of the vessel. Two further sherds (6g), also in fabric G2, have grooves incised on them and are likely from the same vessel as the rim sherds.
- B.1.11 The only other possibly decorated fragment was the largest sherd of pottery recovered (34g). This was in fabric G1 and is very abraded. There appear to be two cordons, meeting at a right angle, on the exterior of this sherd.

### **Discussion**

- B.1.12 The Grooved Ware was all recovered from fill 99 of ditch **98**. It is very unusual to find Grooved Ware deposited within a ditch, as a primary context. The Grooved Ware is all likely to be residual, perhaps derive from an earlier feature that has been obliterated. However, the presence of this pottery is still of interest and adds to a limited corpus of locations where this type pottery has been found in the region.
- B.1.13 There are few very local sites where Grooved Ware has been found, but sherds are known from across Cambridgeshire. Some of the closest sites include Cambridge (Hills Road), Cherry Hinton (South barrow) and Chippenham (Barrow II) (Longworth and Cleal 1999, 180). More recently, 96 sherds (238g) of Grooved Ware were recovered from five pits at Peterhouse Technology Park, Cherry Hinton (Gilmour 2016). Perhaps a better comparison comes from pottery found at Linton Village College, Linton. Here 292 sherds (872g) of pottery were recovered from eight pits and two later ditches (Percival forthcoming). The Linton pottery is also almost entirely in grog tempered fabrics.

## **B.2 Iron Age, Roman and medieval pottery**

*By Carole Fletcher HND BA (Hons) ACIfA*

*Prehistoric pottery identified by Matt Brudenell and Romano-British pottery by Alice Lyons*

### **Introduction**

- B.2.1 The assemblage is multi-period and includes sherds of Grooved ware and other prehistoric pottery (*pers com.* Matt Brudenell and Section B.1). In addition, an abraded sherd from a Late Iron Age jar (*pers com.* Matt Brudenell) and two Roman sherds were recovered, alongside Late Saxon-Early Medieval pottery. A few abraded sherds are not closely datable, including the single sherd from the evaluation (Birnie 2017). In total, a pottery assemblage of 26 sherds, weighing 0.198kg, representing a minimum of 14

vessels, is discussed in this report. The condition of the overall assemblage is moderately abraded and the mean sherd weight is low at approximately 0.008kg.

### **Methodology**

B.2.2 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.2.3 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 sherds, with Prehistoric and Roman fabrics described, and previously described medieval and post-medieval types, named using Cambridgeshire fabric types where possible (Spoerry 2016). Where samples were taken from which pottery was recovered, the sherds were small and abraded, however, where possible, this material was described and dated. All sherds have been counted, classified, minimum number of vessels (MNV) established, and weighed on a context-by-context basis. The assemblage is fully recorded in the catalogue at the end of this report. The pottery and archive are curated by Oxford Archaeology East until formal deposition or dispersal.

### **Sampling Bias**

B.2.4 The open area 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.

### **Assemblage**

B.2.5 Ceramic fabrics used in the report and catalogue and the total sherd count and weight of all fabrics are given in Table 2.

<b>Fabric Name</b>	<b>No. of Sherds</b>	<b>MNV</b>	<b>Weight (kg)</b>	<b>% of Assemblage by weight</b>
Grog-tempered with fine quartz and mica (Late Iron Age)	1	1	0.021	11
Micaceous (Fine) Sandy Greyware (Romano-British)	1	1	0.012	6
Nene Valley Mortaria (Romano-British)	1	1	0.010	5
Developed St Neots-type ware	8	2	0.049	25
St Neots/Developed St Neots	1	0	<0.001	<1
Thetford-type ware	11	7	0.094	47
Oxidised Coarse Sandy ware	1	0	0.003	2
Oxidised Fine Sandy ware	1	1	0.003	2
Reduced Fine Sandy ware	1	1	0.006	3
<b>Total</b>	<b>26</b>	<b>14</b>	<b>0.198</b>	<b>100</b>

Table 2: Fabrics present in the pottery assemblage.



### ***Pottery by Ceramic Period***

- B.2.6 The assemblage is relatively small, yet it consists of a wide range of material from features across the site.

#### ***Prehistoric***

- B.2.7 Prehistoric finds were recovered from the adjacent excavation at Stack Yard Court (ECB2716, MCB 17979), which are likely to be residual. Prehistoric pottery was also recovered from features in the recent excavation: Grooved ware was recovered from context 99, ditch **98** (see section B1) From pit/well **34**, a single sherd of residual Late Iron Age pottery was recovered, again alongside Thetford-type ware and Developed St Neots sherds.

#### ***Romano-British***

- B.2.8 Romano-British remains have been recorded within and around Fulbourn, including an archaeological evaluation undertaken on land off Cox's Drove, to the north-west of the this excavation, which identified a number of boundary ditches dated to the Roman period (Moan 2015). Two sherds of Romano-British pottery were recovered, most likely as residual elements. From pit **129**, a fragment of Nene Valley Mortaria (Mid 2nd-4th century) was recovered and from gully **111**, an uneven base from a wheel-thrown Micaceous (Fine) Sandy Greyware vessel. These finds add to the growing corpus of Roman material recovered from Fulbourn.

#### ***Late Saxon-Early Medieval***

- B.2.9 The bulk of the assemblage is Late Saxon-Early Medieval, and several features produced only Thetford-type ware (840-1150). However, the presence of Developed St Neots, alongside the Thetford ware vessels in several features, suggests the pottery is contemporary and indicates the date of the assemblage as mid 11th-mid 12th century, the end of the Late Saxon period-early medieval. No definitively later pottery was recovered.

#### ***Provenance***

- B.2.10 There is a moderate range of fabrics of local and non-local origin present in the assemblage, from a moderate range of sources. There are no imported wares in any period and the Iron Age pottery in the assemblage is likely to be of local production. The Romano-British material is from the Nene Valley and the other fabrics are probably local coarseware products. The Late Saxon-Early medieval assemblage is from Norfolk (Thetford-type ware) and the Developed St Neots is from Bedfordshire, Buckinghamshire or Northamptonshire, where the fossiliferous crushed shell clays from which the fabric was manufactured occur (Spoerry 2016, 138).

#### ***Form***

- B.2.11 The vessels present in the assemblage are primarily domestic in nature. The Roman base sherd is burnt or sooted and the fragment of mortarium are likely to represent the processing and preparation of food. For the Late Saxon-early medieval material, where a vessel form could be identified, jars were the only form present. No specialist forms were identified within the assemblage.

### ***The Assemblage In Relation to Archaeological Features***

- B.2.12 In 2008 an excavation was undertaken approximately 50m south-east of the site at Stackyard Court, Hall Farm, School Lane, Fulbourn (Bradley-Lovekin 2008, Fig. 3). This

revealed a Saxo-Norman rural settlement dating from the mid-11th century to the last quarter of the 12th century. The excavation is relevant, as linear features examined in 2008 appeared to extend in the direction of the excavation area that is the subject of this report.

- B.2.13 A total of 12 features produced pottery, including six ditches or gullies and a wheel rut. In addition were three pits, a posthole and a well, **34**, the last of which produced the majority of the excavated assemblage.

**Group 3: Trackway**

- B.2.14 Trackway-wheel rut **72** produced a single fragment of Oxidised Coarse Sandy ware that is not closely datable.

**Group 4: Well**

- B.2.15 Well **34** produced a residual Iron Age sherd, and three Thetford-type ware sherds, including a jar body sherd with a thumbled applied strip. Also recovered were six sherds of Developed St Neots ware, five of them from a single sooted jar, suggesting a date of c.mid 11th-mid 12th century for the feature.

**Group 5: Ditch**

- B.2.16 Ditch **6** produced a small sherd of wheel-made Oxidised Fine Sandy ware, recovered from sample <1>, that could not be closely dated. The pottery from ditch **187** was also from a sample, <18>, a small abraded sherd of Developed St Neots.

**Group 7: Pits**

- B.2.17 Pit **146** contained small sherds of Thetford-type ware and a fragment of St Neots or Developed St Neots ware, the sherd is too small to be certain of identification.

**Group 8: Miscellaneous**

- B.2.18 Pit **92** produced four sherds of pottery, which included three sherds from Thetford-type ware vessels, including a sherd that cross-fits with the single sherd of Thetford-type ware recovered from pit **117**. Pit **129** produced a single sherd from a mid 2nd-4th century Nene Valley Mortaria, which may be residual.
- B.2.19 The gullies/ditches excavated all produced single sherds of pottery. Ditch **32** produced a moderately abraded sherd of Developed St Neots, while **107** and **113** each contained a sherd of Thetford-type ware. Gully terminus **111**, produced a wheel-thrown base from a Roman Micaceous (Fine) Sandy Greyware vessel.

**Discussion**

- B.2.20 With the exception of gully **111** and posthole **129**, which produced only Roman pottery, all the features appear to be roughly contemporary, c.mid 11th-mid 12th century, and from a domestic assemblage. It seems likely that this material relates to, and is contemporary with, the Saxo-Norman rural settlement located to the south-east of the current site (Bradley-Lovekin 2008). The paucity of pottery suggests low levels of rubbish deposition at the periphery of the settlement. With no later material recovered, it would appear the site was abandoned at the end of the early medieval period and the focus of the medieval settlement of Fulbourn is located elsewhere in the village.

Context	Cut & Sample No.	Fabric	Description, Basic Form	X-Fit	MNV	Sherd Count	Weight (kg)	Pottery Dates
9	6 <1>	Oxidised Fine Sandy ware	Wheel-made, abraded body sherd		1	1	0.003	Not Closely Datable
33	32	Developed St Neots	Wheel-made moderately abraded body sherd		1	1	0.015	1050–1250
36	187 <18>	Developed St Neots	Small abraded body sherd			1	0.001	1050–1250
37	34	Grog-tempered with fine quartz and mica	Abraded externally thickened and rounded rim.		1	1	0.021	Late Iron Age
		Thetford-type ware	Moderately abraded, body sherd from a hand built jar with narrow, thumb applied strips		1	1	0.030	840-1150
			Moderately abraded body sherd		1	1	0.011	
		Moderately abraded body sherd		1	1	0.013		
	<17>	Developed St Neots	Moderately abraded body sherds from a sooted vessel-?jar		1	5	0.032	1050–1250
Moderately abraded body sherds from a sooted vessel ?jar					1	0.001		
73	72	Oxidised Coarse Sandy ware	Small abraded fragment of pale, dull orange. Likely to be pottery but could be a small fragment of ceramic building material			1	0.003	Not Closely Datable
93	92	Thetford-type ware	Moderately abraded body sherd, lightly sooted. (throwing grooves visible on surface)	122	1	1	0.005	840-1150
			Moderately abraded body sherd		1	1	0.009	
			Moderately abraded body sherd		1	1	0.002	
	<12>	Reduced fine sandy ware	Abraded reduced body sherd		1	1	0.006	Not Closely Datable
108	107	Thetford-type ware. Fine micaceous fabric variant, reduced pale grey surfaces, pale dull red-brown margins and core	Moderately abraded body sherd		1	1	0.013	840-1150
112	111	Micaceous (Fine) Sandy Greyware	Wheel-thrown, uneven base sherd, slightly burnt, possibly a waster (Lyons pers comm)		1	1	0.012	Mid 1st-4th century
114	113	Thetford-type ware	Moderately abraded rim sherd (everted, externally thickened, too small to be certain of diameter)		1	1	0.005	840-1150
122	117	Thetford-type ware	Moderately abraded body sherd, lightly sooted. Throwing grooves visible on surface	93		1	0.005	840-1150
130	129	Nene Valley Mortaria (Tyers 1996 & 2012, 2014 <a href="http://potsherd.net/atlas/Ware/NVMO">http://potsherd.net/atlas/Ware/NVMO</a> )	Moderately abraded body sherd with moderate black iron silicate slag grits		1	1	0.01	Mid 2nd-4th century
148	146	Thetford-type ware	Moderately abraded-abraded body sherd		1	2	0.003	840-1150
		St Neots/Developed St Neots	Abraded body sherd			1	0.001	1050–1250
<b>Total</b>					<b>16</b>	<b>26</b>	<b>0.199</b>	

### B.3 Ceramic Building Material

*By Ted Levermore BA*

#### **Results of Analysis**

- B.3.1 A single undiagnostic fragment (12g) of ceramic building material (CBM) was collected from context 37, Ditch 187. This fragment had the remains of a coarse sanded surface which suggests it probably derived from a tile. A post-medieval date is suggested for it on the basis of the fabric.

#### **Methodology**

- B.3.2 The assemblage was quantified by context, fabric and form and counted and weighed to the nearest whole gram. Fabrics were examined using a x20 hand lens and were described by main inclusions present. Width, length and thickness were recorded where possible. Woodforde (1976) and McComish (2015) formed the basis of reference material for identification and dating.
- B.3.3 The quantified data and fabric descriptions are presented on an Excel spreadsheet held with the site archive.
- B.3.4 This fragment is entirely uninformative. It was very likely brought to site through discard or dispersal processes.

### B.4 Baked Clay

*By Ted Levermore BA*

#### **Introduction**

- B.4.1 Archaeological works produced a small assemblage of baked clay from Pit **146**. This report will characterise this assemblage.

#### **Methodology**

- B.4.2 The assemblage was quantified by context, fabric and form and counted and weighed to the nearest whole gram. Fabrics were examined using a x20 hand lens and were described by main inclusions present. Fired clay collected from samples that weighed less than 1g were not assessed.
- B.4.3 The quantified data and fabric descriptions are presented on an Excel spreadsheet held with the site archive.

#### **Results of Analysis**

##### *Fabrics*

- B.4.4 A single fabric family was identified, with three sub-sets or variants (F1, F1a and F1b), made up of a friable very fine clay and chalk/marl mix. The paste preparation was likely very minimal; consisting if the gathering of a secondary clay deposit formed in the local chalk/marl and the addition of chopped grass or chaff. This resulted in a fabric that is almost identical to the local geology but was able to be worked into and retain a form.
- B.4.5 Without further analysis it is unclear whether this fabric had been subjected to firing conditions, as such the assemblage has been recorded as 'baked' clay.

##### *Assemblage*

- B.4.6 The assemblage (51 fragments, 1460g) was collected from contexts in Pit **146**. These fragments comprised mostly amorphous fragments with few to no distinguishing

features (33 fragments, 652g). Notably these fragments were quite large (4 to 8+ cm); if this is not due to collection bias it would suggest that this was a primary discard deposit. There were several fragments (18, 808g) with structural characteristics, namely flattened surfaces and/or rod impressions. There were three styles of rod impression; small and rounded (diameter: 0.5 to 1cm) and found in near-parallel groups, large and rounded (diameter: 2 to 3cm) and large oblong impressions (~3cm across). The fragments with both a face and rod impressions tended to have these impressions 'behind' its face, within the body of the fragment. To call these fragments 'daub' would be a stretch with such a small assemblage. It is suggested, therefore, that these fragments may derive from a structure like a wall or a hearth.

- B.4.7 This assemblage in itself is largely uninformative as it was found not *in situ*. The structural fragments are indicative of very local activity involving a planned construction of some description. The date for this is unknown.
- B.4.8 The rod impressions are preserved well enough that they could be used for a research project on the materials used in "wattle-and-daub" structures.

## B.5 Spindle whorl

*By Denis Sami PhD*

### **Factual Data**

- B.5.1 A single, complete ceramic spindle whorl (SF1) dating to the 9th-10th centuries was collected from context 153 in pit **146**. The whorl is a truncated-conical shape with a sub-rectangular section (Base major: 38.7 mm; Base minor: 31 mm; Height: 29 mm; Weight 37 g) type Walton Rogers (1997) A2 (No 6546, pp. 1738, dating to 9th -10th centuries). A central tapering circular hole (diameter: 11.66 mm) with signs of heavy wear passes through the whorl. The artefact is made of fine, well-fired clay, pale cream in colour.
- B.5.2 Spindle whorls made of various materials such as ceramic, metal or bone are generally associated with weaving activity and they often occur in or around buildings in rural, as well as in urban contexts, but they also have been documented in early Medieval and late Medieval burials (Standley 2016: 272). Connected with domestic activity, the spindle whorl from Fulbourn Primary School informs us about local small-scale production and fibre processing fundamental for the economy of communities.

## B.6 Flint

*By Lawrence Billington MA PhD*

### **Introduction and methodology**

- B.6.1 A single worked flint and a fragment of unworked burnt flint weighing 57.4g were recovered from the excavations. Both flints were derived from the fills of pit 146, and are catalogued and briefly described in Table 3.

Context	Cut	Feature type	Group	Secondary flake	Unworked burnt flint	Description
148	<b>146</b>	Pit	7	1	-	Small heavily recorticated secondary flake with trimmed striking platform, diffuse bulb of percussion and regular dorsal scars. Probably product of systematic core reduction strategy of Mesolithic or Neolithic date.
153	<b>146</b>	Pit	7	-	1 (57.4g)	Fragment of burnt flint cobble, thin and abraded cortex with crazed and spalled surfaces.

*Table 3. Quantification and description of the flint assemblage.*

- B.6.2 The sole worked piece is a small secondary flake with technological traits suggestive of a broad Mesolithic or Neolithic date. Whilst this piece is almost certainly residual it does provide some evidence for earlier prehistoric activity at the site.
- B.6.3 The unworked burnt flint is a relatively large fragment of a rounded/sub-rounded flint cobble with a thin and abraded cortical surface typical of material collected from glacial/fluvial gravel deposits. This piece is heavily burnt, with crazed surfaces, 'pot lid'/thermal fractures and some discolouration. It seems likely that the burnt flint is broadly contemporary with the 'fire pit' feature from which it derives, although it is not clear whether it should be regarded as having been deliberately heated or whether it was accidentally/incidentally burnt as part of the process which produced the charcoal rich fills of the feature.

## APPENDIX C. ENVIRONMENTAL REPORTS

### C.1 Environmental samples

*By Rachel Fosberry ACIfA HNC AEA*

#### **Introduction**

- C.1.1 Thirteen bulk samples were taken from features within the excavated area at Fulbourn Primary School, Cambridgeshire in order to assess the quality of preservation of plant remains and their potential to contribute to the research aims of the project. Samples were taken from prehistoric, Roman and early-medieval deposits.

#### **Methodology**

- C.1.2 The bulk samples were processed by water flotation (using a modified Siraff three-tank system) for the recovery of charred 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. Both flot and residues were allowed to air dry. A magnet was dragged through each residue fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and a complete list of the recorded remains are presented in Table 1. 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 (1997) for other plants. Carbonized 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).
- C.1.3 Based on the results of an initial assessment of the flots, the remaining soil of selected samples was processed to ensure maximum retrieval of preserved remains. Sub-samples of the two most significant assemblages were examined in greater detail and quantified.

#### **Quantification**

- C.1.4 For the purpose of this assessment, items such as seeds, cereal grains and legumes have been scanned and recorded qualitatively according to the following categories

# = 1-5, ## = 6-25, ### = 25-100, #### = 101-500, ##### = >500 specimens

Items that cannot be easily quantified such as charcoal has been scored for abundance

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

Key to tables: b= burnt, u= untransformed

#### **Results**

- C.1.5 The results are discussed by period:

#### **Prehistoric**

- C.1.6 Sample 27 was taken from fill 99 of a prehistoric gully (**98**) and produced a moderate assemblage of wood charcoal in addition to a single charred seed of cleaver (*Galium aparine*).

**Roman**

- C.1.7 Two samples were taken from fill 130 of 2nd to 4th century pit **129**. Both samples (opposite sides of the deposit) produced large volumes of wood charcoal along with occasional charred cereal grains of oat (*Avena sp.*), barley (*Hordeum vulgare*) and wheat (*Triticum sp.*). The presence of a single floret of oat (the outer husk) enables identification of the oat as the cultivated variety (*A. sativa*). Charred weed seeds include corn gromwell (*Lithospermum arvense*), and a cherry/sloe (*Prunus cerasus/spinosa*) stone.

**Mid 11th to mid 12th century**

- C.1.8 The upper fill (5) of large boundary ditch (**6, 187**) was sampled during the evaluation and again from equivalent fill 193 in the excavation. The evaluation sample produced a charred plant assemblage that included free-threshing wheat (*Triticum aestivum s.l.*), barley (*Hordeum vulgare*) with smaller quantities of rye (*Secale cereale*) and oats. Charred weed seeds are present with frequent well-preserved seeds of lesser meadow-rue (*Thalictrum minus*) and occasional seeds of plants that are likely to have been weeds of the cereal crops such as stinking mayweed (*Anthemis cotula*), black-bindweed (*Fallopia convolvulus*), dock (*Rumex sp.*). Sample 20 from fill 193 contained only sparse charred remains which may indicate that the sample from the evaluation was taken from a discrete deposit of charred material. Of the lower fills 35, 36 and 37 of ditch **187** only fill 36 (Sample 18) contained significant quantities of charred cereal grains, namely oats, barley and rye.
- C.1.9 Well **34** is thought to be pre-dating ditch **187**. Sample 21, taken from fill 192, contains only sparse charred remains with no evidence of waterlogging.
- C.1.10 Pit **92** and post hole **90** contains only sparse charred remains that do not represent deliberate deposition.
- C.1.11 Two large pits (**86** and **146**) located in the central area of the excavation produced significant charred plant assemblages that are comprised of mixed cereal grains with numerous weed seeds that include a high proportion of black bog rush (*Shoenus nigricans*) seeds. Sample 10, fill 87 of pit **86** and Sample 16, fill 150 of pit **146** are very similar in composition. Both samples contain 65 cereal grains per litre of soil sampled with similar proportions of oats, barley, wheat and rye. Chaff elements (the remains of the cereal straw) are relatively rare and are likely to be present as accidental contaminants of fully-threshed grain. Legumes are quite frequent; mainly as small vetches/tares (*Vicia/Lathyrus sp.*) and peas (*Pisum sp.*) and there is a possible lentil (*Lens culinaris*). Brassicas (*Brassica spp.*) that include vegetables such as turnips and cabbages are also quite frequent and may represent a kitchen garden. The weed seeds of both samples are also similar and include seeds of plants that are likely to have been growing amongst the crops such as stinking mayweed, corn gromwell, docks and goosefoots (*Chenopodium spp.*). Seeds of plants that have a more diverse habitat and may represent pasture (collected as hay) include several species of grasses (*Poaceae*), ribwort plantain (*Plantago lanceolata*), clover (*Trifolium sp.*) and mallows (*Malva sp.*). Seeds of wetland plants are also frequent in both assemblages and are predominantly of black bog rush along with at least three varieties of sedges (*Carex spp.*), spike-rush (*Eleocharis pallustris*) and Great Fen sedge (*Cladium mariscus*). Charred reed/sedge leaf fragments are common and 'silicates' are frequent representing the ash that results



from the full combustion of these plants, possibly when burnt as peat. Ostracods (microscopic bivalve crustaceans that live in water) are present and several of the shells have been burnt.

- C.1.12 Mollusc shells are present in all of the samples and occur as burnt specimens in the samples from pits **86** and **146** probably as a result of being burnt whilst still attached to the reeds or as components of peat. The density and diversity of the molluscs was not considered to be sufficient for analysis.

Table 4: Catalogue of plant remains from samples

Sample No.		10	10	11	12	13	14	15	16	16	17	18	19	20	21	27
<b>Context No.</b>		<b>87</b>	<b>87</b>	<b>91</b>	<b>93</b>	<b>130</b>	<b>130</b>	<b>153</b>	<b>150</b>	<b>150</b>	<b>37</b>	<b>36</b>	<b>35</b>	<b>193</b>	<b>192</b>	<b>99</b>
<b>Feature No.</b>		<b>86</b>	<b>86</b>	<b>90</b>	<b>92</b>	<b>129</b>	<b>129</b>	<b>146</b>	<b>146</b>	<b>146</b>	<b>187</b>	<b>187</b>	<b>187</b>	<b>187</b>	<b>34</b>	<b>98</b>
Feature Type		Pit	Pit	Pit	Pit	Pit	Pit	Pit	Pit	Pit	Ditch	Ditch	Ditch	Ditch	Well	Gully
Volume processed (L)		24		5	18	18	18	17	33		8	8	8	9	8	9
<b>Volume of flot (millilitres)</b>		120	24	20	5	150	140	20	180	36	5	20	<1	<1	<1	20
<b>% flot sorted</b>			20							20						
Cereals:	Common Name															
<i>Avena</i> sp. (caryopsis)	Oat	### #	21	#	#	##	#	#	###	60	#	###	#			
<i>Hordeum vulgare</i> (caryopsis)	Barley	####	33	#	#	##	##	#	####	84	#	###	#		#	
<i>Secale cereale</i> . (caryopsis)	Rye	##	7		#				###	17						
<i>Triticum</i> sp. (caryopsis)	Wheat	####	87		#	##	#	#	####	45		###		#	#	
Cereal indet (caryopsis)	cereal	#####	164						#####	106	##		#		#	
Chaff																
<i>Avena sativa</i> floret	Cultivated oat						#									
<i>Hordeum vulgare</i> L. rachis internode	domesticated Barley chaff	#														
<i>Secale cereale</i> . (caryopsis)	Rye	#														
free-threshing <i>Triticum</i> sp. rachis internode	free-threshing Wheat chaff	#														
Culm node	cereal straw	#							###	22						
Fabaceae:																
Legumes <2mm	Vetches/tares						#		###	11						
Legumes 2mm – 4mm	peas/small beans	#				#			##	15						
cf <i>Lens culinaris</i> L. cotyledon	Lentil	#														
Dry land herbs																
<i>Agrostemma githago</i> L. seed	Corncockle	#	7													
<i>Anthemis cotula</i> L. achene	Stinking Mayweed	##							#	28						
<i>Brassica nigra</i> type seed	Black Mustard [coarse-textured seed]	#	1						#	11						
<i>Centaurea nigra</i> L. achene	knapsweed	#								1						
Chenopodiaceae indet. seed	Goosefoot Family	###							#	11						

Table 4: Catalogue of plant remains from samples

Sample No.		10	10	11	12	13	14	15	16	16	17	18	19	20	21	27
<b>Context No.</b>		<b>87</b>	<b>87</b>	<b>91</b>	<b>93</b>	<b>130</b>	<b>130</b>	<b>153</b>	<b>150</b>	<b>150</b>	<b>37</b>	<b>36</b>	<b>35</b>	<b>193</b>	<b>192</b>	<b>99</b>
<b>Feature No.</b>		<b>86</b>	<b>86</b>	<b>90</b>	<b>92</b>	<b>129</b>	<b>129</b>	<b>146</b>	<b>146</b>	<b>146</b>	<b>187</b>	<b>187</b>	<b>187</b>	<b>187</b>	<b>34</b>	<b>98</b>
Feature Type		Pit	Pit	Pit	Pit	Pit	Pit	Pit	Pit	Pit	Ditch	Ditch	Ditch	Ditch	Well	Gully
Volume processed (L)		24		5	18	18	18	17	33		8	8	8	9	8	9
<b>Volume of flot (millilitres)</b>		120	24	20	5	150	140	20	180	36	5	20	<1	<1	<1	20
<b>% flot sorted</b>			20							20						
<i>Galium aparine</i> L. nutlet	Cleavers	#	1						#	1						#
<i>Lithospermum arvense</i> L. nutlet	Field Gromwell	####	27			#	#	#	#	27						
<i>Malva</i> sp. Nutlet	Mallows	#								5						
<i>Papaver rhoeas</i> L. seed	Common Poppy	#														
<i>Plantago lanceolata</i> L. seed	Ribwort Plantain	#								5						
small Poaceae indet. [< 2mm] caryopsis	small-seeded Grass Family	#	1							3						
medium Poaceae indet. [3-4mm]	medium-seeded Grass Family	##	3													
<i>Polygonum aviculare</i> L. achene	Knotgrass									1						
<i>Rumex</i> sp. achene	small-seeded Docks		1						#	6						
<i>Silene</i> sp. Seed	Campion		1							2						
Small <i>Trifolium</i> spp. <1mm seed	small-seeded Clovers	#								2						
<i>Valerianella dentata</i> L. seed	Narrow-fruited cornsalad									1						
Wetland/aquatic plants:																
<i>Carex</i> spp. Achene (trigonous)	Sedges	#							#	12						
<i>Cladium mariscus</i> (L.) Pohl nut	Great Fen-sedge							#		1						
<i>Cladium mariscus</i> (L.) Pohl leaf	Great Fen-sedge								###	###						
<i>Eleocharis palustris</i> (L.) Roem. & Schult.. nut	Common / Slender Spike-rush									2		#				
<i>Ranunculus flammula</i> L. achene	Lesser Spearwort	#								2						
<i>Schoenoplectus cf. lacustris</i> (L.) Palla nut	Common Club-rush	#							#	2						
<i>Schoenus nigricans</i> L. nut	Black bog rush	#####	24						#####	189						
Tree/shrub macrofossils																
<i>Prunus</i> sp. Seed	Cherry/sloe						#									
<i>Rubus</i> subgen. <i>Rubus</i> seed	Brambles	#u														
<i>Sambucus nigra</i> L. seed	Elder	#				#u	#u	#u	#u		#u			#u		

Sample No.		10	10	11	12	13	14	15	16	16	17	18	19	20	21	27
<b>Context No.</b>		<b>87</b>	<b>87</b>	<b>91</b>	<b>93</b>	<b>130</b>	<b>130</b>	<b>153</b>	<b>150</b>	<b>150</b>	<b>37</b>	<b>36</b>	<b>35</b>	<b>193</b>	<b>192</b>	<b>99</b>
<b>Feature No.</b>		<b>86</b>	<b>86</b>	<b>90</b>	<b>92</b>	<b>129</b>	<b>129</b>	<b>146</b>	<b>146</b>	<b>146</b>	<b>187</b>	<b>187</b>	<b>187</b>	<b>187</b>	<b>34</b>	<b>98</b>
Feature Type		Pit	Pit	Pit	Pit	Pit	Pit	Pit	Pit	Pit	Ditch	Ditch	Ditch	Ditch	Well	Gully
Volume processed (L)		24		5	18	18	18	17	33		8	8	8	9	8	9
<b>Volume of flot (millilitres)</b>		120	24	20	5	150	140	20	180	36	5	20	<1	<1	<1	20
<b>% flot sorted</b>			20							20						
Other plant macrofossils																
Estimated charcoal volume (ml)		30	3	15	2	100	100	5	30	5	2	10	<1	<1	4	12
Charcoal <2mm		+++	++	++	+	+++	+++	+++	+++	+++	++	++	+	+	++	+++
Charcoal >2mm		++	++	++	+	+++	+++	++	+++	++	++	++	+	+	++	++
Charcoal >10mm		+	+			+++	+++	++	+++	+	+	++	+			++
Charred root/stem		+	+													
reeds		+++	++													
Silicates		#####	####						#####	####						
Other remains																
molluscs	snails	++b/ + +	+b/ ++	++	++	++	++	++	++	+b/ ++	++	++	+	+	++	+++
<i>Cecilioides acicula</i>	Burrowing snail	++++	+++	++++	++++	+++	++	++	++++	+++	++	+++	++	+++	++	++
Ostracods		++b							++b	2b						

Table 4: Environmental bulk samples from ECB 5148

## **Discussion**

- C.1.13 The environmental samples from excavations at Fulbourn Primary School have produced significant assemblages of plant remains preserved by carbonisation from the early-medieval deposits. The preservation of the material is moderate with most of the cereal grains having signs of abrasion suggesting that the deposits represent the burning and subsequent disposal of a collection of midden material. This would also explain the mixed nature of the cereal varieties with all four of the main cereal varieties represented. Cereals are a staple food and are found on most archaeological sites where there has been human habitation. Wheat and rye were predominantly used to make bread whereas barley and oats were more often eaten as whole grains and barley would also have been valued for brewing beer. Cereals, particularly oats, were also used for fodder for horses. Legumes in the form of vetches/tares and peas are frequent but the preservation is not sufficient to determine if the peas are a cultivated variety and it is possible that the legumes are crop weeds or even the result of the use of these nitrogen-fixing plants for soil improvement through crop rotation. The crop weeds represented are all common contaminants for the period; stinking mayweed is a plant that grows on clay soils and is unlikely to have been a contaminant of the rye which is a cereal that prefers sandy soils. Corn gromwell produces a large seed that is a similar size to a cereal grain and would have been hard to remove by sieving. The seeds are extremely hard and 'stone-like' and would have made a resulting flour very unpalatable if ground with grain. It is likely that these seeds would have been picked out by hand and, in this case, disposed of in a fire.
- C.1.14 Carbonisation of plant remains occurs only in certain areas of a hearth/oven where reducing conditions are favorable. Most of the burnt material would be reduced to ash and consequently any charred grain or seeds preserved only represent a small proportion of what was originally burnt. The presence of silicates in the samples that also contain preserved remains of wetland plants suggest that these silica skeletons are the remains of the vegetative parts of these plants. It is possible that these assemblages represent the burning of peat as fuel. Peat burning is extremely difficult to identify archaeobotanically as wetland plants are known to have been a fenland resource that was exploited for vegetation that would have been dried out and used as flooring and thatching material and for fuel. The presence of burnt ostracods may be further evidence of peat burning.
- C.1.15 In summary, the plant remains preserved from this site represent the burning and disposal of food remains mixed with other vegetation. It is likely that vegetables and herbs would have been grown in small plots close to dwellings whereas the grain is likely to have been brought into the site fully processed (with occasional contaminants). The crop and dryland weed assemblages are similar to those from contemporary deposits at Stackyard Court, Hall Farm, School Lane, Fulbourn, a Saxo-Norman rural settlement located 50m south-east of the site. The Primary School site has additional evidence of the exploitation of fenland resources, possibly in the form of peat which would have been brought into the site from a considerable distance.

## C.2 Animal bone

By Hayley Foster BA MA PhD

### **Introduction and Methodology**

- C.2.1 This report details the analysis of the animal bone recovered from Fulbourn Primary School, Fulbourn, Cambridgeshire. The assemblage was of a small size and the number of recordable fragments totalled 41, with 32 from hand-collection and 9 from environmental samples. Animal bone was recovered from pits, ditches and a gully from four of the identified groups (3, 4, 7 and 8). The species represented include cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*), pig (*Sus scrofa*) and frog (*Rana temporaria*). Material dates to the Late Saxon-Early Medieval period.
- C.2.2 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). This involves analysing and recording bones from the assemblage but omitting those fragments that are considered 'low grade' and not worthy of being counted. For an element to be recorded 50% of the diagnostic zone on a bone must be present. This method narrows down the assemblage so that fragmented elements are not counted multiple times. MNI (minimum number of individuals) was calculated for all species present.
- C.2.3 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. Attempts to distinguish between sheep and goat were carried out based on morphological characteristics and metric data following Boessneck (1969, 339-341) and Prummel and Frisch (1986, 569-570).
- C.2.4 Two methods of ageing were implemented when analysing the mammalian bone remains. These methods include observing dental eruption and wear and epiphyseal fusion. When analysing tooth wear of sheep/goat, tooth wear stages by Payne (1973 and 1987) were implemented. Tooth wear stages by Grant (1982) were implemented when assessing wear for cattle and pig. Higham (1967) mandibular wear stages (MWS) were assigned to loose mandibular M3s and mandibles with the innermost tooth still present. Fusion was recorded according to Silver (1970) for horse and dog, and Schmid (1972) for cattle, sheep and pig.
- C.2.5 Gnawing marks made by carnivores and rodents were noted where applicable. For all bones, butchery marks were recorded. Butchery marks were described as chop, cut or saw marks. Burning on bones was simply recorded as either blackened, calcined or singed.

### **Results of Analysis**

- C.2.6 The faunal remains come from 10 different contexts and consist mainly of teeth. The main domestic mammals are present, which would be the main stay of the food economy during this period. Cattle comprise most of the elements followed by amphibian (frog). There was no evidence of young or old animals present. The only ageing data gathered for tooth wear was a sheep/goat third molar ageing to adulthood. All long bone fragments had fused epiphyses, indicating a cattle older than 36-42 months of age and a sheep/goat older than 15-24 months of age at death. The MNI for

all the domestic species is one and for frog the MNI is two. One pig canine from context 99 could be sexed and it belongs to a female animal.

C.2.7

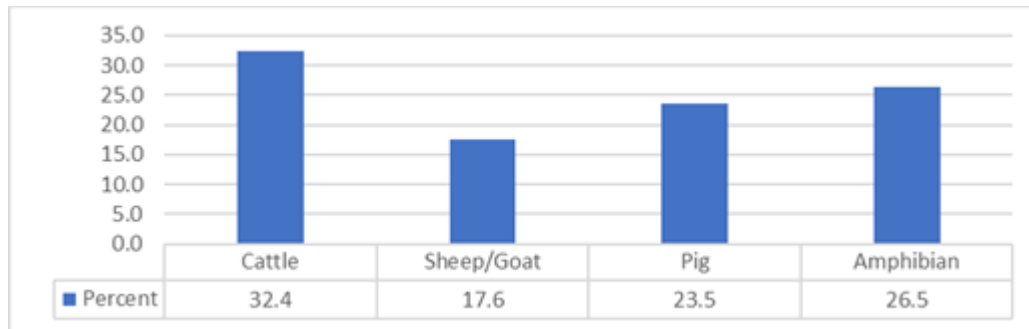


Table 5. Species distribution for Fulbourn Primary School

- C.2.8 There were several taphonomic processes noted in the assemblage. Burning was noted in contexts 148 and 150, both from the pit (146) containing oven/hearth waste. The pig mandible fragments from 148 show evidence of blackened and calcined sections, indicating placement within different temperatures of the fire. A singed pig mandibular incisor also shows evidence of burning, though only slight. Weathering appears on three fragments from three different contexts. The surface texture of the bones appears rough and fibrous. Weathering indicates that fragments were not disposed of immediately and likely exposed to the elements for a period before being discarded. Carnivore gnawing is seen on one fragment from context 37, which highlights the presence of dogs on site even though no physical evidence of dog remains was recovered.
- C.2.9 The small amount of faunal remains recovered is not representative of all stages of carcass processing activities, as there is a bias in the proportion of elements recovered. The majority of remains are made up of cranial elements including teeth, which would be more indicative of initial butchery waste with the removal of the head. The single piece of butchery evidence recorded correlates with this as it is on a sheep/goat mandible that has two sharp cut marks on the ascending ramus below the condyle. This type of evidence is associated with skinning.
- C.2.10 The ageing data indicates a lack of young animals which may suggest that on site breeding was not taking place. However, the small sample size should be considered, as overarching husbandry trends cannot be made with such a small amount of data.
- C.2.11 Animal bone assemblages from sites in a close proximity to Fulbourn primary school include Hall Farm (Holmes, 2008) and the Chantry (Germany, 2007). At these sites cattle, sheep/goat and pig were the majority of animals recorded, with only a few wild mammal or bird species present. Hall farm did include frog remains, however they were from undated contexts. These types of species are typical of rural Saxon settlement sites.

Species	Element	No of fragments	Context	Notes
Cattle	Loose maxillary molar	1	25	Weathered
Sheep/Goat	Tibia	1	33	Weathered
Cattle	Femur	1	37	Gnawing
Cattle	Loose maxillary molar	1	37	

Cattle	Loose maxillary premolar	1	37	
Sheep/Goat	Mandibular incisor	1	37	
Sheep/Goat	Mandible	1	37	Butchery 2 cuts below condyle
Amphibian	Pelvis	1	87	
Amphibian	Pelvis	1	87	
Amphibian	Pelvis	1	87	
Amphibian	Pelvis	1	87	
Amphibian	Humerus	1	87	
Amphibian	Humerus	1	87	
Pig	Mandibular incisor	1	99	
Pig	Mandibular incisor	1	99	
Pig	Mandibular premolar	1	99	Weathered
Pig	Loose maxillary canine	1	99	Female
Pig	Mandible	7 (likely 1 element)	148	Blackened and calcined
Cattle	Atlas	1	152	
Cattle	Scafo-cuboid	1	152	
Cattle	Mandibular premolar	1	152	
Cattle	Mandibular premolar	1	152	
Cattle	Thoracic vertebra	1	153	
Cattle	Loose maxillary molar	1	192	
Cattle	Loose maxillary molar	1	192	
Sheep/goat	Mandibular molar	1	150 <16>	
Amphibian	Humerus	1	37 <17>	
Pig	Mandibular incisor	1	150 <16>	Singed
Sheep/Goat	Mandibular third molar	1	99 <27>	Adult
Sheep/Goat	Mandibular premolar	1	99 <27>	
Pig	Mandibular molar	1	99 <27>	
Pig	Mandibular molar	1	99 <27>	
Amphibian	Pelvis	1	153 <15>	
Amphibian	Tibio-fibula	1	153 <15>	

Table 6: Number of identifiable specimens (NISP) by element and species for Fulbourn Primary School.



#### APPENDIX D. BIBLIOGRAPHY

Albarella, U., 1997. Size, power, wool and veal: zooarchaeological evidence for late medieval innovations. *Environment and subsistence in medieval Europe*, 9, pp.19-30.

Albarella, U. and Davis, S.J., 1996. 'Mammals and birds from Launceston Castle, Cornwall: decline in status and the rise of agriculture', *Circaea* 12 (1), 1-156.

Birnie, S., 2017. *Fulbourn Primary School: Archaeological Evaluation Report*, OAEast Unpublished Report no 2073.

Boessneck, J., 1969. 'Osteological Differences between Sheep (*Ovis aries* Linné) and Goat (*Capra hircus* Linné)', in D. Brothwell and E. Higgs (eds.), *Science in Archaeology*, 331-358. London: Thames and Hudson.

Bradley-Lovekin, T., 2008. *Archaeological Excavation on Land at Hall Farm, School Lane, Fulbourn, Cambridgeshire*, APS Unpublished Report no 56/08.

British Geological Survey (BGS)

<<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>> accessed on 01/08/2017

Brown & Glazebrook, 2000. *Research and Archaeology: A Framework for the Eastern counties: 2. Research Agenda and Strategy*, East Anglian Archaeology Occasional Papers 8

Brown, D., 2011. *Archaeological archives. A guide to best practice in creation, compilation, transfer and curation*, 2nd edition, Archaeological Archives Forum.

Cappers, R.T.J., Bekker, R.M. & Jans, J.E.A., 2006. *Digital Seed Atlas of the Netherlands*. Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands. [www.seedatlas.nl](http://www.seedatlas.nl)

CIfA, 2014a. *Standard and guidance for archaeological excavation*.

CIfA, 2014b. *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*.

Cohen, A. and Serjeantson, D., 1996. *A Manual for the Identification of Bird Bones from Archaeological Sites*. London: Archetype Publications Ltd.

Collie, T. and Connor, A., 2017. *Fulbourn Primary School, Fulbourn, Cambridgeshire: Written Scheme of Investigation*, OAEast Unpublished Report.

Davis, S.J., 1992. *A rapid method for recording information about mammal bones from archaeological site* (AML report 19/92), London: English Heritage.

Driesch, A. von den, 1976. *A guide to the measurement of animal bones from archaeological sites*. Cambridge, Massachusetts: Peabody Museum of Archaeology and Ethnology, Harvard University.

Driesch, A. von den and Boessneck, J., 1974. 'Kritische Anmerkungen zur Widerristhohenberechnung aus Langenmassen vor- und fruhgeschichtlicher Tierknochen',

*Saugetierkundliche Mitteilungen* 22, 325-348.

Germany, M., 2007. *Land of the Chantry, Fulbourn, Cambridgeshire: Archaeological Excavation*, Field Archaeology Unit Unpublished report no 1634.

Glazebrook, 1997. *Research and Archaeology: A Framework for the Eastern counties: 1. Resource Assessment*, East Anglian Archaeology Occasional Papers 3

Grant, A., 1982. 'The use of tooth wear as a guide to the age of domestic ungulates', in B. Wilson, C. Grigson and S. Payne (eds.), *Ageing and sexing animal bones from archaeological sites*, 91-108. (British Archaeological Reports British Series 109). Oxford: BAR.

Habermehl, K.H., 1961 'Die Altersbestimmung bei Haustieren, Pelztieren und beim jagdbaren wild', 146-153. Berlin and Hamberg: Paul Parey.

Higham, C.F.W., 1967. 'Stockrearing as a cultural factor in prehistoric Europe', *Proceedings of the Prehistoric Society* 33, 84-106.

Hillson, S., 1992. *Mammal Bones and Teeth: An Introductory Guide to Methods and Identification*. London Institute of Archaeology: University College London.

Historic England, 2006. *Management of research projects in the historic environment*. The MoRPHE project managers' guide.

Historic England, 2008. *Management of research projects in the historic environment*. PPN3: Archaeological excavation.

Jacomet, S., 2006. *Identification of cereal remains from archaeological sites*. (2nd edition) IPNA, Universität Basel / Published by the IPAS, Basel University.

Longworth, I. and Cleal, R., 1999. *Grooved Ware Gazetteer*, in Cleal, R. and MacSween, A 1999, *Grooved Ware in Britain and Ireland*. Neolithic Studies Group Seminar Papers 3.

Medieval Pottery Research Group, 1998. *A Guide to the Classification of Medieval Ceramic Forms*. MPRG Occasional Paper

Medlycott, 2011. *Research and Archaeology Revisited: A Revised Framework for the East of England*, East Anglian Archaeology Occasional Papers 24

McComish, J.M. 2015. *A Guide to Ceramic Building Materials*. York Archaeological Trust. Report Number 2015/36. Web Based Report.

McCormick, F. and Murray E., 2007. *Knowth and the Zooarchaeology of Early Christian Ireland*. Dublin: Royal Irish Academy.

Moan, P., 2015. *Roman and Saxon Remains at Land of Cox's Drove, Fulbourn, Cambridgeshire: Archaeological Evaluation Report*, OAEast Unpublished Report no 1739.

Murphy, P., 1991. 'Fuels' in Shepherd Popescu, E., *Norwich Castle: Excavations and Historical Survey 1987-98. Part II: c.1345 to Modern*, East Anglian Archaeology 132, pp. 1034-1035.

- O'Connor, T., 2000. *The Archaeology of Animal Bones*. Stroud: Sutton Publishing.
- Payne, S., 1973. 'Kill off patterns in sheep and goats: the mandible from Asvan Kale', *Anatolian Studies* 23, 281-303.
- PCRG, 2011. *The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication*. Oxford: Prehistoric Ceramics Research Group Occasional Papers 1 and 2 (fourth edition)
- PCRG SGRP MPRG, 2016. *A Standard for Pottery Studies in Archaeology*.
- Percival, S., Forthcoming. Neolithic and Bronze Age Pottery, in Clarke, R and Gilmour, N. *Linton in Context: A Granta Valley Landscape. Excavations at Linton Village College, Cambridgeshire 2004-10*. East Anglian Archaeology
- Prummel, W. and Frisch, H.J., 1986. 'A guide for the distinction of species, sex and body side in bones of sheep and goat', *Journal of Archaeological Science* 13, 567-577.
- Reitz, E.J. and Wing, E.S., 1999. *Zooarchaeology*. (Cambridge Manuals in Archaeology). Cambridge: Cambridge University Press.
- Schmid, E., 1972. *Atlas of Animal Bones for Prehistorians, Archaeologists and Quaternary Geologists*. Amsterdam-London-New York: Elsevier Publishing Company.
- Silver, I.A., 1970. The Ageing of Domestic Animals. In D.R. Brothwell and E.S. Higgs (eds), *Science in Archaeology: A Survey of Progress and Research*, pp.283-302. New York: Praeger Publishing.
- Spoerry, P.S.S., 2016. *The Production and Distribution of Medieval Pottery in Cambridgeshire*. East Anglian Archaeology 159.
- Stace, C., 1997. *New Flora of the British Isles*. Second edition. Cambridge University Press.
- Standley, E.R., 2016, 'Spinning Yarns: The Archaeological Evidence for Hand Spinning and its Social Implication', *Medieval Archaeology*, 60/2, pp: 266-99.
- Tyers, 1996 & 2012, 2014. <<http://potsherd.net/atlas/Ware/NVMO>> consulted 07/10/2017.
- Walton Rogers, P., 1997, *The Archaeology of York. Volume 17: The Small Finds. Textile Production at 16-22 Coppergate*, York Archaeological Trust for Excavation and Research.
- Wareham, A.F. and Wright, A.P.M., 2002 Fulbourn in The histories of the twenty-three parishes which make up the four hundreds of Staploe, Staine, Flendish and Cheveley. Victoria County History - Cambridgeshire. Victoria County History, London, pp:130-36.
- Woodforde, J., 1976. *Bricks: To Build A House*. Routledge and Kegan Paul.
- Zohary, D. & Hopf, M., 2000. *Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley*. 3rd edition. Oxford University Press.

APPENDIX E. OASIS REPORT FORM

All fields are required unless they are not applicable.

**Project Details**

OASIS Number	<input type="text"/>		
Project Name	<input type="text"/>		
Project Dates (fieldwork) Start	<input type="text"/>	Finish	<input type="text"/>
Previous Work (by OA East)	<input type="text"/>	Future Work	<input type="text"/>

**Project Reference Codes**

Site Code	<input type="text"/>	Planning App. No.	<input type="text"/>
HER No.	<input type="text"/>	Related HER/OASIS No.	<input type="text"/>

**Type of Project/Techniques Used**

Prompt

**Please select all techniques used:**

<input type="checkbox"/> Field Observation (periodic visits)	<input type="checkbox"/> Part Excavation	<input type="checkbox"/> Salvage Record
<input type="checkbox"/> Full Excavation (100%)	<input type="checkbox"/> Part Survey	<input type="checkbox"/> Systematic Field Walking
<input type="checkbox"/> Full Survey	<input type="checkbox"/> Recorded Observation	<input type="checkbox"/> Systematic Metal Detector Survey
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Remote Operated Vehicle Survey	<input type="checkbox"/> Test Pit Survey
<input type="checkbox"/> Open-Area Excavation	<input type="checkbox"/> Salvage Excavation	<input type="checkbox"/> Watching Brief

**Monument Types/Significant Finds & Their Periods**

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Project Location**

County	<input type="text"/>	Site Address (including postcode if possible)
District	<input type="text"/>	<input type="text"/>
Parish	<input type="text"/>	
HER	<input type="text"/>	
Study Area	<input type="text"/>	National Grid Reference <input type="text"/>

### Project Originators

Organisation	<input type="text"/>
Project Brief Originator	<input type="text"/>
Project Design Originator	<input type="text"/>
Project Manager	<input type="text"/>
Supervisor	<input type="text"/>

### Project Archives

Physical Archive	Digital Archive	Paper Archive
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

### Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ceramics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stratigraphic		<input type="checkbox"/>	<input type="checkbox"/>
Survey		<input type="checkbox"/>	<input type="checkbox"/>
Textiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Bone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Stone/Lithic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Digital Media	Paper Media
<input type="checkbox"/> Database	<input type="checkbox"/> Aerial Photos
<input type="checkbox"/> GIS	<input type="checkbox"/> Context Sheet
<input type="checkbox"/> Geophysics	<input type="checkbox"/> Correspondence
<input type="checkbox"/> Images	<input type="checkbox"/> Diary
<input type="checkbox"/> Illustrations	<input type="checkbox"/> Drawing
<input type="checkbox"/> Moving Image	<input type="checkbox"/> Manuscript
<input type="checkbox"/> Spreadsheets	<input type="checkbox"/> Map
<input type="checkbox"/> Survey	<input type="checkbox"/> Matrices
<input type="checkbox"/> Text	<input type="checkbox"/> Microfilm
<input type="checkbox"/> Virtual Reality	<input type="checkbox"/> Misc.
	<input type="checkbox"/> Research/Notes
	<input type="checkbox"/> Photos
	<input type="checkbox"/> Plans
	<input type="checkbox"/> Report
	<input type="checkbox"/> Sections
	<input type="checkbox"/> Survey

### Notes:



Contains Ordnance Survey data © Crown copyright and database right 2017. All rights reserved. CM00617458

Figure 1: Site location showing excavation area (red)

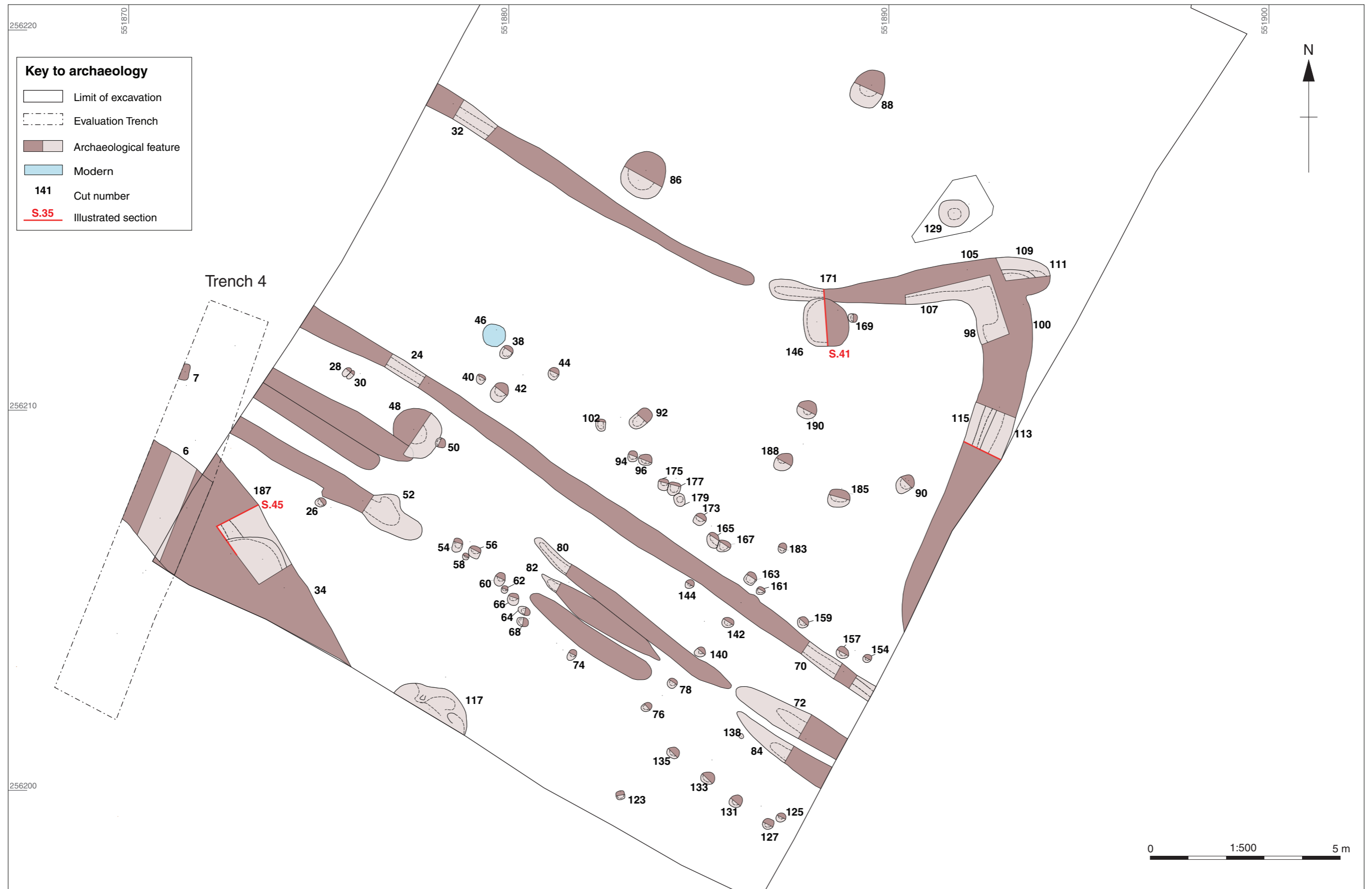


Figure 2: Site Plan

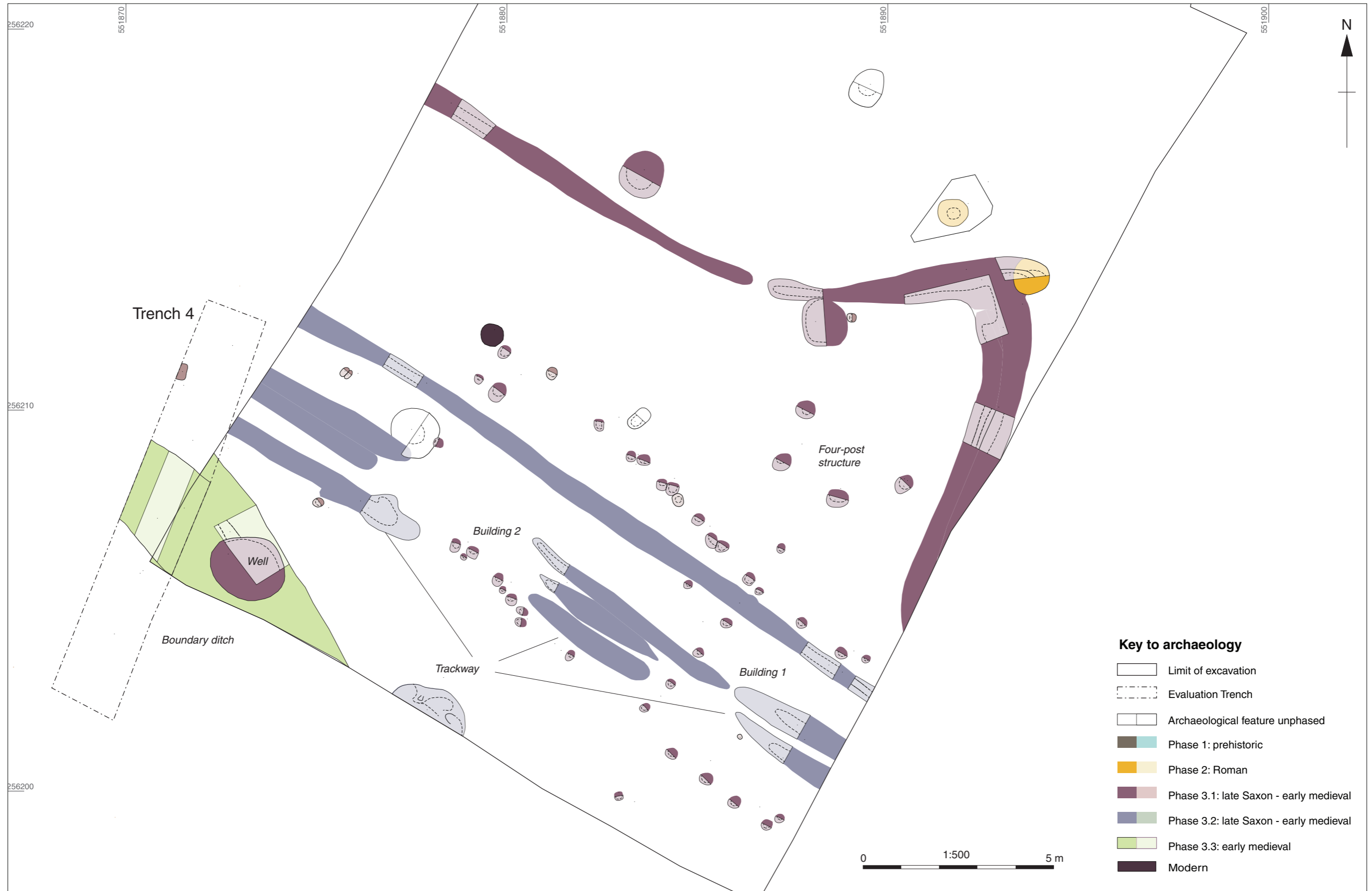


Figure 3: Phasing of the site





Figure 4: Hall Farm (Bradley-Lovekin 2008) and current excavation

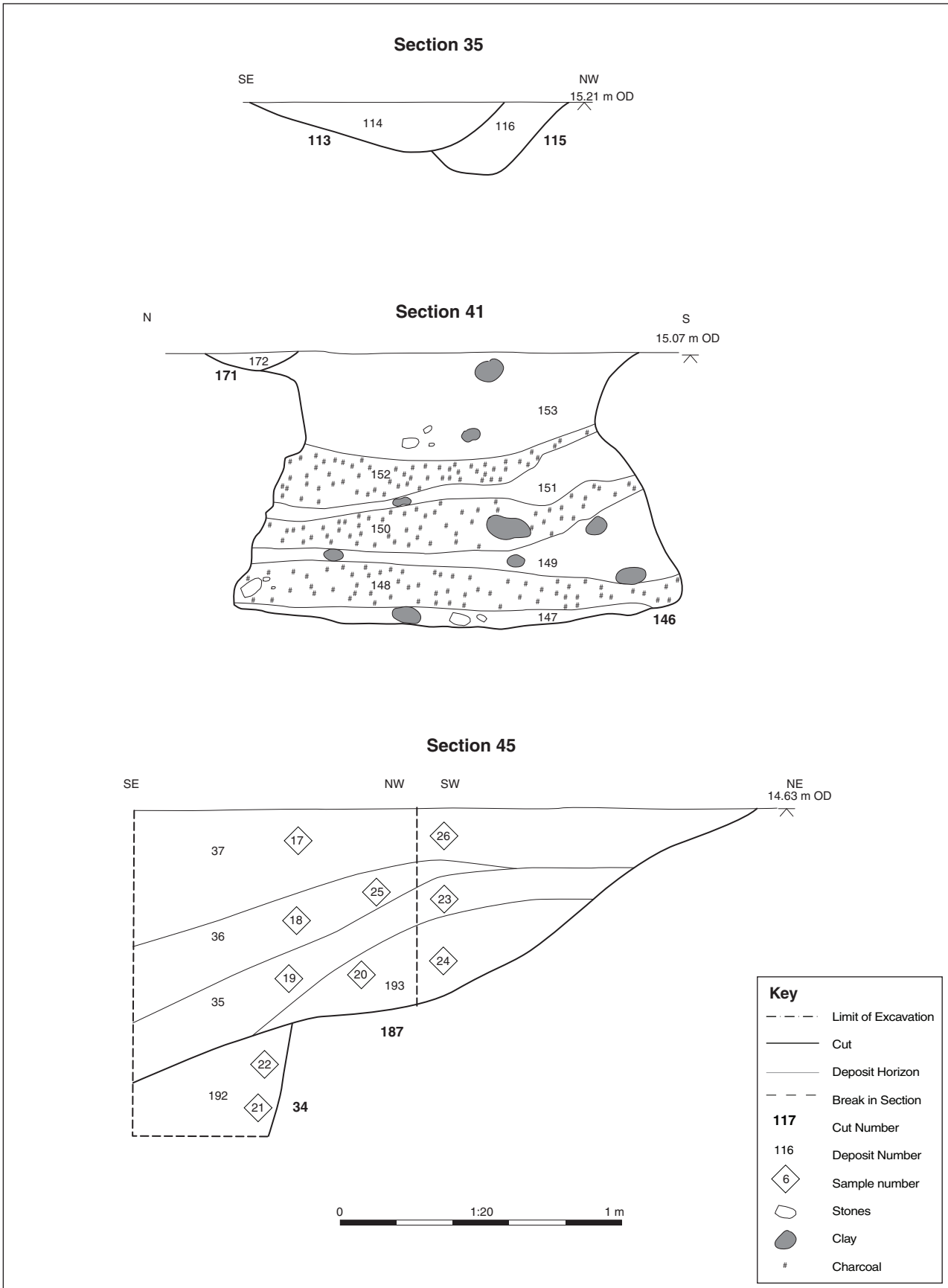


Figure 5: Selected sections. Scale 1:20



Plate 1: Photogrammetry of excavation area, 28m long and 18m wide, north is top right corner



Plate 2: Well 34 and ditch 187, view from south-east



Plate 3: Wheel ruts **80** and **82**, view from north-west



Plate 4: Group of post holes and pits (**38**, **40**, **42**, **44**), view from south-west

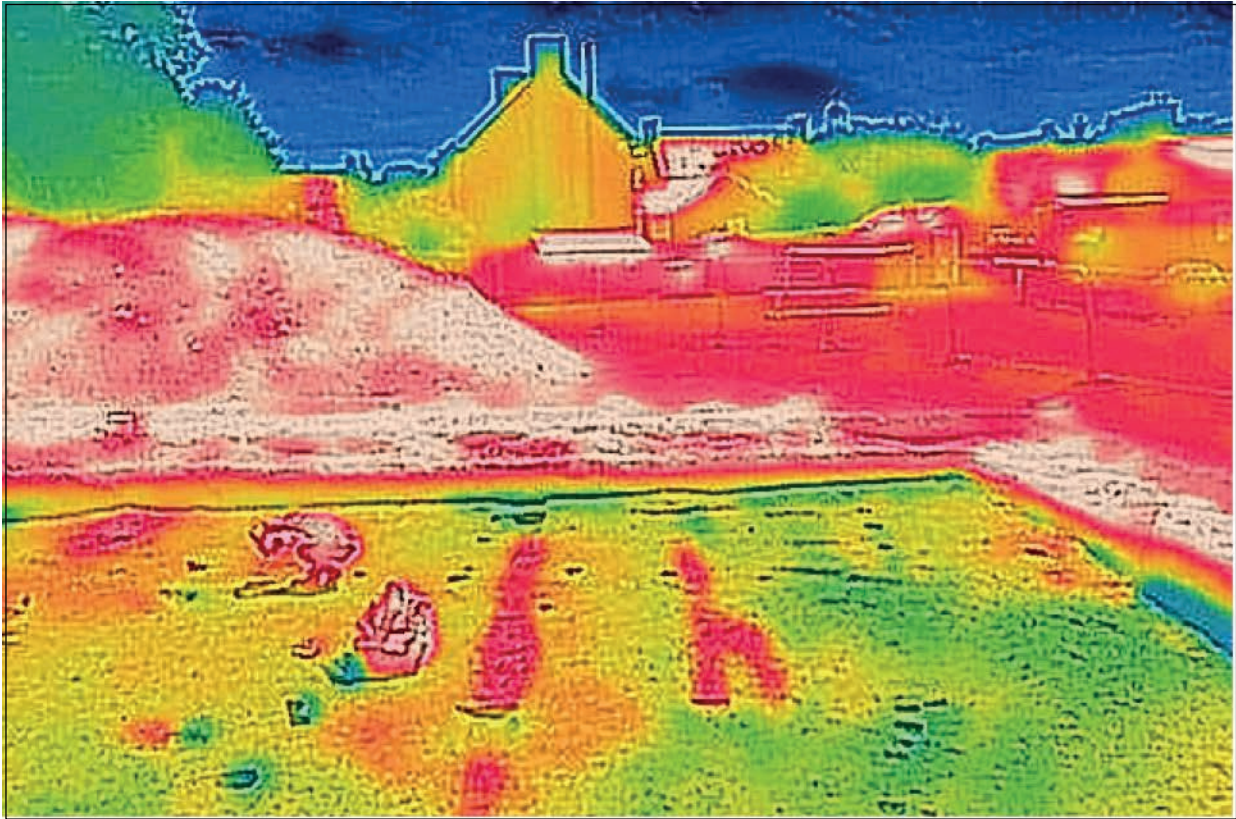


Plate 5: Thermal imaging of the post hole structures (blue) and wheel ruts (red), view from north-west ©FLIR



Plate 6: Pit 146, view from west



Plate 7: Pit **86**, view from north-west



Plate 8: Gully **32**, view from south-east



### **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](mailto: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](mailto: 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](mailto: oaeast@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>



**Director:** Gill Hey, BA PhD FSA MCIFA  
*Oxford Archaeology Ltd is a  
Private Limited Company, N<sup>o</sup>: 1618597  
and a Registered Charity, N<sup>o</sup>: 285627*